METROPOLITAN
TRANSPORTATION
COMMISSION

Bay Area Metro Center
375 Beale Street, Suite 800
San Francisco, CA 94105
415.778.6700
www.mtc.ca.gov

Air Quality Conformity Task Force Meeting

Metropolitan Transportation Commission

Join Zoom Meeting @
https://bayareametro.zoom.us/j/84383698853
Meeting ID: 843 8369 8853

(Additional Zoom Meeting Call-In Info on Next Page)

April 27, 2023
9:30 a.m. – 11:00 a.m.

AGENDA

1. Welcome and Introductions

2. $PM_{2.5}$ Project Conformity Interagency Consultations

   a. Consultation to Determine Project of Air Quality Concern Status
      i. State Route 239 Initial Phase of Construction Project

   b. Confirm Project Projects Exempt from $PM_{2.5}$ Conformity
      i. Toll Bridge Rehabilitation Program - Open Road Tolling Conversion Northern Bridges Project
      ii. Projects Exempt Under 40 CFR 93.126 – Not of Air Quality Concern

3. Projects with Regional Air Quality Conformity Concerns

   a. Review of the Regional Conformity Status for New and Revised Projects
      3a_Regional_AQ_Conformity_Review_042723.pdf
      3a_Attachment-A_List_of_Proposed_New_Projects_042723.pdf

4. Consent Calendar

   a. March 27, 2023 Air Quality Conformity Task Force Meeting Summary

5. Other Items

Next Meeting: May 25, 2023

MTC Staff Liaison: Harold Brazil hbrazil@bayareametro.gov

Harold Brazil is inviting you to a scheduled Zoom meeting.

Topic: Air Quality Conformity Task Force Meeting
Time: This is a recurring meeting Meet anytime

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213.19.144.110 (Amsterdam Netherlands)
213.244.140.110 (Germany)
103.122.166.55 (Australia Sydney)
103.122.167.55 (Australia Melbourne)
64.211.144.160 (Brazil)
69.174.57.160 (Canada Toronto)
65.39.152.160 (Canada Vancouver)
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Memorandum

TO: Air Quality Conformity Task Force

DATE: April 20, 2023

FR: Harold Brazil

W. I.

RE: $PM_{2.5}$ Project Conformity Interagency Consultation

A project sponsor seeks interagency consultation from the Air Quality Conformity Task Force (AQCTF) at today's meeting and the projects are as follows:

No.	Project Sponsor	Project Title
1	Caltrans	State Route 239 Initial Phase of Construction Project
2	*Caltrans*	*Open Road Tolling Conversion Northern Bridges Project*

2ai_SR239_Initial_Ph_Construct_Project_Assessment_Form.pdf (for the State Route 239 Initial Phase of Construction project)

2bi_OpenRd_Toll_Convers_NBridges_Project_Assessment_Form.pdf (for the Open Road Tolling Conversion Northern Bridges project) – ***40 CFR 93.126 determination request***

MTC also requests the review and concurrence from the Task Force on a project which a project sponsor has identified as exempt and likely not to be a POAQC. **2b_POAQC_Exempt_List_ 041323.pdf** lists exempt projects under 40 CFR 93.126.

Application of Criteria for a Project of Air Quality Concern
Project Title: State Route 239 Initial Phase of Construction
Project Summary for Air Quality Conformity Task Force Meeting: April 27, 2023

Description

- The California Department of Transportation, in partnership with the Contra Costa Transportation Authority, proposes the State Route 239 (SR-239) project, which will ultimately be a new, four-lane highway from State Route 4 near Marsh Creek Road in Contra Costa County to Interstate 205 and/or Interstate 580 in Alameda County and/or San Joaquin County.
- SR-239 project consists of both Tier I (program) level and Tier II (project) level components.
- Tier I program is exempt from the requirements of the Transportation Conformity Rule in accordance with 40 code of federal regulations (CFR) 93.126.
- The Tier II project-level study will evaluate the initial phase of construction (IPOC) of the SR-239 Project and is subject to transportation conformity.
- The IPOC would include construction of a new two-lane facility (one lane in each direction) of about 3.6 miles in length connecting Vasco Road and Byron Highway near the Byron Airport.
- The IPOC includes several local street modifications to eliminate local street conflicts and accommodate local access.

Background

- Caltrans is currently preparing an EIR/EIS that will evaluate the SR-239 corridor at both a Tier I (program) level and a Tier II (project) level.
- Public review of Draft EIR/EIS anticipated in 2024.

Not a Project of Air Quality Concern (40 CFR 93.123(b)(1))

(i) New or expanded highway projects with significant number/increase in diesel vehicles?

- The IPOC would redistribute AADT and truck AADT from areas with relatively high concentrations of residential receptors (i.e., along Byron Highway and Camino Diablo) to areas with no existing or planned development (i.e., along the IPOC and Vasco Road).
- While traffic would be redistributed to the IPOC and Vasco Road north of the future IPOC connection, total truck AADT on the IPOC and Vasco Road would not be significant. Under horizon (2050) year conditions,
    - AADT and truck AADT on the IPOC are predicted to be 11,380 and 900, respectively.
    - Maximum AADT and truck AADT on Vasco Road are predicted to be 43,270 and 1,450, respectively.

(ii) Affects intersections at LOS D, E, or F with a significant number of diesel vehicles?

- LOS would stay the same or improve at most intersections with implementation of the IPOC.
- Where intersections are forecasted to operate at LOS D, E, or F, they would do so with or without the project.
    - At these locations, maximum peak-hour truck volumes would not exceed 2,500 (6% of total traffic) under horizon (2050) year conditions.
- No project changes to land use that would affect diesel traffic percentage, relative to no build conditions.

(iii) New bus and rail terminals and transfer points?—Not Applicable

(iv) Expanded bus and rail terminals and transfer points?—Not Applicable

(v) Affects areas identified in PM_{10} or $PM_{2.5}$ implementation plan as site of violation?

- No state implementation plan for $PM_{2.5}$.Therefore, not identified in plan as an area of potential violation.
- The immediate project area is not a site of $PM_{2.5}$ violation or possible violation.

RTP ID# *(required)*
21-T06-047

TIP ID# *(required)*
CC-070081

Air Quality Conformity Task Force Consideration Date
April 27, 2023

Project Description *(clearly describe project)*
The California Department of Transportation (Caltrans), in partnership with the Contra Costa Transportation Authority (CCTA), proposes the State Route 239 (SR-239) project, which will ultimately be a new, four-lane highway from State Route 4 near Marsh Creek Road in Contra Costa County to Interstate 205 and/or Interstate 580 in Alameda County and/or San Joaquin County. Caltrans is currently preparing an EIR/EIS that will evaluate the SR-239 corridor at both a Tier I (program) level and a Tier II (project) level.

The Tier I programmatic-level study will evaluate and analyze alternatives that cover the entire SR-239 corridor (Ultimate Project) through a broad and general assessment and will set up one or more future project level EIR/EIS (depending on funding and phasing) that will allow for project approval, design, and construction of the Ultimate Project. As a Tier 1 study, the Ultimate Project is exempt from the requirements of the Transportation Conformity Rule in accordance with 40 code of federal regulations (CFR) 93.126, Other, Specific activities which do not involve or lead directly to construction, planning and technical studies. The only direct activity authorized based on a Tier I document is emergency or hardship advance land acquisitions (23 CFR 710.503), which is also exempt from conformity under 40 CFR 93.126. Accordingly, a conformity determination is not required for the Tier I Ultimate Project study, and it is therefore not discussed further in this documentation.

The Tier II project-level study will evaluate the initial phase of construction (IPOC) of the SR-239 Project at a project level. Because the IPOC will allow for project approval, design, and construction of the initial phase, it is subject to transportation conformity. The enclosed analysis and requested air quality conformity determination is for the IPOC.

The IPOC proposes a new two-lane facility (one lane in each direction) of about 3.6 miles in length connecting Vasco Road and Byron Highway near the Byron Airport (see **Figure 1** in Attachment A). The IPOC would intersect Vasco Road about 1.2 miles south of the Vasco Road/Camino Diablo intersection. The IPOC would follow a southeasterly alignment until it joins and conforms with existing Byron Highway about 1,800 feet north of Bruns Road. Full access to the IPOC would be provided from Vasco Road and from a new at-grade intersection at Armstrong Road. The IPOC includes several local street modifications to eliminate local street conflicts and accommodate local access. Two major local street modifications that are part of the IPOC are the following:

- Extending Armstrong Road eastward from Byron Hot Springs Road to Byron Highway, to provide access to the IPOC.
- Closing Byron Highway about 800 feet north of Holey Road, so that all through traffic would use the new IPOC facility and would no longer travel through the community of Byron.

Portions of a Class II/IV bicycle/pedestrian facility would be constructed along local roads as part of the IPOC. These include:

- Class II Bike Path along Camino Diablo between Byron Highway and Vasco Road
- Class II Bike Path along Walnut Boulevard and Concord Avenue between Camino Diablo and Marsh Creek Trail Staging Area
- Class II Bike Path along Byron Highway from the California Aqueduct to Clifton Court
- Class IV Bike Path along Byron Highway between Camino Diablo and Clifton Court Road

Type of Project:
New regionally significant street (proposed two-lane facility), roadway realignment (extension of Armstrong Road), change to existing state highway (closure of Byron Highway through Byron)

County Contra Costa	***Narrative Location/Route & Postmiles*** In Contra Costa County, 0.3 miles north of the California Aqueduct to about 1.2 miles south of the Vasco Road/Camino Diablo intersection **Caltrans Project #** EA 04-3G830

Lead Agency: California Department of Transportation

Contact Person	***Phone#***	***Fax#***	***Email***
Stephane Hu	925-256-4740	925-256-4701	StephanieH@ccta.net

Federal Action for which Project-Level PM Conformity is Needed *(check appropriate box)*

Categorical Exclusion (NEPA)	X	**EA or Draft EIS**	**FONSI or Final EIS**	**PS&E or Construction**	*Other*

Scheduled Date of Federal Action:

NEPA Delegation – Project Type *(check appropriate box)*

	Section 326 – Categorical Exclusion	X	**Section 327 – Non-Categorical Exclusion**

Current Programming Dates *(as appropriate)*

	PE/Environmental	**ENG**	**ROW**	**CON**
Start	2021	2025	2026	2027
End	2025	2026	2027	2028

Project Purpose and Need (Summary): *(please be brief)*

Purpose: Allow for immediate benefits to the public for the most critical transportation needs, including improved access to Byron Airport and reduced regional/non-local traffic through the town of Byron, while deferring other improvements until additional funding becomes available for the Ultimate Project.

Need: The IPOC is needed to improve regional mobility, improve access to Byron Airport, and reduce traffic through the community of Bryon. Specifically, through the community of Byron there is a mix of regional through traffic (including trucks) and local traffic. This creates operational conflicts and quality of life issues, including traffic congestion and associated localized emissions.

Surrounding Land Use/Traffic Generators *(especially effect on diesel traffic)*

Figure 2 in Attachment A identifies sensitive receptors within 1,000 feet of the proposed IPOC roadway alignment and connecting roadways as well as proposed bicycle/pedestrian facilities in the study area. Sensitive receptors are defined as schools and school yards, parks and playgrounds, daycare centers, nursing homes, medical facilities, and residences.

There are two residences south of the new intersection at Armstrong Road/Bryon Hot Springs Road, the closest of which is about 260 feet from the project right of way (Sheet 10 of Figure 2). Also shown in Sheet 10 of Figure 2 is one residence just north of the IPOC off Byron Hot Springs Road. There is one additional residence within 1,000 feet of the proposed IPOC, which is approximately 500 feet from the southern terminus with Byron Highway (Sheet 11 of Figure 2). There are no other sensitive receptors within 1,000 feet of the proposed IPOC. Likewise, there are no receptors along Vasco Road north of the future IPOC/Vasco Road intersection to Marsh Creek Road (Sheet 4). As shown in Figure 2, sensitive receptors are concentrated in the community of Byron along Byron Highway, Camino Diablo, and State Route 4 (Sheets 3 and 5). There are also scattered receptors along Marsh Creek Road (Sheet 2) and Great Valley Parkway/Byron Highway in the community of Mountain House (Sheet 13).

The Tracy area and nearby Lathrop, which are southeast of the study area, are key regional trucking and intermodal distribution centers for the Bay Area, and trucks from these centers bound for east Contra Costa County use Byron Highway because it is the shortest route. There are also significant agricultural resources around the south and southeast of Byron that use Byron Highway for distribution

access for agricultural products. In the future, manufacturing, wholesale, and transportation are expected to be among the fastest growing industries in east Contra Costa and west San Joaquin region. As freight volumes increase in the future, so will traffic and congestion. Without the IPOC, trucks will continue using Byron Highway and Camino Diablo to travel between east Contra Costa County and west San Joaquin County, which will affect the efficient movement of freight and result in increasing localized air pollution for residents and schools adjacent to these roadways (Figure 2).

Brief summary of assumptions and methodology used for conducting analysis

The IPOC is anticipated to influence travel patterns primarily in the community of Byron and surrounding unincorporated areas of Contra Costa County. The transportation study area and affected intersections are presented in **Figure 3** in Attachment A. A Visum Dynamic Traffic Assignment model (Visum DTA model) was used to develop traffic forecasts for the transportation study area with and without the IPOC under opening (2030) year conditions and horizon (2050) year conditions. (Fehr & Peers and Barrios Transportation Consulting 2022.) Year 2030 and 2050 truck volumes in the study area were based on truck counts collected in 2020.

Opening Year: If facility is a highway or street, Build and Baseline LOS, AADT, % and # trucks, truck AADT of proposed facility

Opening Year for the project-level conformity analysis is 2030. With implementation of the IPOC, local traffic is anticipated to shift from Byron Highway and Camino Diablo to the IPOC and Vasco Road. Table 1 summarizes average annual daily traffic (AADT) and truck (3-axles or more) volumes for the proposed IPOC roadway alignment and existing roadways in the study area. **Figure 4** in Attachment A depicts the study segments. AM and PM study period truck percentages and volumes on these segments are presented in Attachment B.

Levels of service (LOS) on individual roadway facilities are not available. Please refer to Tables 3 through 8 in later sections for an analysis of intersection LOS effects.

Table 1. Opening Year (2030) AADT and Truck Volumes for the Proposed IPOC Roadway Alignment and Study Segments

Roadway (location Code in Figure 4)	Total AADT			Truck AADT			% Trucks	
	No Build	Build	Δ [a]	No Build	Build	Δ [a]	No Build	Build
IPOC Roadway (G)	n/a [b]	8,320	**+8,320**	n/a [b]	660	**+660**	n/a [b]	8%
Vasco Rd. between IPOC and Camino Diablo (D)	29,020	36,510	**+7,490**	980	1,230	**+250**	3%	3%
Vasco Rd. between Camino Diablo and Marsh Creek Rd. (A)	30,650	31,860	**+1,210**	770	800	**+30**	3%	3%
Vasco Rd. south of IPOC (F)	29,020	29,020	0	980	980	0	3%	3%
Byron Hwy between SR 4 and Camino Diablo (B)	19,800	18,580	-1,220	1,660	1,560	-100	8%	8%
Byron Hwy between Camino Diablo and Holey Rd. (E)	23,950	15,790	-8,160	1,710	1,130	-580	7%	7%
Byron Hwy between Holey Rd. and Great Valley Pkwy (H)	23,830	23,830	0	1,800	1,800	0	8%	8%
Camino Diablo between Byron Hwy and Vasco Rd. (C)	18,150	10,510	-7,640	610	350	-260	3%	3%

Source: Barrios pers. comm.

Notes: **Bold underline** indicates an increase in traffic volumes from No Build conditions. Truck AADT has been rounded.

[a] Delta (Build minus No Build)

[b] The IPOC roadway is a new transportation facility and as such, there are no values for the No Build.

As shown in Table 1, opening year AADT on the IPOC roadway alignment is projected to be 8,320, of which only 660 AADT would be from trucks. With implementation of the IPOC, AADT on Vasco Road between the new IPOC connection and Camino Diablo and between Camino Diablo and Marsh Creek

Road would increase over No Build volumes. Total truck AADT on these portions of Vasco Road with the IPOC are predicted to be 1,230 and 800, respectively. While the volume of trucks traveling north on Vasco Road would slightly increase (by 30 to 250 vehicles), the percentage of trucks, relative to total AADT, would not change compared to No Build conditions (about 3% of total AADT). AADT and truck AADT on all other study segments would stay the same or decrease with implementation of the IPOC. Of note, through the community of Byron, trucks are anticipated to decrease on average by about 24% (locations B, C, and E in Table 1).

RTP Horizon Year / Design Year: If facility is a highway or street, Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

The Horizon Year for the project-level conformity analysis is 2050. Table 2 summarizes AADT and truck (3-axles or more) volumes for the proposed IPOC roadway alignment and existing roadways in the study area. **Figure 4** in Attachment A depicts the study segments. AM and PM study period truck percentages and volumes on these segments are presented in Attachment B. LOS on individual roadway facilities are not available. Please refer to Tables 3 through 8 in later sections for an analysis of intersection LOS effects.

Table 2. Horizon Year (2050) AADT and Truck Volumes for the Proposed IPOC Roadway Alignment and Study Segments

Roadway (location Code in Figure 4)	Total AADT			Truck AADT			% Trucks	
	No Build	Build	Δ [a]	No Build	Build	Δ [a]	No Build	Build
IPOC Roadway (G)	n/a [b]	11,380	**+11,380**	n/a [b]	900	**+900**	n/a [b]	8%
Vasco Rd. between IPOC and Camino Diablo (D)	34,760	43,270	**+8,510**	1,170	1,450	**+280**	3%	3%
Vasco Rd. between Camino Diablo and Marsh Creek Rd. (A)	34,440	36,250	**+1,810**	870	910	**+40**	3%	3%
Vasco Rd. south of IPOC (F)	34,760	34,760	0	1,170	1,170	0	3%	3%
Byron Hwy between SR 4 and Camino Diablo (B)	25,130	23,320	-1,810	2,110	1,960	-150	8%	8%
Byron Hwy between Camino Diablo and Holey Rd. (E)	29,840	19,400	-10,440	2,130	1,390	-740	7%	7%
Byron Hwy between Holey Rd. and Great Valley Pkwy (H)	29,230	29,230	0	2,210	2,210	0	8%	8%
Camino Diablo between Byron Hwy and Vasco Rd. (C)	22,390	12,940	-9,450	750	420	-330	3%	3%

Source: Barrios pers. comm.

Notes: **Bold underline** indicates an increase in traffic volumes from No Build conditions. Truck AADT has been rounded.

[a] Delta (Build minus No Build)

[b] The IPOC roadway is a new transportation facility and as such, there are no values for the No Build.

As shown in Table 2, horizon AADT on the IPOC roadway alignment is projected to be 11,380, of which only 900 AADT would be from trucks. With implementation of the IPOC, AADT on Vasco Road between the new IPOC connection and Camino Diablo and between Camino Diablo and Marsh Creek Road would increase over No Build volumes. Total truck AADT on these portions of Vasco Road with the IPOC are predicted to be 1,450 and 900, respectively. While the volume of trucks traveling north on Vasco Road would slightly increase (by 40 to 280 vehicles), the percentage of trucks, relative to total AADT, would not change compared to No Build conditions (3% of total AADT). AADT and truck AADT on all other study segments would stay the same or decrease with implementation of the IPOC. Of note, through the community of Byron, trucks are anticipated to decrease on average by about 24% (locations B, C, and E in Table 2).

Opening Year: If facility is an interchange(s) or intersection(s), Build and Baseline cross-street AADT, % and # trucks, truck AADT

The IPOC includes several local street modifications, including extending Armstrong Road eastward from Byron Hot Springs Road to Byron Highway and closing Byron Highway about 800 feet north of Holey Road. These improvements would create four new signalized intersections and remove the intersection at Byron Highway and Holey Road. Twelve additional intersections were included in the transportation study area based on the anticipated travel patterns that will be influenced by the IPOC. **Figure 3** in Attachment A shows all 17 intersections in the transportation study area.

Tables 3 and 4 summarize intersection LOS (AM and PM peak hours), AADT, and truck (3-axles or more) percentages under opening (2030) year Build and No-Build conditions, respectively. Table 5 compares AADT and truck percentages between the two conditions. AM and PM study period traffic volumes and truck percentages are presented in Attachment B.

Table 3. Opening (2030) Year Build Intersection LOS (AM and PM Peak Hours), AADT, and Truck Percentages within the Transportation Study Area

# [a]	Route	Cross Street	AM (PM) LOS	Total AADT	% Trucks	Truck AADT
1	Marsh Creek Rd.	Vineyards Pkwy.	B (A)	8,400	2%	200
2	Marsh Creek Rd.	Vasco Rd.	C (C)	44,500	5%	2,300
3	Marsh Creek Rd.	Walnut Blvd.	C (F)	32,000	5%	1,700
4	Marsh Creek Rd.	Sellers Ave.	A (A)	24,000	7%	1,600
5	Marsh Creek Rd.	Byron Highway	C (C)	38,600	5%	1,900
6	Walnut Blvd.	Vasco Rd.	B (B)	33,300	3%	900
7	Byron Highway	SR 4	B (E)	40,900	6%	2,400
8	Camino Diablo	Vasco Rd.	C (C)	41,500	3%	1,300
9	Camino Diablo	Holway Drive	C (C)	10,700	3%	400
10	Camino Diablo	Bryon Highway	C (C)	18,700	6%	1,100
11	Holey Rd.	Bryon Highway	n/a [b]	n/a [b]	n/a [b]	n/a [b]
12	Mountain House Rd.	Bryon Highway	A (B)	23,800	6%	1,500
13	Great Valley Pkwy.	Bryon Highway	B (B)	24,400	7%	1,600
14*	Vasco Rd.	IPOC	D (F)	37,200	5%	2,000
15*	Armstrong Rd.	IPOC	D (C)	25,000	6%	1,400
16*	Armstrong Rd.	Byron Hot Springs Rd.	B (C)	8,700	1%	100
17*	Armstrong Rd.	Byron Highway	A (A)	9,600	6%	600

Source: Barrios pers. comm.

Notes: Total and truck AADT have been rounded. * = new intersection created by the IPOC.

[a] See Figure 3 in Attachment A.

[b] Intersection removed under the Build condition.

Table 4. Opening (2030) Year No-Build Intersection LOS (AM and PM Peak Hours), AADT, and Truck Percentages within the Transportation Study Area

# [a]	Route	Cross Street	AM (PM) LOS	Total AADT	% Trucks	Truck AADT
1	Marsh Creek Rd.	Vineyards Pkwy.	B (A)	8,400	2%	200
2	Marsh Creek Rd.	Vasco Rd.	C (C)	43,300	5%	2,300
3	Marsh Creek Rd.	Walnut Blvd.	C (F)	32,000	5%	1,700
4	Marsh Creek Rd.	Sellers Ave.	A (A)	24,000	7%	1,600
5	Marsh Creek Rd.	Byron Highway	C (C)	39,800	5%	2,000
6	Walnut Blvd.	Vasco Rd.	B (A)	32,100	3%	900
7	Byron Highway	SR 4	B (D)	42,100	6%	2,500
8	Camino Diablo	Vasco Rd.	F (F)	41,000	3%	1,300
9	Camino Diablo	Holway Drive	C (C)	18,400	3%	600
10	Camino Diablo	Bryon Highway	D (D)	26,900	6%	1,600
11	Holey Rd.	Bryon Highway	A (A)	23,900	6%	1,500
12	Mountain House Rd.	Bryon Highway	A (A)	23,800	6%	1,500
13	Great Valley Pkwy.	Bryon Highway	B (B)	24,400	7%	1,600
14*	Vasco Rd.	IPOC	n/a [b]	n/a [b]	n/a [b]	n/a [b]

15*	Armstrong Rd.	IPOC	n/a [b]	n/a [b]	n/a [b]	n/a [b]
16*	Armstrong Rd.	Byron Hot Springs Rd.	n/a [b]	n/a [b]	n/a [b]	n/a [b]
17*	Armstrong Rd.	Byron Highway	n/a [b]	n/a [b]	n/a [b]	n/a [b]

Source: Barrios pers. comm.

Notes: Total and truck AADT have been rounded. * = new intersection created by the IPOC.

[a] See Figure 3 in Attachment A.

[b] Intersection does not exist under the No Build condition.

Table 5. Comparison of Build and No-Build Opening (2030) Year AADT and Truck Volumes within the Transportation Study Area

# [a]	Route	Cross Street	Change, Build vs. No Build		
			Total AADT	% Trucks	Truck AADT
1	Marsh Creek Rd.	Vineyards Pkwy.	0	0%	0
2	Marsh Creek Rd.	Vasco Rd.	**+1,200**	0%	**<+10**
3	Marsh Creek Rd.	Walnut Blvd.	0	0%	0
4	Marsh Creek Rd.	Sellers Ave.	0	0%	0
5	Marsh Creek Rd.	Byron Highway	-1,200	0%	-100
6	Walnut Blvd.	Vasco Rd.	**+1,200**	0%	**<+10**
7	Byron Highway	SR 4	-1,200	0%	-100
8	Camino Diablo	Vasco Rd.	**+500**	0%	**<+10**
9	Camino Diablo	Holway Drive	-7,700	0%	-200
10	Camino Diablo	Bryon Highway	-8,200	0%	-500
11	Holey Rd.	Bryon Highway	n/a [b]	n/a [b]	n/a [b]
12	Mountain House Rd.	Bryon Highway	0	0%	0
13	Great Valley Pkwy.	Bryon Highway	0	0%	0
14*	Vasco Rd.	IPOC	n/a [b]	n/a [b]	n/a [b]
15*	Armstrong Rd.	IPOC	n/a [b]	n/a [b]	n/a [b]
16*	Armstrong Rd.	Byron Hot Springs Rd.	n/a [b]	n/a [b]	n/a [b]
17*	Armstrong Rd.	Byron Highway	n/a [b]	n/a [b]	n/a [b]

Source: Barrios pers. comm.

Notes: **Bold underline** indicates an increase in traffic volumes from the No Build condition. Total and truck AADT have been rounded. * = new intersection created by the IPOC.

[a] See Figure 3 in Attachment A.

[b] Comparison not available - intersection does not exist under the Build or No Build condition.

As shown in Table 3, opening year (2030) AADT at the new IPOC connections with Vasco Road and Armstrong Road are projected to be 37,200 and 25,000, respectively. Trucks are expected to comprise 5% of AADT at IPOC/Vasco Road (2,000 AADT) and 6% at IPOC/Armstrong Road (1,400 AADT). Opening year (2030) AADT at the two other Armstrong Road intersections created under the project (at Bryon Hot Spring Road and at Bryon Highway) are projected to be 8,700 and 9,600, respectively. Truck volumes at these locations would be limited—100 AADT at Armstrong Road/ Bryon Hot Spring Road and 600 AADT at Armstrong Road/Bryon Highway. The new IPOC connections with Vasco Road and Armstrong Road are expected to operate at LOS D during the AM peak hour. AM and PM LOS at the two other Armstrong Road intersections created under the project would be C or better.

Beyond these four new intersections, implementation of the IPOC would slightly increase total and truck AADT at the three existing Vasco Road cross streets north of the future IPOC connection (at Marsh Creek Road, at Walnut Boulevard, and at Camino Diablo) (Table 5). The Marsh Creek Road and Walnut Boulevard intersections operate at LOS C or better under No Build conditions; the intersection with Camino Diablo operates at LOS F (Table 4). With implementation of the IPOC, LOS at Vasco Road/Camino Diablo would improve to LOS C (LOS at the Marsh Creek Road and Walnut Boulevard would remain relatively unchanged from No Build conditions) (Table 3). Improvements to LOS are a result of traffic redistribution caused by the IPOC and the new intersection of Vasco Road/IPOC metering the amount of traffic that can be delivered to the intersections within the study area. While total traffic volumes would increase at these three intersection locations, relative to No Build conditions, the increase in truck volumes would not be significant. As shown in Table 5, truck volumes would increase

by less than 10 to about 200 AADT, depending on location. The percentage of trucks, relative to total AADT, would also not change compared to No Build conditions.

AADT and truck AADT through all other study intersections would stay the same or decrease with implementation of the IPOC. LOS would likewise stay the same or improve at most intersections, including the intersection of Byron Highway/Camino Diablo where the LOS would improve from LOS D to LOS C for both the AM and PM peak hour with implementation of the IPOC.

RTP Horizon Year / Design Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

Tables 6 and 7 summarize intersection LOS (AM and PM peak hours), AADT, and truck (3-axles or more) percentages under horizon (2050) year Build and No-Build conditions, respectively. Table 8 compares AADT and truck percentages between the two conditions. AM and PM study period traffic volumes and truck percentages are presented in Attachment B.

Table 6. Horizon (2050) Year Build Intersection LOS (AM and PM Peak Hours), AADT, and Truck Percentages within the Transportation Study Area

# [a]	Route	Cross Street	AM (PM) LOS	Total AADT	% Trucks	Truck AADT
1	Marsh Creek Rd.	Vineyards Pkwy.	B (A)	10,800	2%	200
2	Marsh Creek Rd.	Vasco Rd.	C (C)	52,800	5%	2,800
3	Marsh Creek Rd.	Walnut Blvd.	C (F)	37,600	5%	2,000
4	Marsh Creek Rd.	Sellers Ave.	A (A)	29,000	7%	1,900
5	Marsh Creek Rd.	Byron Highway	C (D)	46,300	5%	2,300
6	Walnut Blvd.	Vasco Rd.	F (E)	39,300	3%	1,100
7	Byron Highway	SR 4	C (F)	49,100	6%	2,900
8	Camino Diablo	Vasco Rd.	F (F)	49,200	3%	1,500
9	Camino Diablo	Holway Drive	C (C)	13,300	3%	400
10	Camino Diablo	Bryon Highway	D (D)	23,700	6%	1,400
11	Holey Rd.	Bryon Highway	n/a [b]	n/a [b]	n/a [b]	n/a [b]
12	Mountain House Rd.	Bryon Highway	A (F)	29,200	6%	1,800
13	Great Valley Pkwy.	Bryon Highway	C (C)	30,000	7%	2,000
14*	Vasco Rd.	IPOC	D (F)	44,700	5%	2,400
15*	Armstrong Rd.	IPOC	E (D)	31,800	6%	1,800
16*	Armstrong Rd.	Byron Hot Springs Rd.	D (C)	13,800	1%	100
17*	Armstrong Rd.	Byron Highway	A (A)	11,300	6%	700

Source: Barrios pers. comm.

Notes: Total and truck AADT have been rounded. * = new intersection created by the IPOC.

[a] See Figure 3 in Attachment A.

[b] Intersection removed under the Build condition.

Table 7. Horizon (2050) Year No-Build Intersection LOS (AM and PM Peak Hours), AADT, and Truck Percentages within the Transportation Study Area

# [a]	Route	Cross Street	AM (PM) LOS	Total AADT	% Trucks	Truck AADT
1	Marsh Creek Rd.	Vineyards Pkwy.	B (A)	10,800	2%	200
2	Marsh Creek Rd.	Vasco Rd.	F (E)	51,000	5%	2,700
3	Marsh Creek Rd.	Walnut Blvd.	C (F)	37,600	5%	2,000
4	Marsh Creek Rd.	Sellers Ave.	A (A)	29,000	7%	1,900
5	Marsh Creek Rd.	Byron Highway	C (E)	48,100	5%	2,400
6	Walnut Blvd.	Vasco Rd.	F (C)	37,500	3%	1,000
7	Byron Highway	SR 4	C (F)	50,900	6%	3,000
8	Camino Diablo	Vasco Rd.	F (F)	48,800	3%	1,500
9	Camino Diablo	Holway Drive	C (F)	22,800	3%	800
10	Camino Diablo	Bryon Highway	F (F)	34,100	6%	2,100
11	Holey Rd.	Bryon Highway	B (A)	29,300	6%	1,800
12	Mountain House Rd.	Bryon Highway	A (F)	29,200	6%	1,800
13	Great Valley Pkwy.	Bryon Highway	C (C)	30,000	7%	2,000
14*	Vasco Rd.	IPOC	n/a [b]	n/a [b]	n/a [b]	n/a [b]

15*	Armstrong Rd.	IPOC	n/a [b]	n/a [b]	n/a [b]	n/a [b]
16*	Armstrong Rd.	Byron Hot Springs Rd.	n/a [b]	n/a [b]	n/a [b]	n/a [b]
17*	Armstrong Rd.	Byron Highway	n/a [b]	n/a [b]	n/a [b]	n/a [b]

Source: Barrios pers. comm.

Notes: Total and truck AADT have been rounded. * = new intersection created by the IPOC.

[a] See Figure 3 in Attachment A.

[b] Intersection does not exist under the No Build condition.

Table 8. Comparison of Build and No-Build Horizon (2050) Year AADT and Truck Volumes within the Transportation Study Area

# [a]	Route	Cross Street	Change, Build vs. No Build		
			Total AADT	% Trucks	Truck AADT
1	Marsh Creek Rd.	Vineyards Pkwy.	0	0%	0
2	Marsh Creek Rd.	Vasco Rd.	**+1,800**	0%	**+100**
3	Marsh Creek Rd.	Walnut Blvd.	0	0%	0
4	Marsh Creek Rd.	Sellers Ave.	0	0%	0
5	Marsh Creek Rd.	Byron Highway	-1,800	0%	-100
6	Walnut Blvd.	Vasco Rd.	**+1,800**	0%	**+100**
7	Byron Highway	SR 4	-1,800	0%	-100
8	Camino Diablo	Vasco Rd.	**+400**	0%	**<+10**
9	Camino Diablo	Holway Drive	-9,500	0%	-400
10	Camino Diablo	Bryon Highway	-10,400	0%	-700
11	Holey Rd.	Bryon Highway	n/a [b]	n/a [b]	n/a [b]
12	Mountain House Rd.	Bryon Highway	0	0%	0
13	Great Valley Pkwy.	Bryon Highway	0	0%	0
14*	Vasco Rd.	IPOC	n/a [b]	n/a [b]	n/a [b]
15*	Armstrong Rd.	IPOC	n/a [b]	n/a [b]	n/a [b]
16*	Armstrong Rd.	Byron Hot Springs Rd.	n/a [b]	n/a [b]	n/a [b]
17*	Armstrong Rd.	Byron Highway	n/a [b]	n/a [b]	n/a [b]

Source: Barrios pers. comm.

Notes: **Bold underline** indicates an increase in traffic volumes from No Build conditions. Total and truck AADT have been rounded. * = new intersection created by the IPOC.

[a] See Figure 3 in Attachment A.

[b] Comparison not available - intersection does not exist under the Build or No Build condition.

As shown in Table 6, horizon year (2050) AADT at the new IPOC connections with Vasco Road and Armstrong Road are projected to be 44,700 and 31,800, respectively. Trucks would comprise 2,400 and 1,800 of this AADT, respectively. Horizon year (2050) AADT at the two other Armstrong Road intersections created under the IPOC (at Bryon Hot Spring Road and at Bryon Highway) are projected to be 13,800 and 11,300, respectively. Truck volumes at these locations would be limited—100 AADT at Armstrong Road/Bryon Hot Spring Road and 700 AADT at Armstrong Road/Bryon Highway. The new IPOC connections with Vasco Road and Armstrong Road are expected to operate at LOS D or worse during the AM and PM peak hours. The Armstrong Road/Bryon Hot Spring Road intersection would likewise operate at LOS D during the AM peak hour.

Beyond these four new intersections, implementation of the IPOC would slightly increase total and truck AADT at the three existing Vasco Road cross streets north of the future IPOC connection (at Marsh Creek Road, at Walnut Boulevard, and at Camino Diablo) (Table 8). These intersections operate at LOS E or worse under No Build conditions during one or more peak hours (Table 7). With implementation of the IPOC, LOS at Marsh Creek Road would improve to LOS C and PM LOS at Walnut Boulevard to LOS E (LOS at Camino Diablo would remain unchanged from No Build conditions) (Table 6). Improvements to LOS are a result of traffic redistribution caused by the IPOC and the new intersection of Vasco Road/IPOC metering the amount of traffic that can be delivered to the intersections within the study area. While total traffic volumes would increase at these three intersection locations, relative to No Build conditions, the increase in truck volumes would not be significant. As shown in Table 8, truck volumes would increase by less than 10 to about 200 AADT, depending on location. The percentage of trucks, relative to total AADT, would also not change compared to No Build conditions.

AADT and truck AADT through all other study intersections would stay the same or decrease with implementation of the IPOC. LOS would likewise stay the same or improve at most intersections, including the intersection of Byron Highway/Camino Diablo where the LOS would improve from LOS F to LOS D for both the AM and PM peak hour with implementation of the IPOC.

Opening Year: If facility is a bus, rail or intermodal facility/terminal/transfer point, # of bus arrivals for Build and No Build, % and # of bus arrivals will be diesel buses

The IPOC is not a designated terminal or central transfer point. This criterion, therefore, does not apply.

RTP Horizon Year / Design Year: If facility is a bus, rail or intermodal facility/terminal/transfer point, # of bus arrivals for Build and No Build, % and # of bus arrivals will be diesel buses

The IPOC is not a designated terminal or central transfer point. This criterion, therefore, does not apply.

Describe potential traffic redistribution effects of congestion relief *(impact on other facilities)*

The IPOC would provide a new connection between Byron Highway and Vasco Road, just north of Byron Airport. Traffic is anticipated to shift from Byron Highway and Camino Diablo to the IPOC and Vasco Road, delivering congestion relief on local roads and intersections in the community of Byron and just west of Discovery Bay. While traffic would increase on Vasco Road north of the future IPOC connection, affected intersections would generally operate at an equivalent or better peak hour LOS, relative to no build conditions.

Comments/Explanation/Details (please be brief)

The IPOC would reduce AADT and truck AADT along Byron Highway and Camino Diablo through the community of Bryon. As shown in **Figure 2** in Attachment A, sensitive receptors are immediately adjacent to these roadways. While traffic would be redistributed to the IPOC and Vasco Road north of the future IPOC connection, total truck AADT on the IPOC and Vasco Road would not be significant. Under horizon (2050) year conditions, truck AADT on the IPOC is predicted to be 900. Maximum truck AADT on Vasco Road would be 1,450 (see Table 2). Importantly, while truck AADT would increase along these segments, there are limited to no sensitive receptors within 1,000 feet of the roadways (see Figure 2). **In this way, the IPOC will redistribute AADT and truck AADT from areas with relatively high concentrations of residential receptors (i.e., along Byron Highway and Camino Diablo) to areas with no existing or planned development (i.e., along the IPOC and Vasco Road)** (Figure 5 in Attachment A). This would be an air quality and public health benefit. Furthermore, the IPOC falls outside of the Contra Costa County urban limit line (ULL) and within an area of the County that is restricted for development. The goal for the land beyond the ULL per the Contra Costa County General Plan is to preserve open space, recreation, wetlands, distance from existing development, and likelihood of substantial injury to fish or wildlife or their habitat; few or no additional residential developments are anticipated in this area, thus limiting the potential for future sensitive receptors to be located adjacent to the IPOC.

The IPOC affects intersections that will operate at LOS D or worse, with or without the project. However, the percent (max of 6% in 2050) and volume (max of 2,900 in 2050) of trucks traveling through these intersections is not significant.

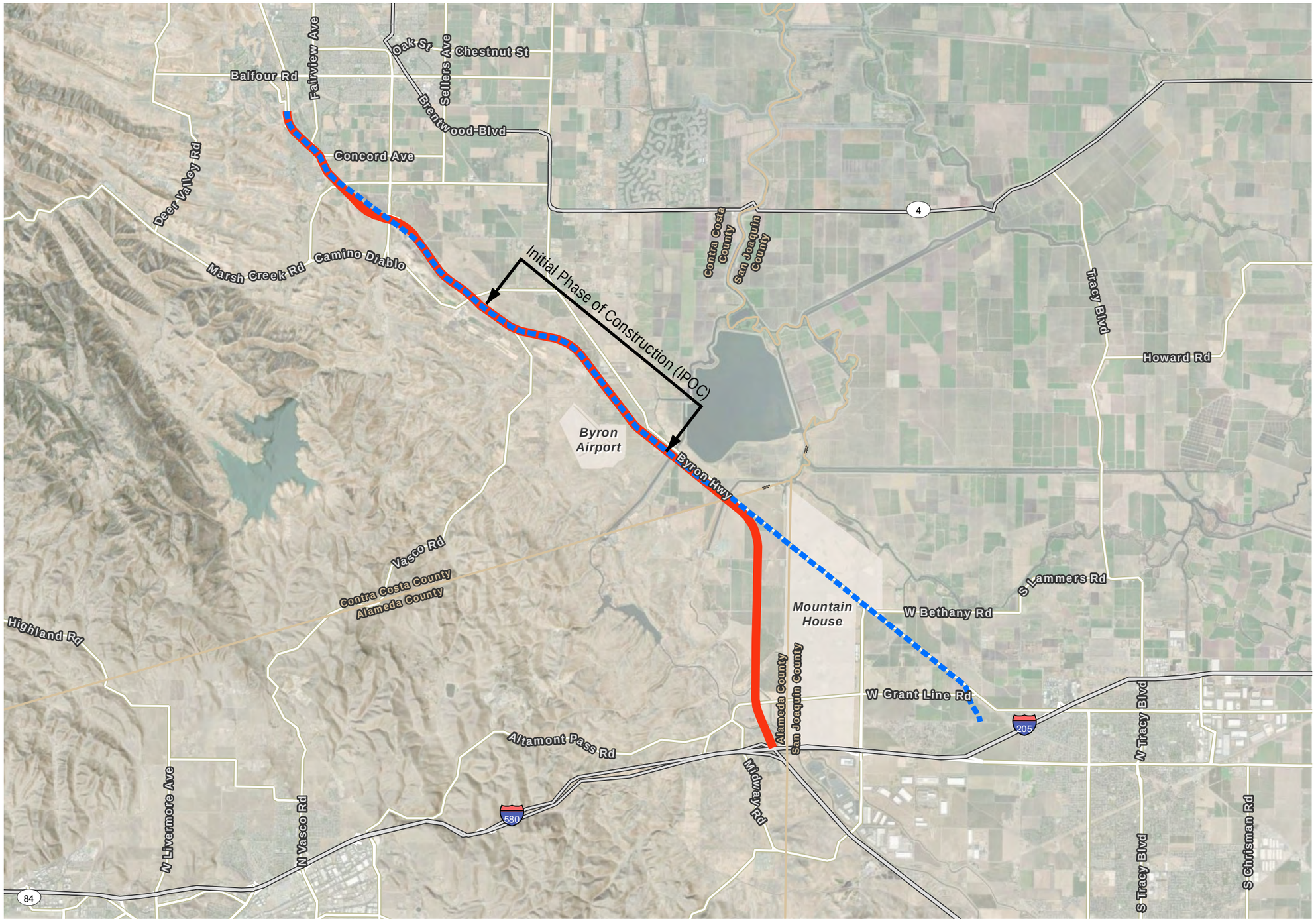
Recommendation: The project does not meet criteria for being a Project of Air Quality Concern (POAQC).

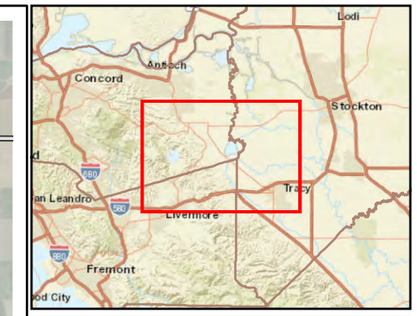
References Cited

Barrios, Eddie. Principal. Barrios Transportation Consulting. January 26, 2023 and February 28, 2023—email message to ICF with traffic data for air quality analysis.

Fehr & Peers and Barrios Transportation Consulting. 2022. SR 239 PA/ED: Final Year 2035/2055 Traffic Volume Forecasts for Tier I Project and Year 2030/2050 Traffic Volume Forecasts for Tier II Project. Memo to Brady Nadell, WSP. November 17.

Attachment A: Figures





Legend

- Ultimate SR 239 Project Alternative A
- Ultimate SR 239 Project Alternative B
- Initial Phase of Construction (IPOC)

Source: ESRI

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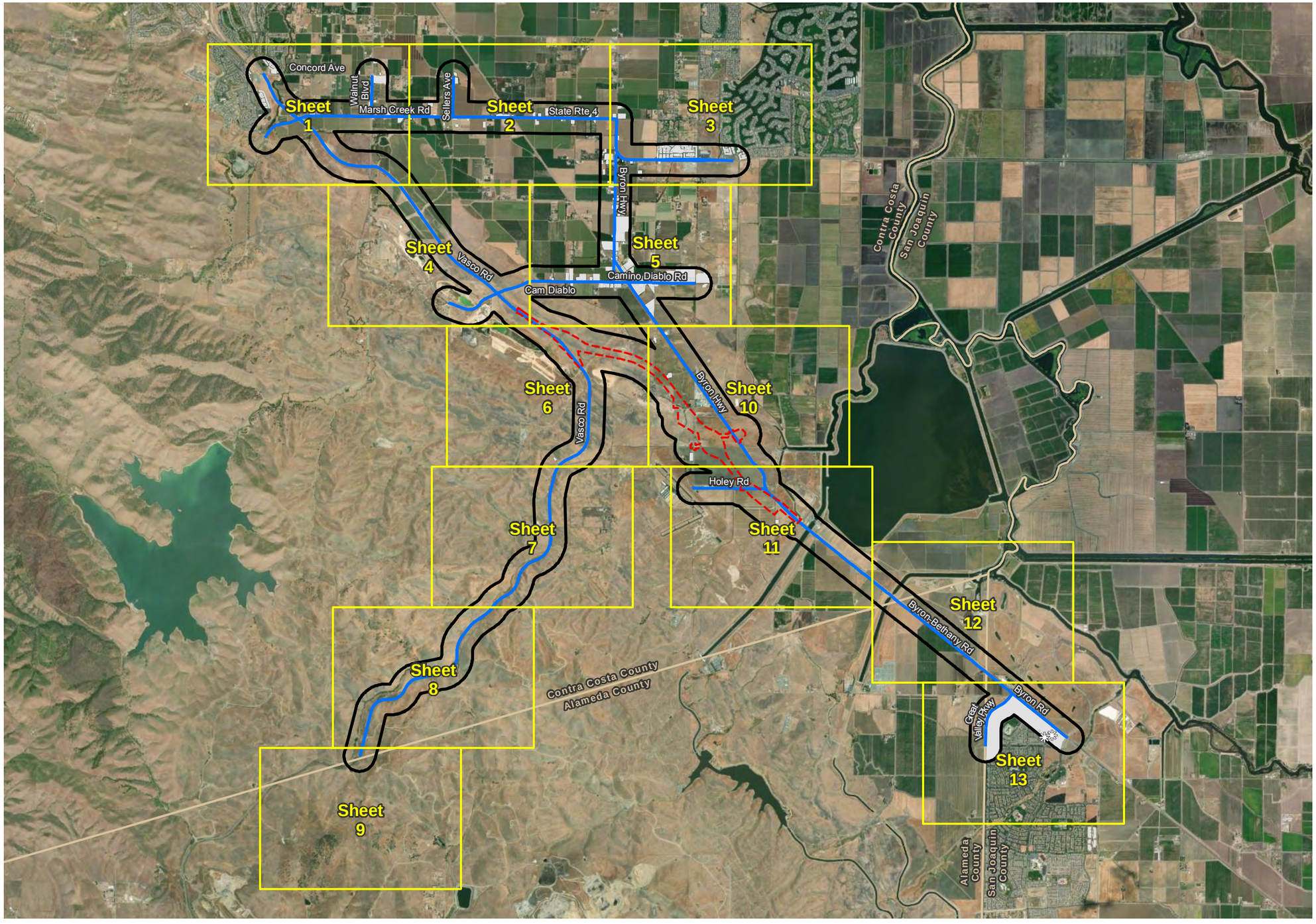
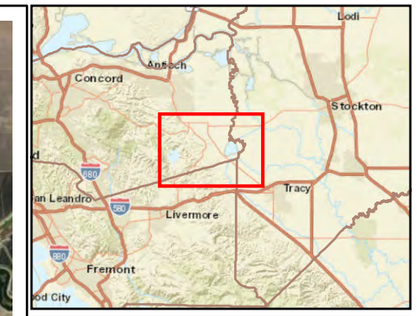
Figure 1
Project Alternatives
SR 239





Legend

- IPOC Alignment
- Study Roads
- Study Area (1,000-ft Buffer)
- Sensitive Receptor*

*Receptor types detailed on following sheets

Source: ESRI World Imagery

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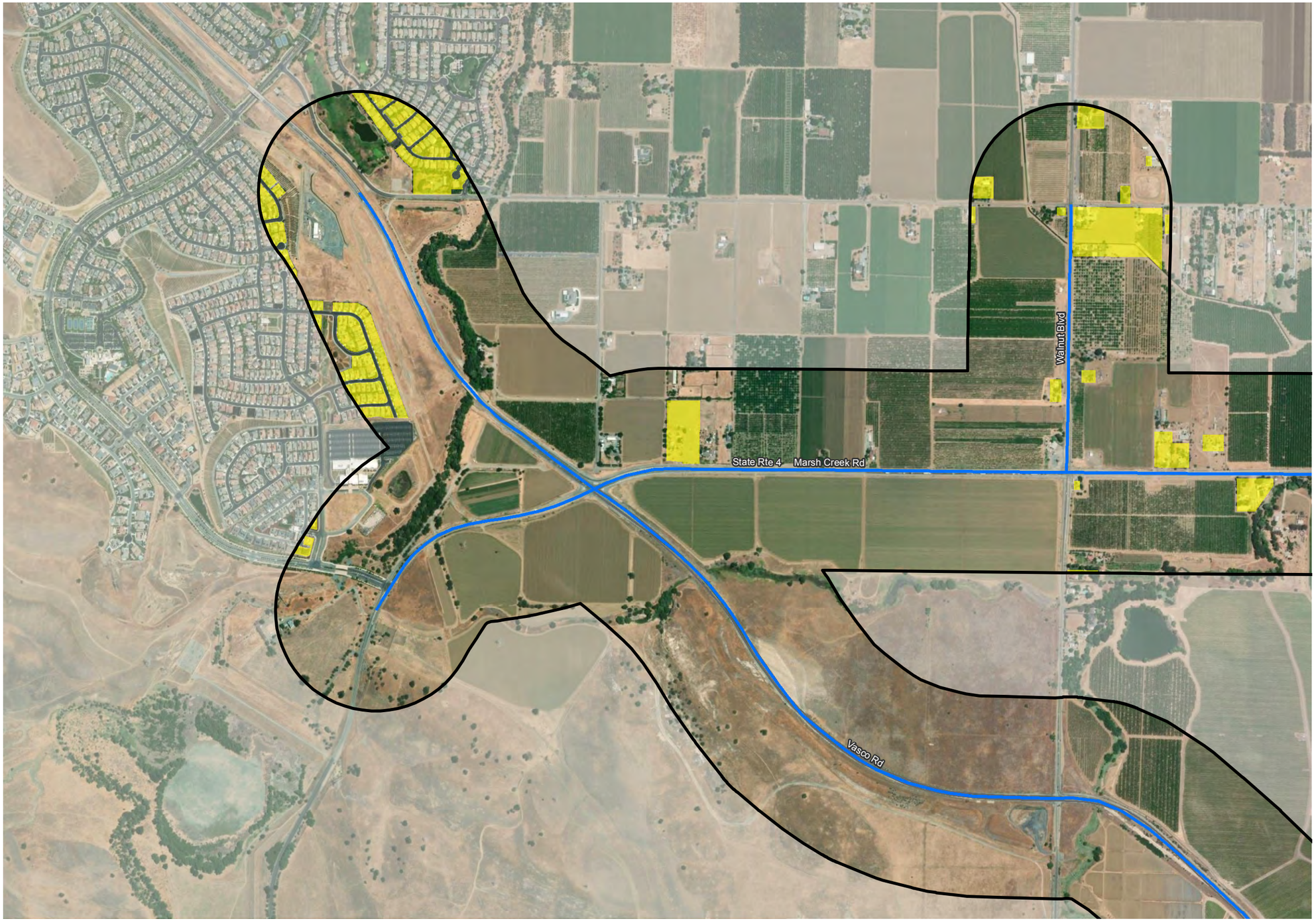
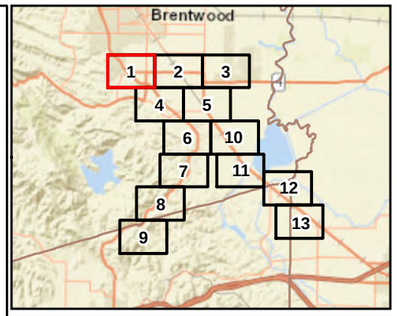
Figure 2 - Detail Sheet Index Map
Sensitive Receptors





Legend

- IPOC Alignment
- Study Roads
- Study Area (1,000-ft Buffer)
- Daycare/Preschool
- School
- Residential
- Neighborhood Park

Note: Pedestrian/bicycle-lane improvements not shown in figure (construction-only).

Source: ESRI World Imagery & StreetMap

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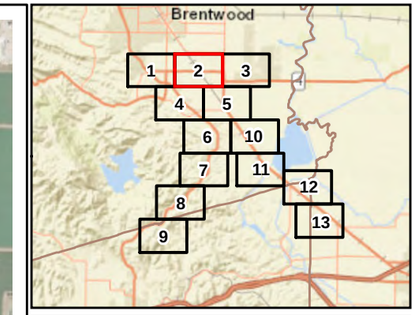
Figure 2 - Detail Sheet 1 of 13
Sensitive Receptors



Legend

- IPOC Alignment
- Study Roads
- Study Area (1,000-ft Buffer)
- Daycare/Preschool
- School
- Residential
- Neighborhood Park

Note: Pedestrian/bicycle-lane improvements not shown in figure (construction-only).

Source: ESRI World Imagery & StreetMap

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Figure 2 - Detail Sheet 2 of 13
Sensitive Receptors

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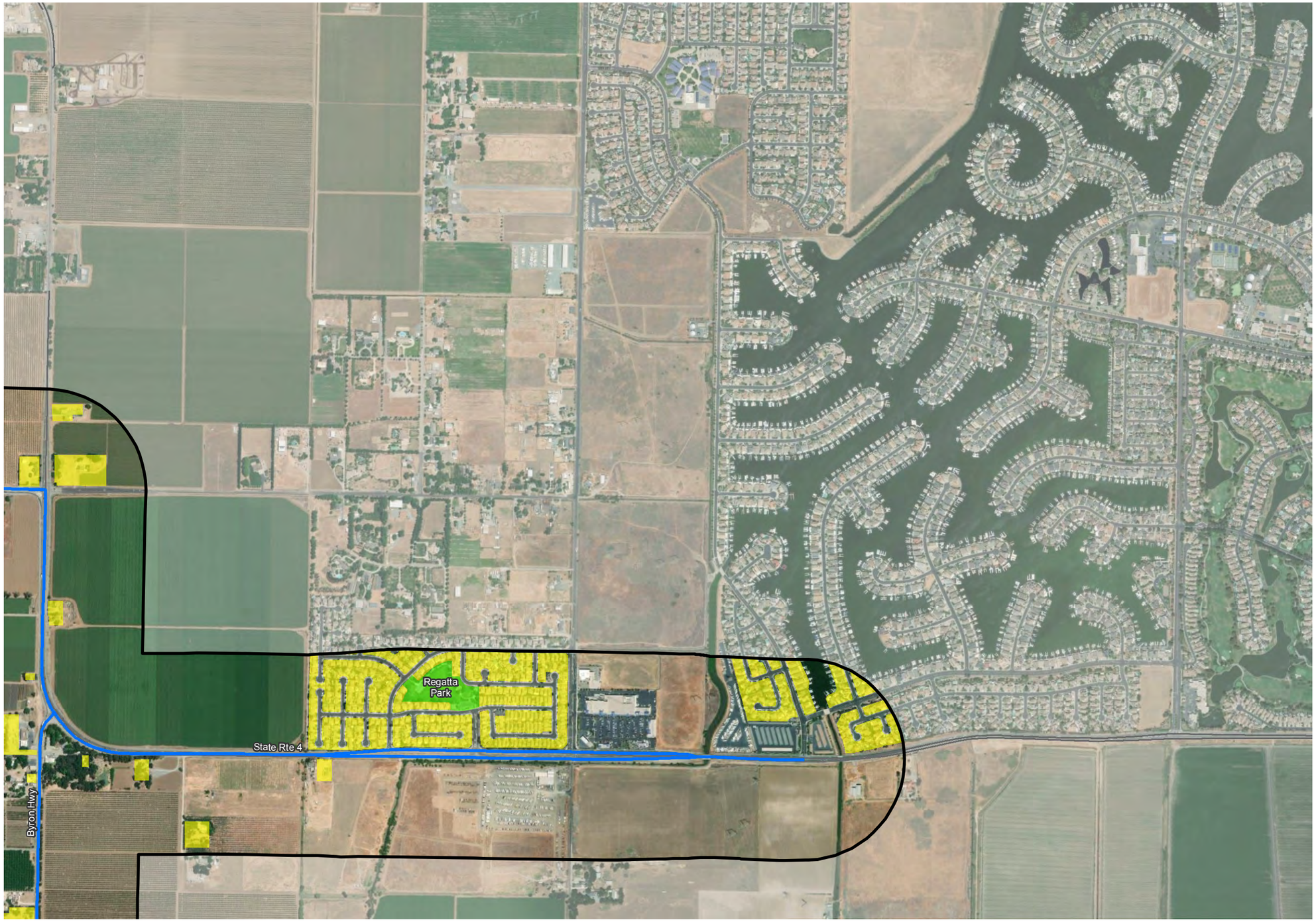

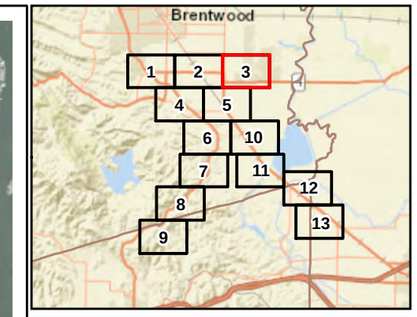

Legend

- IPOC Alignment
- Study Roads
- Study Area (1,000-ft Buffer)
- Daycare/Preschool
- School
- Residential
- Neighborhood Park

Note: Pedestrian/bicycle-lane improvements not shown in figure (construction-only).

Source: ESRI World Imagery & StreetMap

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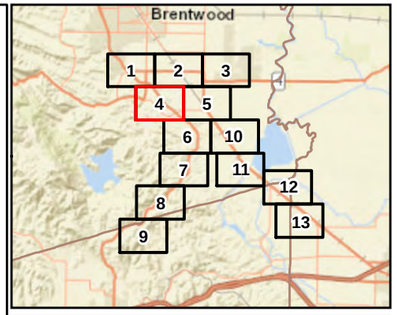
Figure 2 - Detail Sheet 3 of 13
Sensitive Receptors



Legend

- IPOC Alignment
- Study Roads
- Study Area (1,000-ft Buffer)
- Daycare/Preschool
- School
- Residential
- Neighborhood Park

Note: Pedestrian/bicycle-lane improvements not shown in figure (construction-only).

Source: ESRI World Imagery & StreetMap

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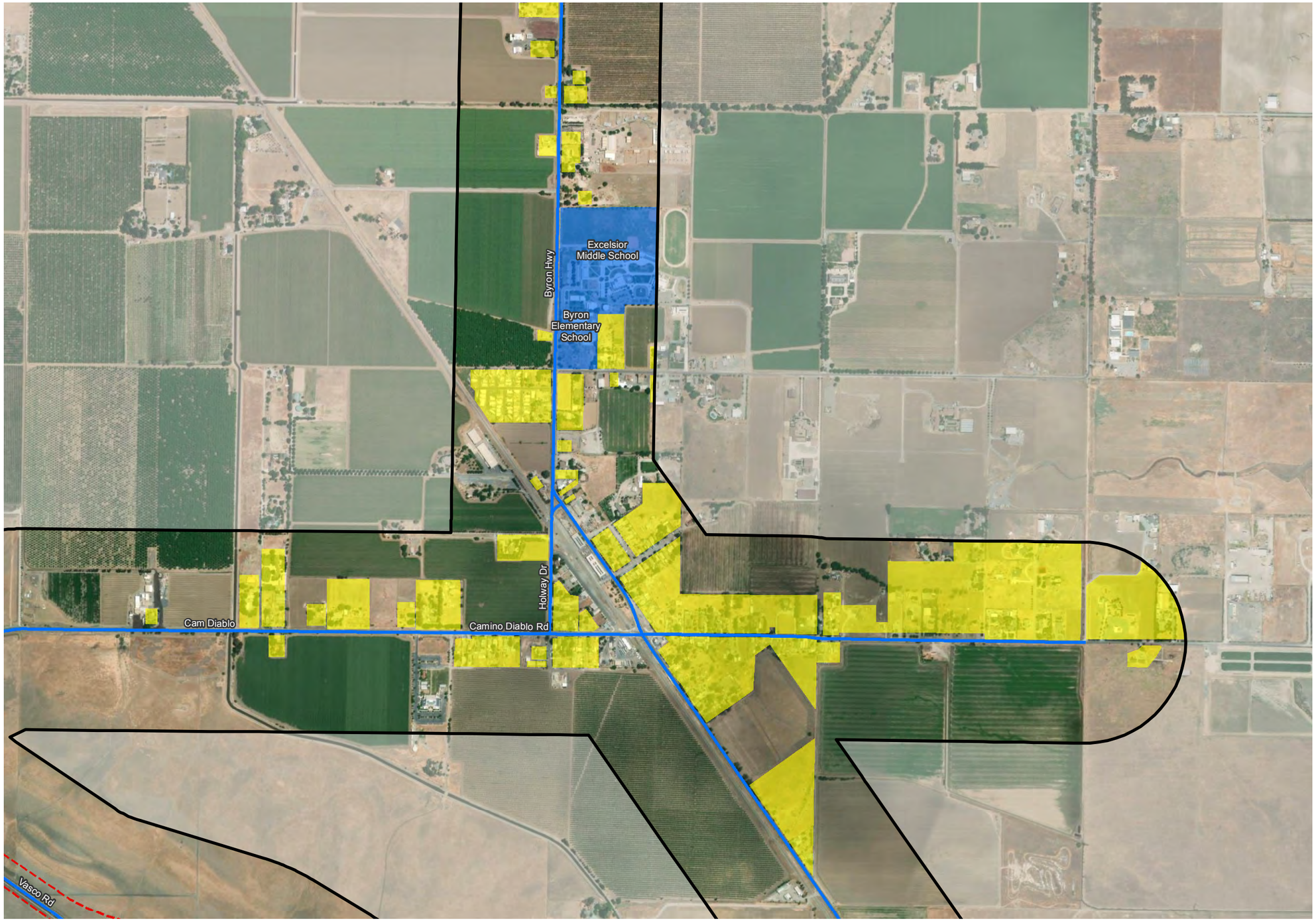
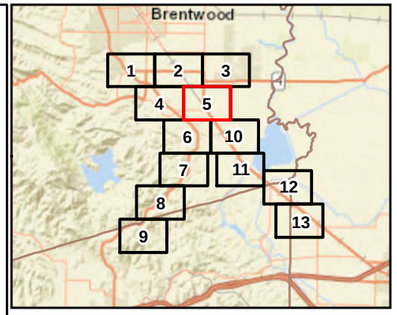
Figure 2 - Detail Sheet 4 of 13
Sensitive Receptors





Legend

- IPOC Alignment
- Study Roads
- Study Area (1,000-ft Buffer)
- Daycare/Preschool
- School
- Residential
- Neighborhood Park

Note: Pedestrian/bicycle-lane improvements not shown in figure (construction-only).

Source: ESRI World Imagery & StreetMap

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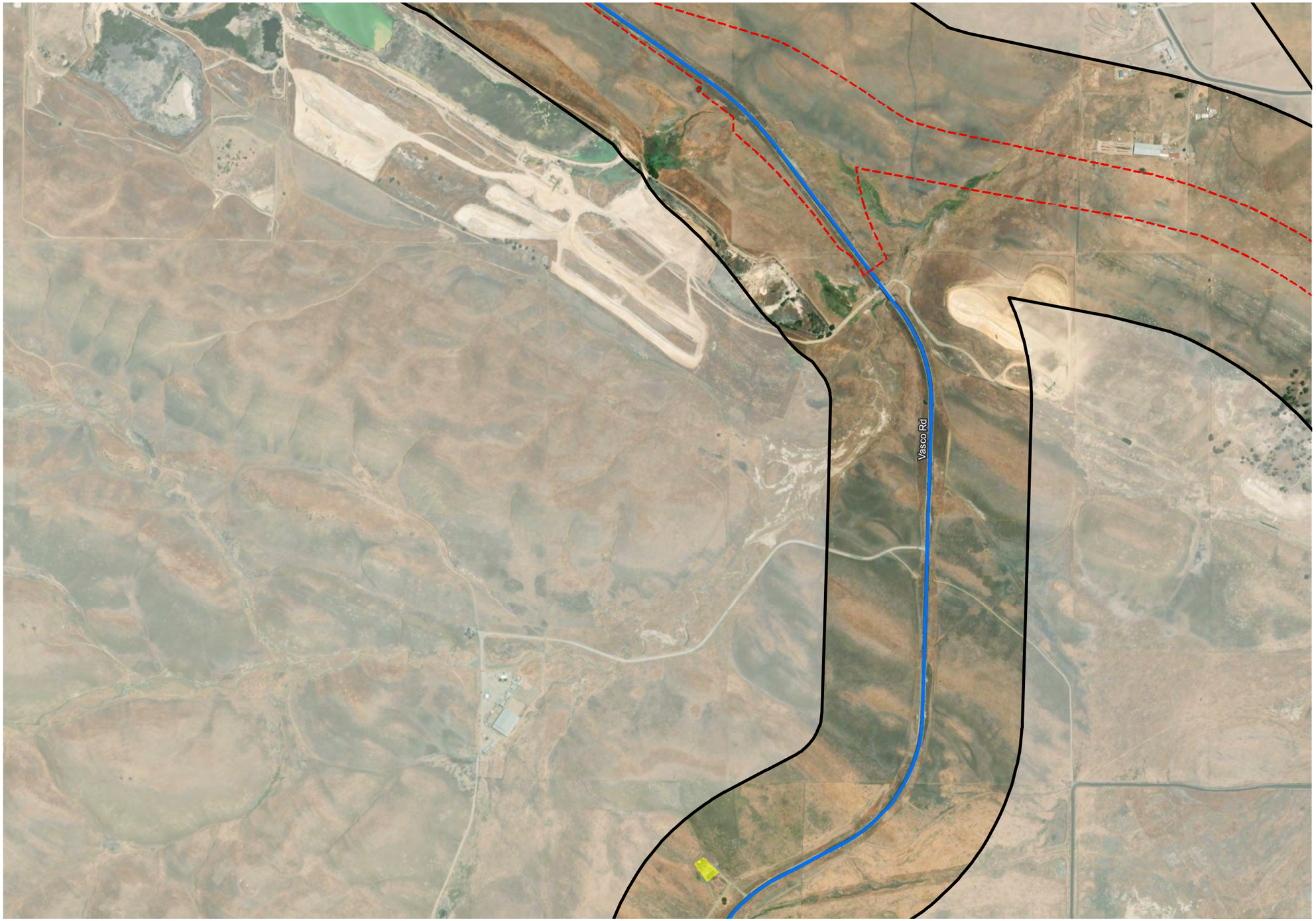
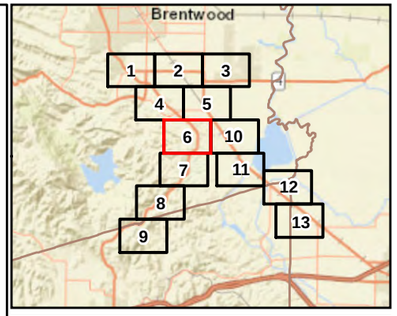
Figure 2 - Detail Sheet 5 of 13
Sensitive Receptors





Legend

- IPOC Alignment
- Study Roads
- Study Area (1,000-ft Buffer)
- Daycare/Preschool
- School
- Residential
- Neighborhood Park

Note: Pedestrian/bicycle-lane improvements not shown in figure (construction-only).

Source: ESRI World Imagery & StreetMap

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Figure 2 - Detail Sheet 6 of 13
Sensitive Receptors

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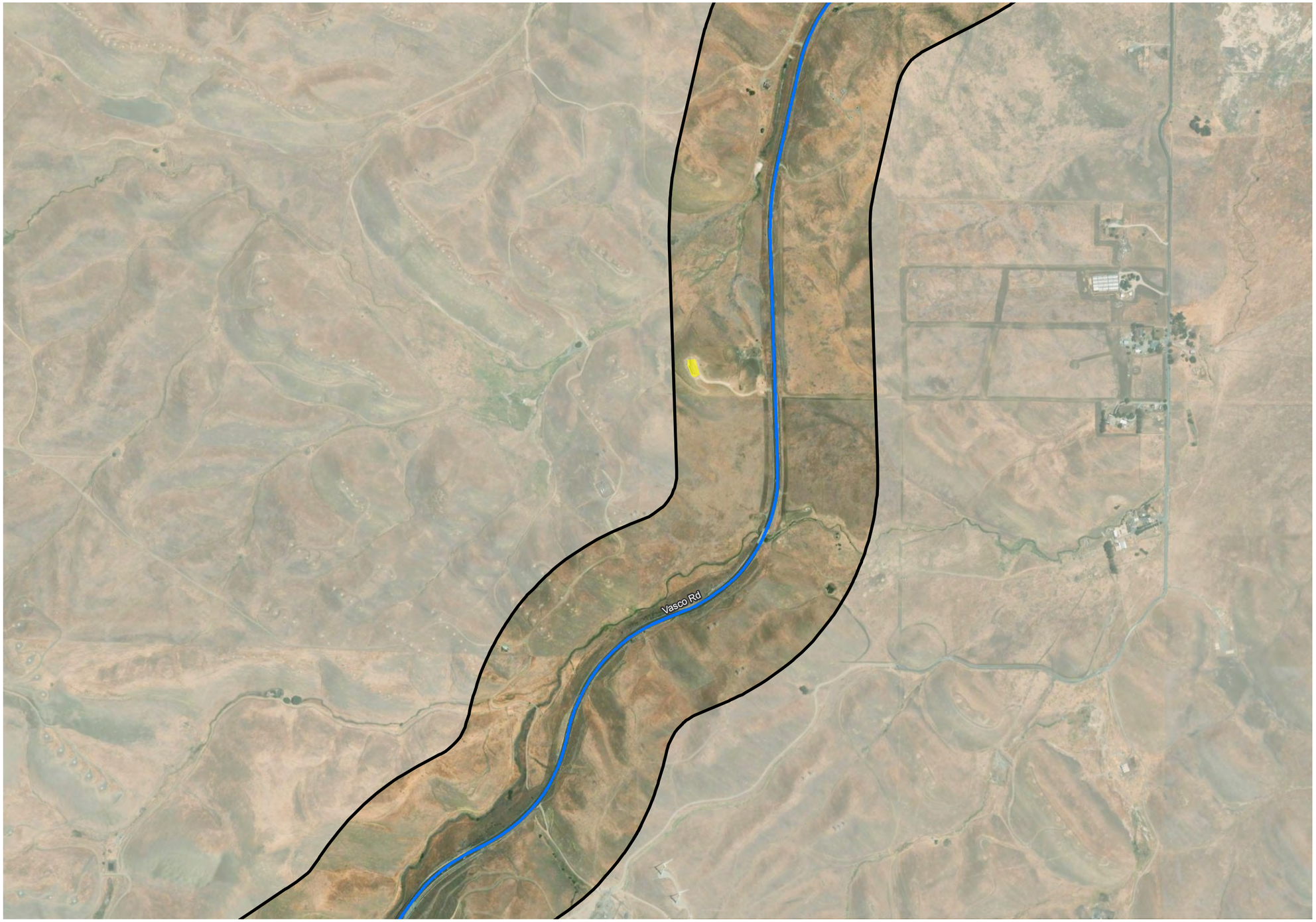

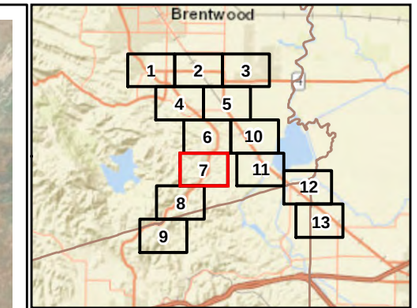

Legend

- IPOC Alignment
- Study Roads
- Study Area (1,000-ft Buffer)
- Daycare/Preschool
- School
- Residential
- Neighborhood Park

Note: Pedestrian/bicycle-lane improvements not shown in figure (construction-only).

Source: ESRI World Imagery & StreetMap

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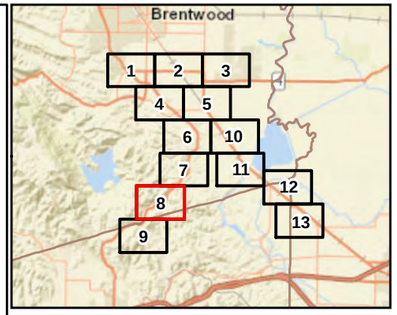
Figure 2 - Detail Sheet 7 of 13
Sensitive Receptors



Legend

- IPOC Alignment
- Study Roads
- Study Area (1,000-ft Buffer)
- Daycare/Preschool
- School
- Residential
- Neighborhood Park

Note: Pedestrian/bicycle-lane improvements not shown in figure (construction-only).

Source: ESRI World Imagery & StreetMap

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Figure 2 - Detail Sheet 8 of 13
Sensitive Receptors

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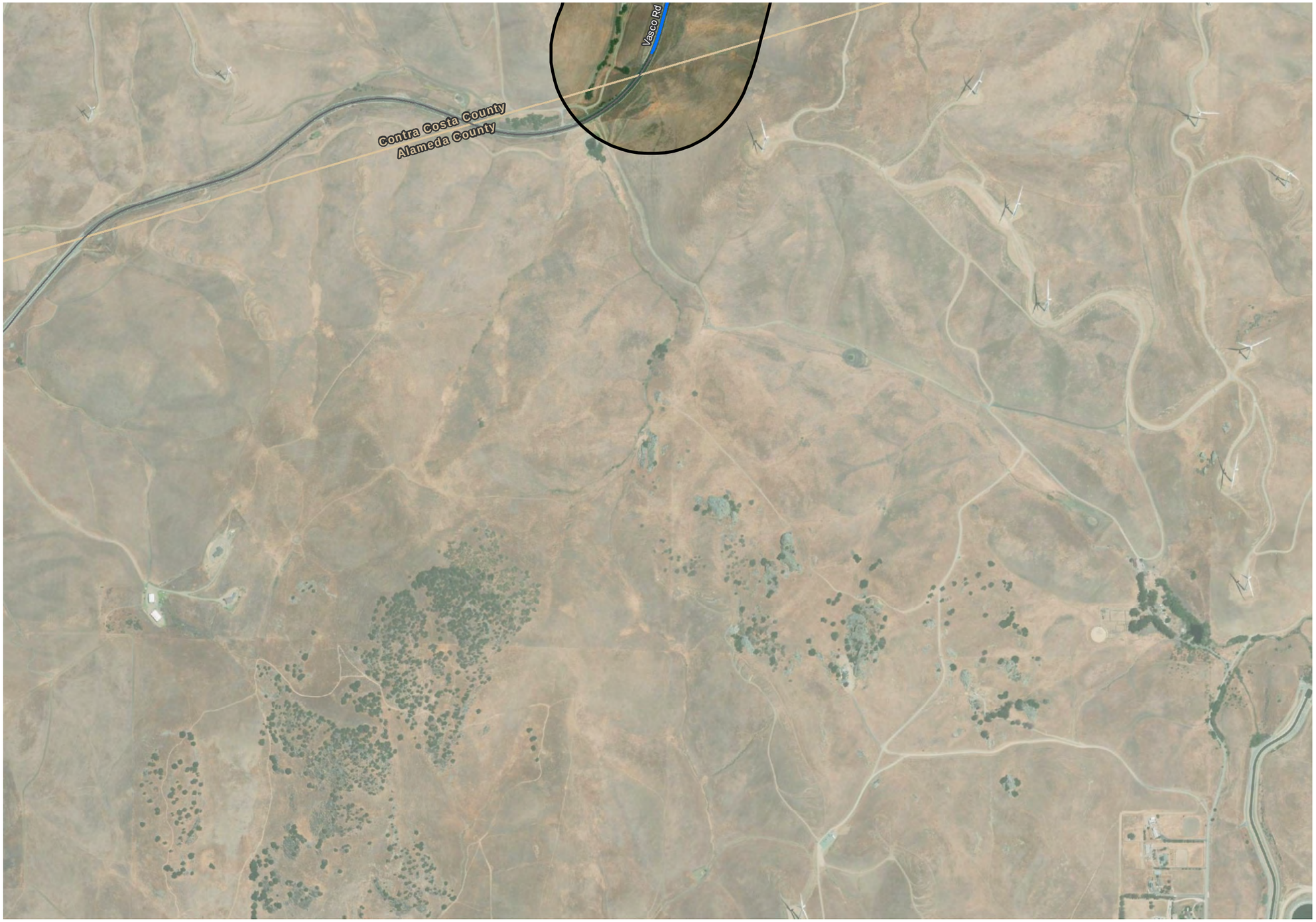

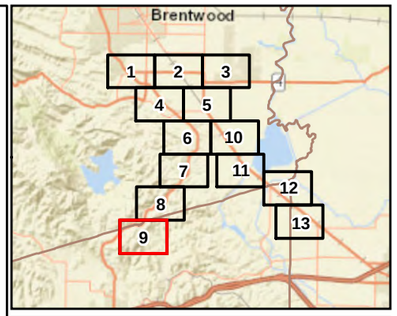

Legend

- IPOC Alignment
- Study Roads
- Study Area (1,000-ft Buffer)
- Daycare/Preschool
- School
- Residential
- Neighborhood Park

Note: Pedestrian/bicycle-lane improvements not shown in figure (construction-only).

Source: ESRI World Imagery & StreetMap

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Figure 2 - Detail Sheet 9 of 13
Sensitive Receptors

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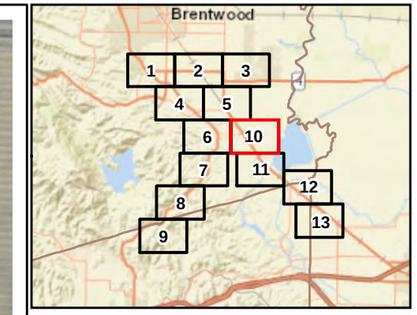

Legend

- IPOC Alignment
- Study Roads
- Study Area (1,000-ft Buffer)
- Daycare/Preschool
- School
- Residential
- Neighborhood Park

Note: Pedestrian/bicycle-lane improvements not shown in figure (construction-only).

Source: ESRI World Imagery & StreetMap

N

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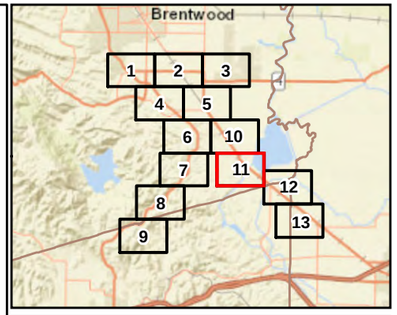
Figure 2 - Detail Sheet 10 of 13
Sensitive Receptors



Legend

- IPOC Alignment
- Study Roads
- Study Area (1,000-ft Buffer)
- Daycare/Preschool
- School
- Residential
- Neighborhood Park

Note: Pedestrian/bicycle-lane improvements not shown in figure (construction-only).

Source: ESRI World Imagery & StreetMap

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0 500 1,000 Feet

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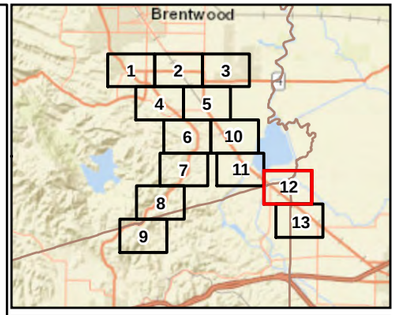
Figure 2 - Detail Sheet 11 of 13
Sensitive Receptors



Legend

- IPOC Alignment
- Study Roads
- Study Area (1,000-ft Buffer)
- Daycare/Preschool
- School
- Residential
- Neighborhood Park

Note: Pedestrian/bicycle-lane improvements not shown in figure (construction-only).

Source: ESRI World Imagery & StreetMap

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0 500 1,000 Feet

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Figure 2 - Detail Sheet 12 of 13
Sensitive Receptors

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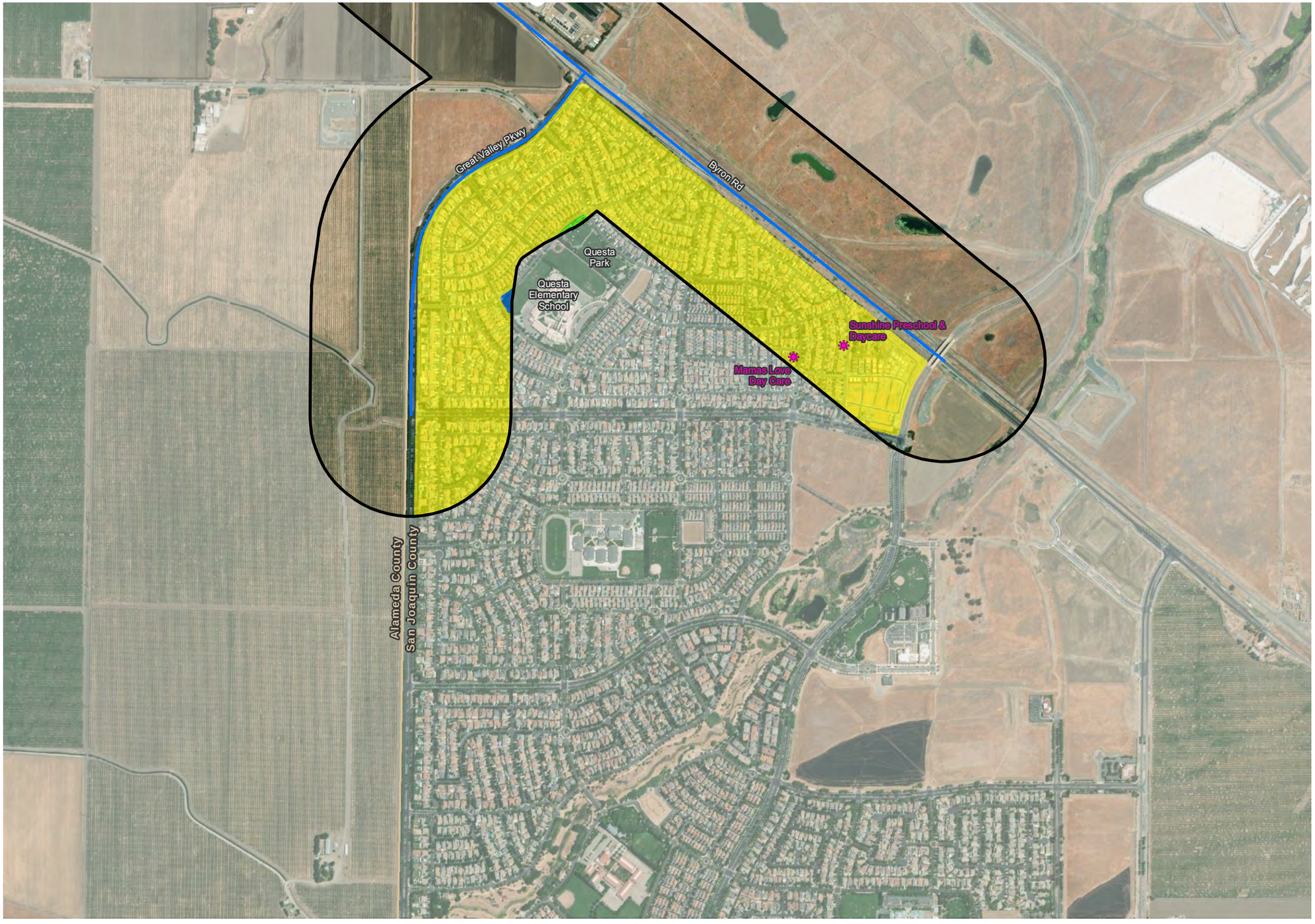

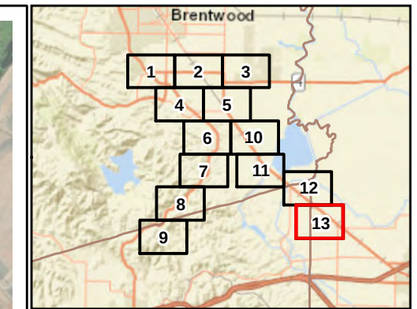

Legend

- IPOC Alignment
- Study Roads
- Study Area (1,000-ft Buffer)
- Daycare/Preschool
- School
- Residential
- Neighborhood Park

Note: Pedestrian/bicycle-lane improvements not shown in figure (construction-only).

Source: ESRI World Imagery & StreetMap

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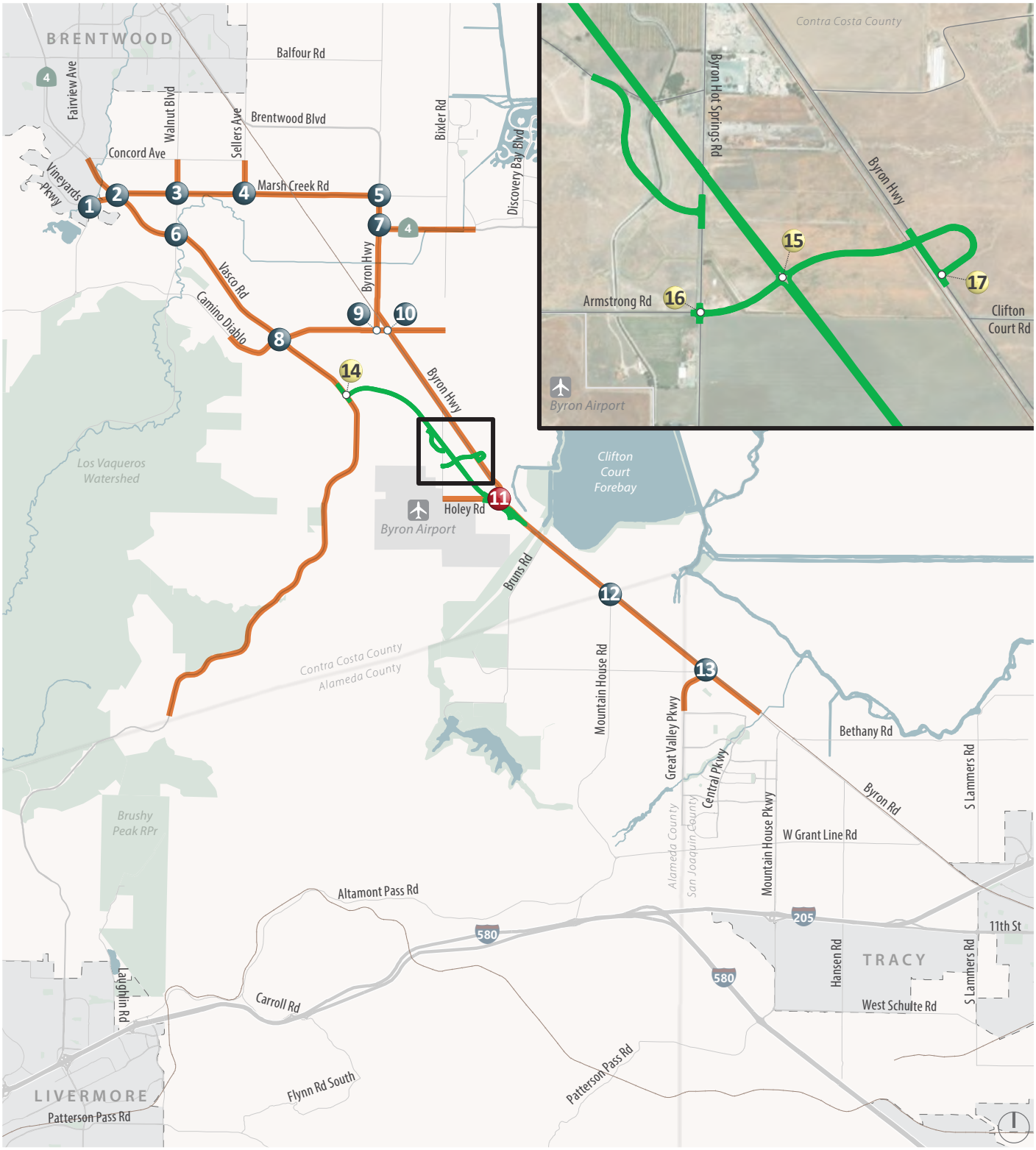
Figure 2 - Detail Sheet 13 of 13
Sensitive Receptors



Existing Study Intersections

Existing Study Roadways

Potential IPOC Roadway Alignment

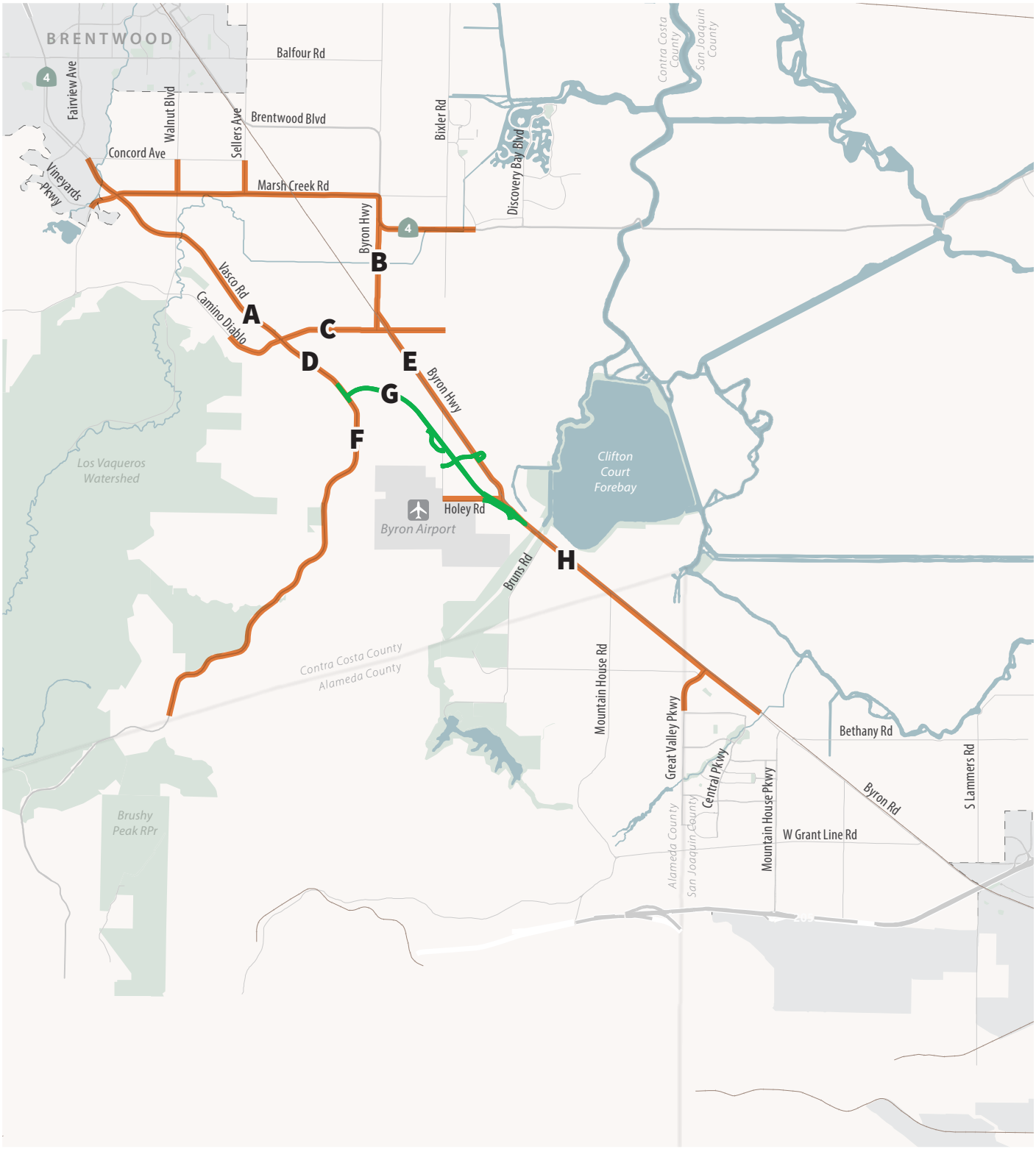
With Project Study Intersection

Removed with Project

Figure 3

IPOC Study Intersections

WC20-3721_X-X_TierIIStudyArea

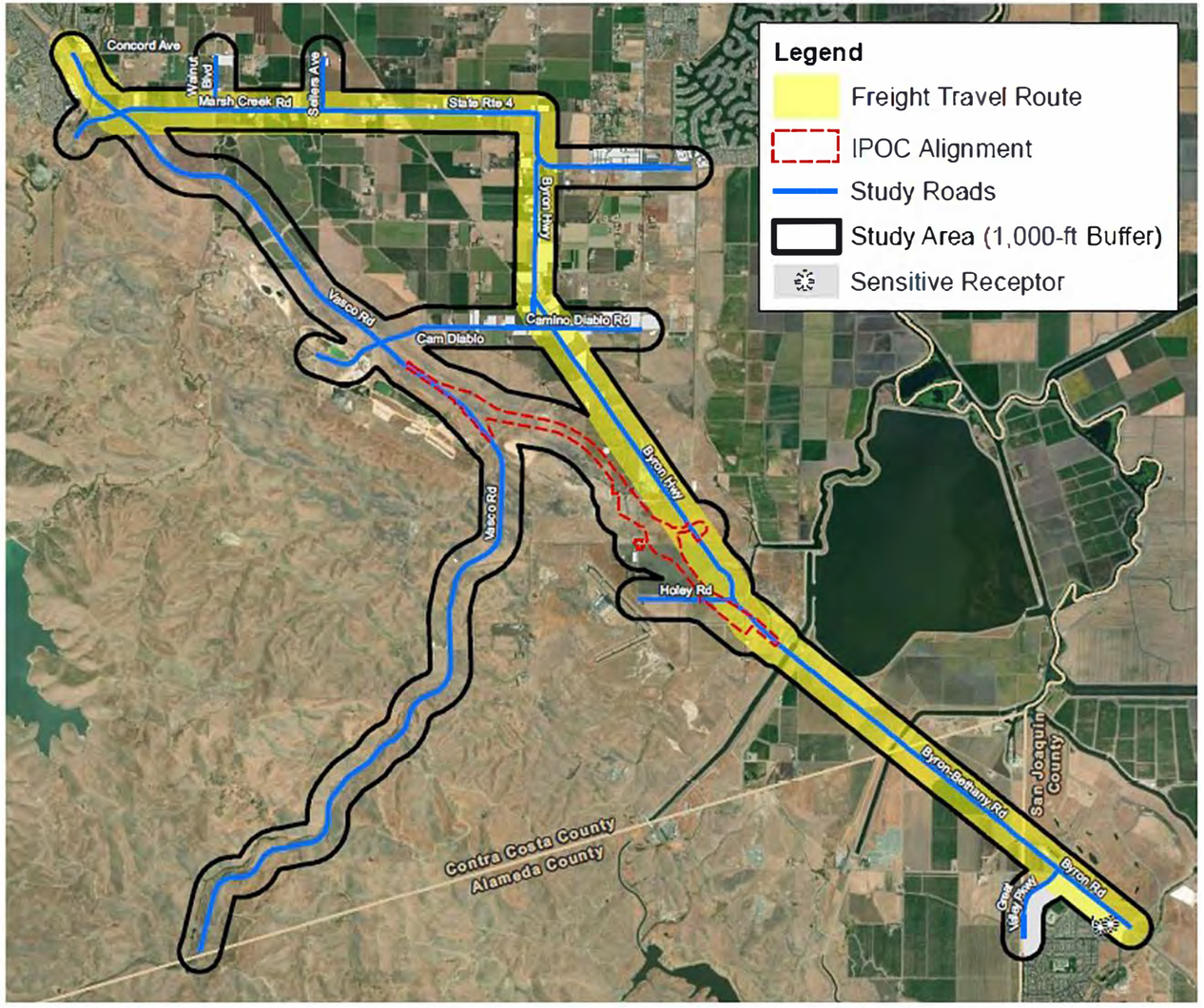


Existing Study Roadways

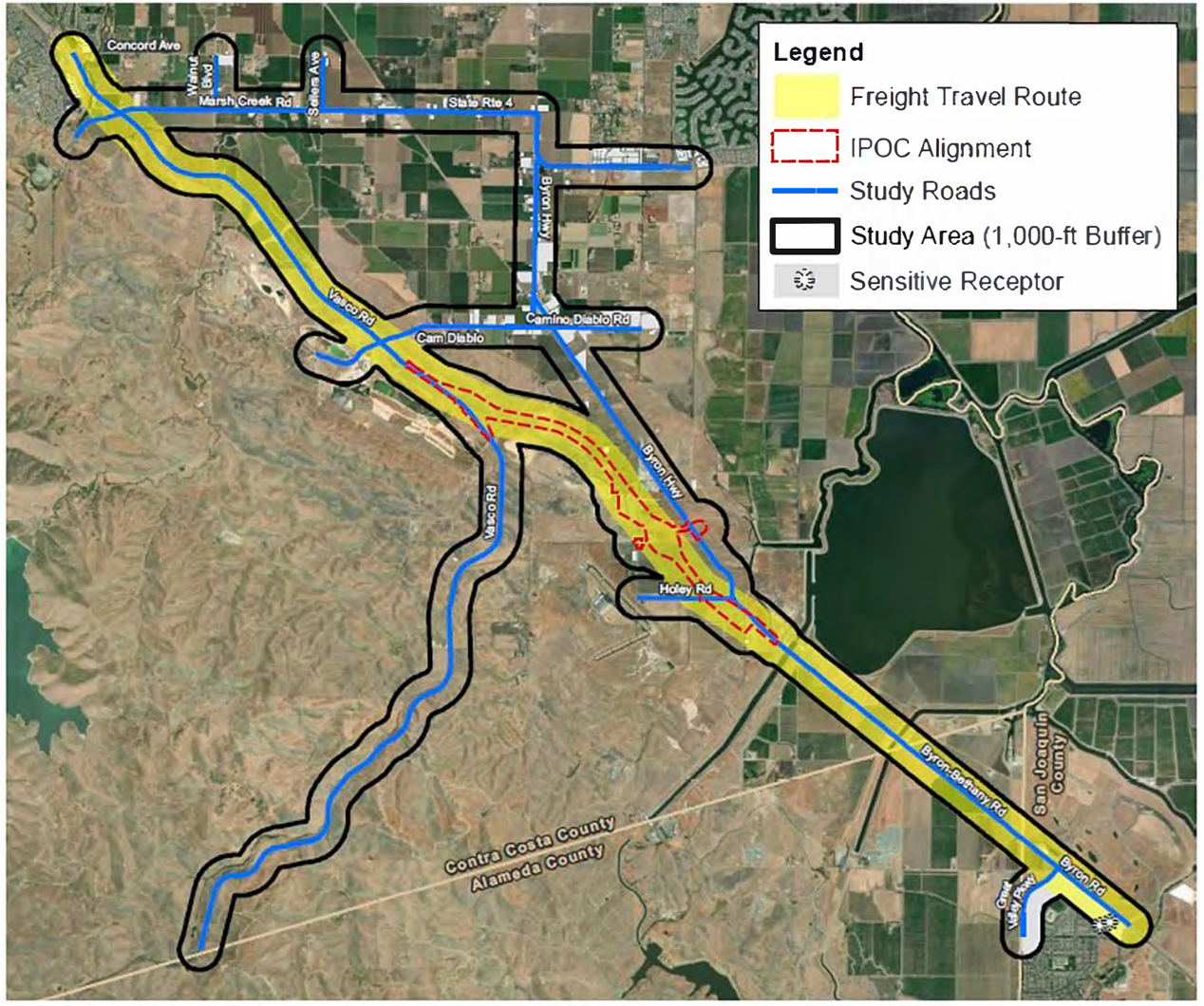
Potential IPOC Roadway Alignment

Figure 4

IPOC Study Segments



Freight Travel Without IPOC



Freight Travel With IPOC

Figure 5 – Freight Travel with and without the IPOC

Attachment B: Peak-Hour Data

Table C-1. Opening Year (2030) AM (4 AM to 11 AM) Study Period Traffic Data With and Without the Proposed IPOC and Study Segments

Roadway (location Code in Figure 4)	Traffic Volume		% Trucks		Truck Volume	
	No Build	Build	No Build	Build	No Build	Build
IPOC Roadway (G)	n/a [a]	**3,280**	n/a [a]	10%	n/a [a]	**340**
Vasco Rd. between IPOC and Camino Diablo (D)	10,960	**13,580**	4%	4%	410	**510**
Vasco Rd. between Camino Diablo and Marsh Creek Rd. (A)	11,210	**11,730**	3%	3%	330	**340**
Vasco Rd. south of IPOC (F)	10,960	10,860	4%	4%	410	410
Byron Hwy between SR 4 and Camino Diablo (B)	7,490	6,770	11%	11%	790	710
Byron Hwy between Camino Diablo and Holey Rd. (E)	8,790	5,930	9%	9%	780	520
Byron Hwy between Holey Rd. and Great Valley Pkwy (H)	8,870	8,770	10%	10%	860	850
Camino Diablo between Byron Hwy and Vasco Rd. (C)	6,540	3,900	4%	4%	250	150

Sources: Barrios pers. comm.

Notes: **Bold underline** indicates an increase in traffic volumes from No Build conditions. Truck volumes have been rounded.

[a] The IPOC roadway is a new transportation facility and as such, there are no values for the No Build.

Table C-2. Opening Year (2030) PM (2 PM to 10 PM) Study Period Traffic Data for the Proposed IPOC Roadway Alignment and Study Segments

Roadway (location Code in Figure 4)	Traffic Volume		% Trucks		Truck Volume	
	No Build	Build	No Build	Build	No Build	Build
IPOC Roadway (G)	n/a [a]	**3,880**	n/a [a]	5%	n/a [a]	**210**
Vasco Rd. between IPOC and Camino Diablo (D)	12,480	**15,840**	3%	3%	310	**400**
Vasco Rd. between Camino Diablo and Marsh Creek Rd. (A)	13,540	**13,940**	2%	2%	280	**290**
Vasco Rd. south of IPOC (F)	12,480	**12,520**	3%	3%	310	**320**
Byron Hwy between SR 4 and Camino Diablo (B)	8,510	8,190	6%	6%	500	480
Byron Hwy between Camino Diablo and Holey Rd. (E)	10,560	6,780	5%	5%	530	340
Byron Hwy between Holey Rd. and Great Valley Pkwy (H)	10,390	**10,410**	5%	5%	520	**520**
Camino Diablo between Byron Hwy and Vasco Rd. (C)	8,140	4,540	3%	3%	240	130

Sources: Barrios pers. comm.

Notes: **Bold underline** indicates an increase in traffic volumes from No Build conditions. Truck volumes have been rounded.

[a] The IPOC roadway is a new transportation facility and as such, there are no values for the No Build.

Table C-3. Horizon Year (2050) AM (4 AM to 11 AM) Study Period Traffic Data for the Proposed IPOC Roadway Alignment and Study Segments

Roadway (location Code in Figure 4)	Traffic Volume		% Trucks		Truck Volume	
	No Build	Build	No Build	Build	No Build	Build
IPOC Roadway (G)	n/a [a]	**4,000**	n/a [a]	10%	n/a [a]	**380**
Vasco Rd. between IPOC and Camino Diablo (D)	12,730	**15,510**	4%	4%	480	**590**
Vasco Rd. between Camino Diablo and Marsh Creek Rd. (A)	11,960	**12,800**	3%	3%	350	**380**
Vasco Rd. south of IPOC (F)	12,730	12,650	4%	4%	480	480
Byron Hwy between SR 4 and Camino Diablo (B)	9,340	8,340	11%	11%	980	880
Byron Hwy between Camino Diablo and Holey Rd. (E)	10,480	7,140	9%	9%	920	630
Byron Hwy between Holey Rd. and Great Valley Pkwy (H)	10,510	10,430	10%	10%	1,020	1,010
Camino Diablo between Byron Hwy and Vasco Rd. (C)	7,550	4,430	4%	4%	290	170

Sources: Barrios pers. comm.

Notes: **Bold underline** indicates an increase in traffic volumes from No Build conditions. Truck volumes have been rounded.

[a] The IPOC roadway is a new transportation facility and as such, there are no values for the No Build.

Table C-4. Horizon Year (2050) PM (2 PM to 10 PM) Study Period Traffic Data for the Proposed IPOC Roadway Alignment and Study Segments

Roadway (location Code in Figure 4)	Traffic Volume		% Trucks		Truck Volume	
	No Build	Build	No Build	Build	No Build	Build
IPOC Roadway (G)	n/a [a]	**5,220**	n/a [a]	5%	n/a [a]	**280**
Vasco Rd. between IPOC and Camino Diablo (D)	15,310	**19,390**	3%	3%	390	**490**
Vasco Rd. between Camino Diablo and Marsh Creek Rd. (A)	15,820	**16,440**	2%	2%	330	**350**
Vasco Rd. south of IPOC (F)	15,310	**15,390**	3%	3%	390	**390**
Byron Hwy between SR 4 and Camino Diablo (B)	10,930	10,470	6%	6%	640	620
Byron Hwy between Camino Diablo and Holey Rd. (E)	13,590	8,510	5%	5%	680	430
Byron Hwy between Holey Rd. and Great Valley Pkwy (H)	13,070	**13,150**	5%	5%	660	**660**
Camino Diablo between Byron Hwy and Vasco Rd. (C)	10,510	5,970	3%	3%	310	180

Sources: Barrios pers. comm.

Notes: **Bold underline** indicates an increase in traffic volumes from No Build conditions. Truck volumes have been rounded.

[a] The IPOC roadway is a new transportation facility and as such, there are no values for the No Build.

Table C-5. Opening (2030) Year Build Intersection Study Period Traffic Data within the Transportation Study Area

# [a]	Route	Cross Street	AM (PM) LOS	Traffic Volume		% Trucks		Truck Volume	
				AM (4 AM to 11 AM)	PM (2 PM to 10 PM	AM (4 AM to 11 AM)	PM (2 PM to 10 PM	AM (4 AM to 11 AM)	PM (2 PM to 10 PM
1	Marsh Creek Rd.	Vineyards Pkwy.	B (A)	3,340	3,450	1%	3%	30	120
2	Marsh Creek Rd.	Vasco Rd.	C (C)	16,460	19,430	7%	3%	1,180	650
3	Marsh Creek Rd.	Walnut Blvd.	C (F)	11,970	13,800	8%	3%	900	410
4	Marsh Creek Rd.	Sellers Ave.	A (A)	8,740	10,610	10%	3%	840	360
5	Marsh Creek Rd.	Byron Highway	C (C)	12,860	18,230	7%	3%	920	540
6	Walnut Blvd.	Vasco Rd.	B (B)	12,430	14,410	3%	3%	370	360
7	Byron Highway	SR 4	B (E)	14,130	18,830	8%	3%	1,190	630
8	Camino Diablo	Vasco Rd.	C (C)	15,390	18,080	3%	3%	520	530
9	Camino Diablo	Holway Drive	C (C)	4,090	4,560	3%	3%	140	150
10	Camino Diablo	Bryon Highway	C (C)	6,950	8,130	9%	3%	610	270
11	Holey Rd.	Bryon Highway	n/a [b]	n/a [b]	n/a [b]	n/a [b]	n/a [b]	n/a [b]	n/a [b]
12	Mountain House Rd.	Bryon Highway	A (B)	8,820	10,400	9%	3%	810	350
13	Great Valley Pkwy.	Bryon Highway	B (B)	8,820	10,820	10%	3%	850	360
14	Vasco Rd.	IPOC	D (F)	13,930	16,100	7%	4%	940	680
15	Armstrong Rd.	IPOC	D (C)	9,210	10,970	8%	4%	720	410
16	Armstrong Rd.	Byron Hot Springs Rd.	B (C)	3,520	3,500	1%	1%	30	30
17	Armstrong Rd.	Byron Highway	A (A)	3,150	4,590	9%	3%	280	150

Source: Barrios pers. comm.

Notes: Traffic and truck volumes have been rounded.

[a] See Figure 3 in Attachment A.

[b] Intersection removed under the Build conditions.

Table C-6. Opening (2030) Year No Build Intersection Study Period Traffic Data within the Transportation Study Area

# [a]	Route	Cross Street	AM (PM) LOS	Traffic Volume		% Trucks		Truck Volume	
				AM (4 AM to 11 AM)	PM (2 PM to 10 PM	AM (4 AM to 11 AM)	PM (2 PM to 10 PM	AM (4 AM to 11 AM)	PM (2 PM to 10 PM
1	Marsh Creek Rd.	Vineyards Pkwy.	B (A)	3,340	3,450	1%	3%	30	120
2	Marsh Creek Rd.	Vasco Rd.	C (C)	15,840	19,070	7%	3%	1,130	640
3	Marsh Creek Rd.	Walnut Blvd.	C (F)	11,970	13,800	8%	3%	900	410
4	Marsh Creek Rd.	Sellers Ave.	A (A)	8,740	10,610	10%	3%	840	360
5	Marsh Creek Rd.	Byron Highway	C (C)	13,480	18,590	7%	3%	960	550
6	Walnut Blvd.	Vasco Rd.	B (A)	11,810	14,050	3%	3%	350	350
7	Byron Highway	SR 4	B (D)	14,750	19,190	8%	3%	1,240	640
8	Camino Diablo	Vasco Rd.	F (F)	14,990	18,050	3%	3%	500	530
9	Camino Diablo	Holway Drive	C (C)	6,630	8,180	3%	3%	220	270
10	Camino Diablo	Bryon Highway	D (D)	9,710	11,950	9%	3%	860	400
11	Holey Rd.	Bryon Highway	A (A)	8,830	10,450	9%	3%	820	350
12	Mountain House Rd.	Bryon Highway	A (A)	8,820	10,400	9%	3%	810	350
13	Great Valley Pkwy.	Bryon Highway	B (B)	8,820	10,820	10%	3%	850	360
14	Vasco Rd.	IPOC	n/a [b]	n/a [b]	n/a [b]	n/a [b]	n/a [b]	n/a [b]	n/a [b]
15	Armstrong Rd.	IPOC	n/a [b]	n/a [b]	n/a [b]	n/a [b]	n/a [b]	n/a [b]	n/a [b]
16	Armstrong Rd.	Byron Hot Springs Rd.	n/a [b]	n/a [b]	n/a [b]	n/a [b]	n/a [b]	n/a [b]	n/a [b]
17	Armstrong Rd.	Byron Highway	n/a [b]	n/a [b]	n/a [b]	n/a [b]	n/a [b]	n/a [b]	n/a [b]

Source: Barrios pers. comm.

Notes: Traffic and truck volumes have been rounded.

[a] See Figure 3 in Attachment A.

[b] Intersection does not exist under No Build conditions.

Table C-7. Horizon Year (2050) Build Intersection Study Period Traffic Data within the Transportation Study Area

# [a]	Route	Cross Street	AM (PM) LOS	Traffic Volume		% Trucks		Truck Volume	
				AM (4 AM to 11 AM)	PM (2 PM to 10 PM	AM (4 AM to 11 AM)	PM (2 PM to 10 PM	AM (4 AM to 11 AM)	PM (2 PM to 10 PM
1	Marsh Creek Rd.	Vineyards Pkwy.	B (A)	3,980	4,750	1%	3%	30	160
2	Marsh Creek Rd.	Vasco Rd.	C (C)	19,070	23,550	7%	3%	1,360	790
3	Marsh Creek Rd.	Walnut Blvd.	C (F)	13,920	16,440	8%	3%	1,050	480
4	Marsh Creek Rd.	Sellers Ave.	A (A)	10,510	12,840	10%	3%	1,020	430
5	Marsh Creek Rd.	Byron Highway	C (D)	15,330	22,000	7%	3%	1,090	650
6	Walnut Blvd.	Vasco Rd.	F (E)	14,340	17,330	3%	3%	420	440
7	Byron Highway	SR 4	C (F)	16,530	23,070	8%	3%	1,390	780
8	Camino Diablo	Vasco Rd.	F (F)	17,610	22,070	3%	3%	590	650
9	Camino Diablo	Holway Drive	C (C)	4,690	6,010	3%	3%	160	200
10	Camino Diablo	Bryon Highway	D (D)	8,650	10,440	9%	3%	760	350
11	Holey Rd.	Bryon Highway	n/a [b]	n/a [b]	n/a [b]	n/a [b]	n/a [b]	n/a [b]	n/a [b]
12	Mountain House Rd.	Bryon Highway	A (F)	10,470	13,110	9%	3%	970	440
13	Great Valley Pkwy.	Bryon Highway	C (C)	10,790	13,420	10%	3%	1,040	450
14	Vasco Rd.	IPOC	D (F)	16,130	19,930	7%	4%	1,080	840
15	Armstrong Rd.	IPOC	E (D)	11,240	14,400	8%	4%	870	540
16	Armstrong Rd.	Byron Hot Springs Rd.	D (C)	5,240	5,850	1%	1%	40	50
17	Armstrong Rd.	Byron Highway	A (A)	3,560	5,540	9%	3%	310	190

Source: Barrios pers. comm.

Notes: Traffic and truck volumes have been rounded.

[a] See Figure 3 in Attachment A.

[b] Intersection removed under the Build conditions.

Table C-8. Horizon Year (2050) No Build Intersection Study Period Traffic Data within the Transportation Study Area

# [a]	Route	Cross Street	AM (PM) LOS	Traffic Volume		% Trucks		Truck Volume	
				AM (4 AM to 11 AM)	PM (2 PM to 10 PM	AM (4 AM to 11 AM)	PM (2 PM to 10 PM	AM (4 AM to 11 AM)	PM (2 PM to 10 PM
1	Marsh Creek Rd.	Vineyards Pkwy.	B (A)	3,980	4,750	1%	3%	30	160
2	Marsh Creek Rd.	Vasco Rd.	F (E)	18,150	23,010	7%	3%	1,300	770
3	Marsh Creek Rd.	Walnut Blvd.	C (F)	13,920	16,440	8%	3%	1,050	480
4	Marsh Creek Rd.	Sellers Ave.	A (A)	10,510	12,840	10%	3%	1,020	430
5	Marsh Creek Rd.	Byron Highway	C (E)	16,250	22,540	7%	3%	1,160	660
6	Walnut Blvd.	Vasco Rd.	F (C)	13,420	16,790	3%	3%	390	420
7	Byron Highway	SR 4	C (F)	17,450	23,610	8%	3%	1,470	790
8	Camino Diablo	Vasco Rd.	F (F)	17,240	22,110	3%	3%	580	650
9	Camino Diablo	Holway Drive	C (F)	7,730	10,630	3%	3%	260	360
10	Camino Diablo	Bryon Highway	F (F)	11,910	15,600	9%	3%	1,050	520
11	Holey Rd.	Bryon Highway	B (A)	10,470	13,180	9%	3%	970	440
12	Mountain House Rd.	Bryon Highway	A (F)	10,470	13,110	9%	3%	970	440
13	Great Valley Pkwy.	Bryon Highway	C (C)	10,790	13,420	10%	3%	1,040	450
14	Vasco Rd.	IPOC	n/a [b]	n/a [b]	n/a [b]	n/a [b]	n/a [b]	n/a [b]	n/a [b]
15	Armstrong Rd.	IPOC	n/a [b]	n/a [b]	n/a [b]	n/a [b]	n/a [b]	n/a [b]	n/a [b]
16	Armstrong Rd.	Byron Hot Springs Rd.	n/a [b]	n/a [b]	n/a [b]	n/a [b]	n/a [b]	n/a [b]	n/a [b]
17	Armstrong Rd.	Byron Highway	n/a [b]	n/a [b]	n/a [b]	n/a [b]	n/a [b]	n/a [b]	n/a [b]

Source: Barrios pers. comm.

Notes: Traffic and truck volumes have been rounded.

[a] See Figure 3 in Attachment A.

[b] Intersection does not exist under No Build conditions.

SR 239 Initial Phase of Construction (IPOC)

Contra Costa Transportation Authority (CCTA)

Stephanie Hu
CCTA, Director, Projects

Laura Yoon
ICF, Managing Director

4/27/2023

Agenda

- Project History
- Overview of Project
- Project Description
  - Ultimate SR 239 Project (Tier I program)
  - Initial Phase of Construction / IPOC (Tier II project)
- IPOC Surrounding Land Uses
- IPOC Purpose and Need
- Project of No Air Quality Concern
- Project Schedule
- Discussion

Project History

1959	2014	2015	2019
SR 239 first legislatively designated	Feasibility report completed	Project Study Report/Project Development Support (PSR/PDS) completed	CCTA and Caltrans enter cooperative agreement

Overview of Project

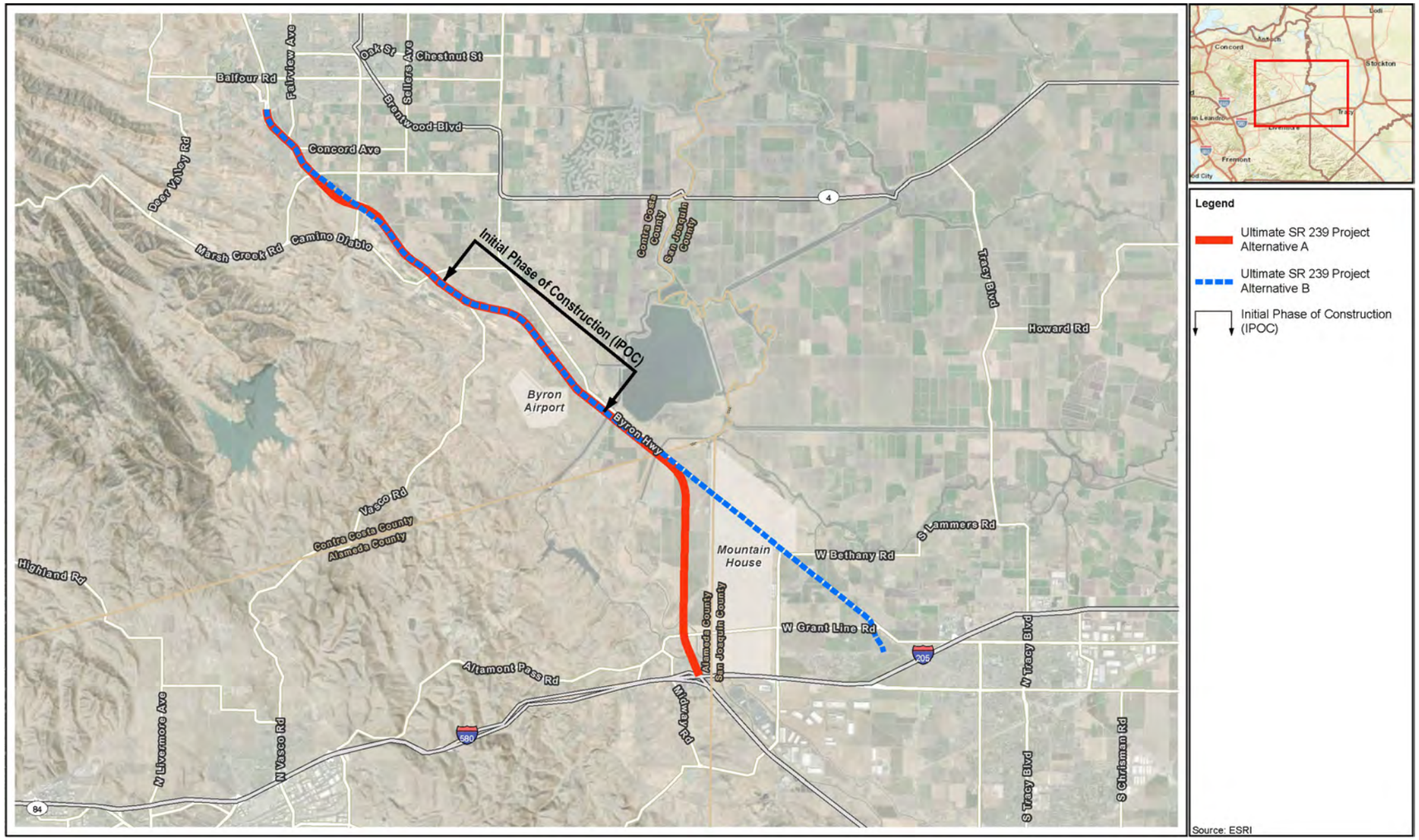
Combined Tier I/Tier II Environmental Impact Report/Environmental Impact Statement

Tier I – Program Alternatives

- Alternative A
- Alternative B

Tier II – Project Alternative

- Initial Phase of Construction



Project Description: Ultimate SR 239 Project (Tier I)

New, four-lane highway from SR4 at Marsh Creek Road in Contra Costa County to I-580 in Alameda County or I-205 in San Joaquin County

- REDUCE regional / non-local traffic through town of Byron
- IMPROVE north-south mobility including connections to emergency evacuation routes
- IMPROVE access to Byron airport
- SUPPORT north-south goods movement
- IMPROVE regional modes of travel
- SUPPORT planned development and job realization

As a Tier 1 study, the Ultimate SR 239 Project is exempt from Transportation Conformity (40 CFR 93.126, *Other, Specific Activities which do Not Involve or Lead Directly to Construction, Planning and Technical Studies*)

Project Description: Initial Phase of Construction / IPOC (Tier II)

New, two-lane facility (one lane in each direction) of about 3.6 miles in length connecting Vasco Road and Byron Highway near the Byron Airport

- Intersect Vasco Road about 1.2 miles south of the Vasco Road/Camino Diablo intersection
- Join and conform with existing Byron Highway about 1,800 feet north of Bruns Road

Local street modifications

- Extend Armstrong Road eastward from Byron Hot Springs Road to Byron Highway
- Realign Armstrong Road to cross over Byron Highway and railroad tracks via bridge
- Close Byron Highway about 800 feet north of Holey Road
- Create four new at-grade, signalized intersections
- Remove intersection at Bryon Highway/Holey Road

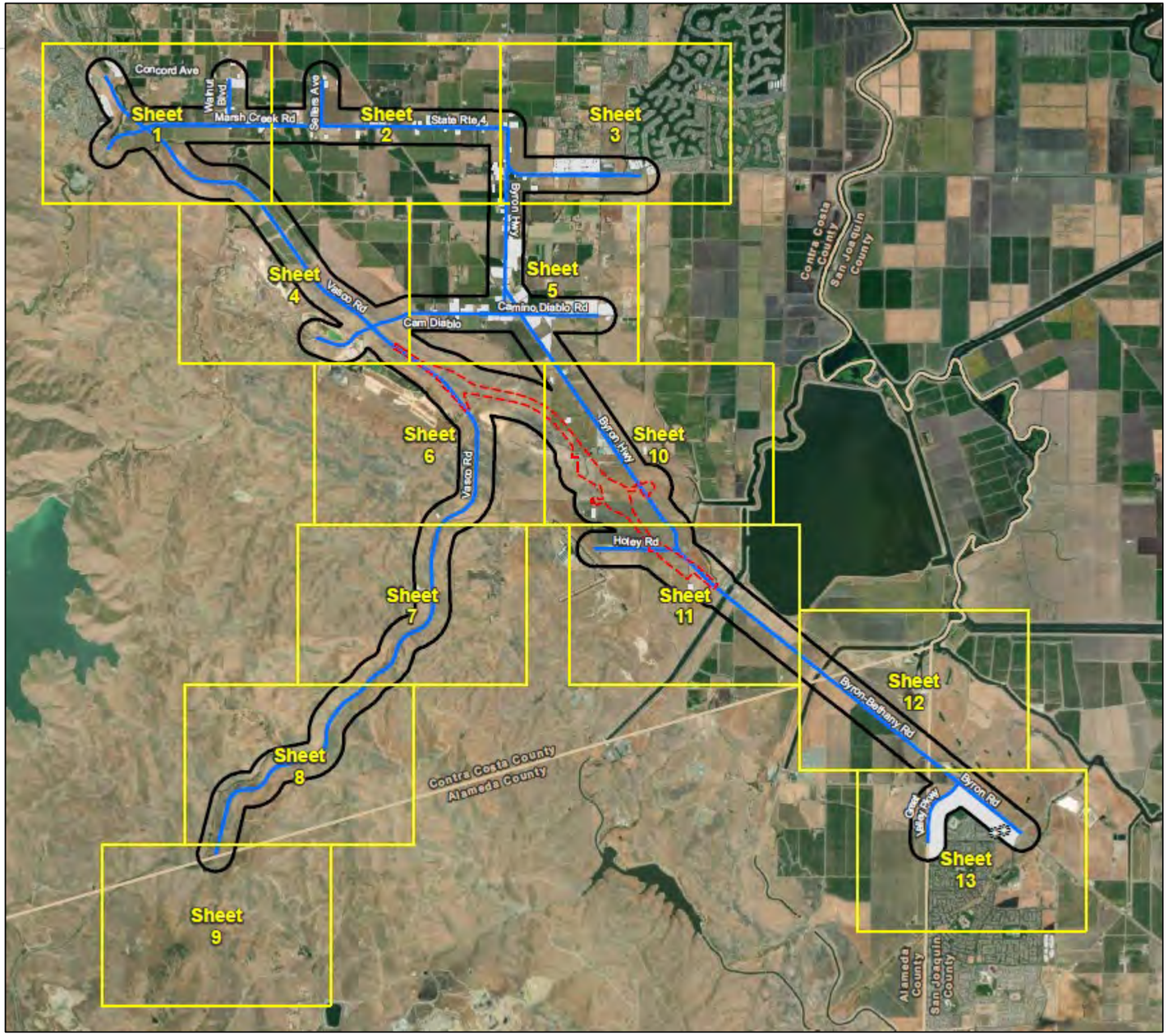
Class I/II/IV bicycle/pedestrian improvements

- Specific routes and facilities to be determined; all new facilities will meet County Complete Street Ordinance for local street conforms

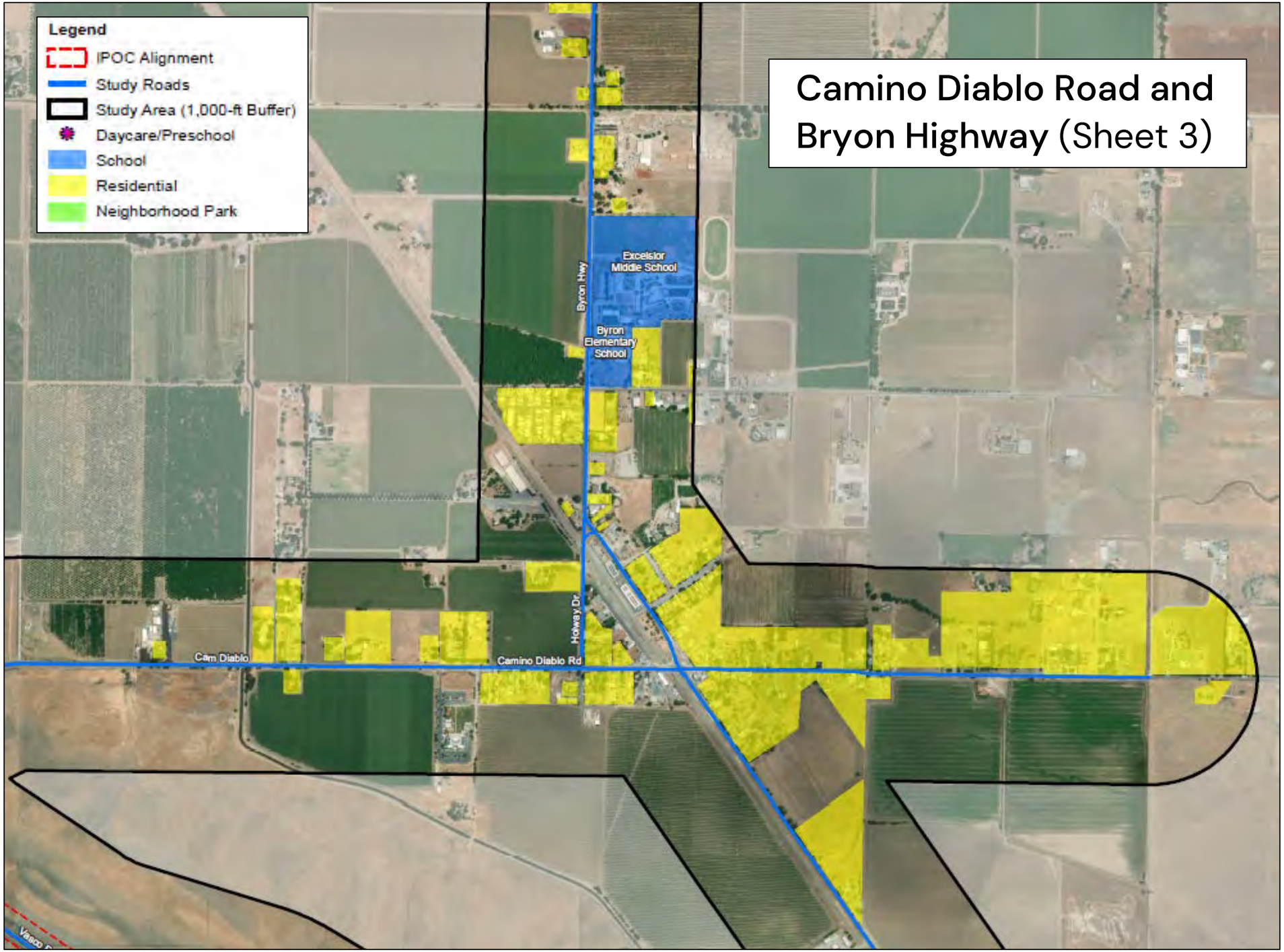
Project Description – IPOC (Tier II Study)

IPOC Surrounding Land Uses

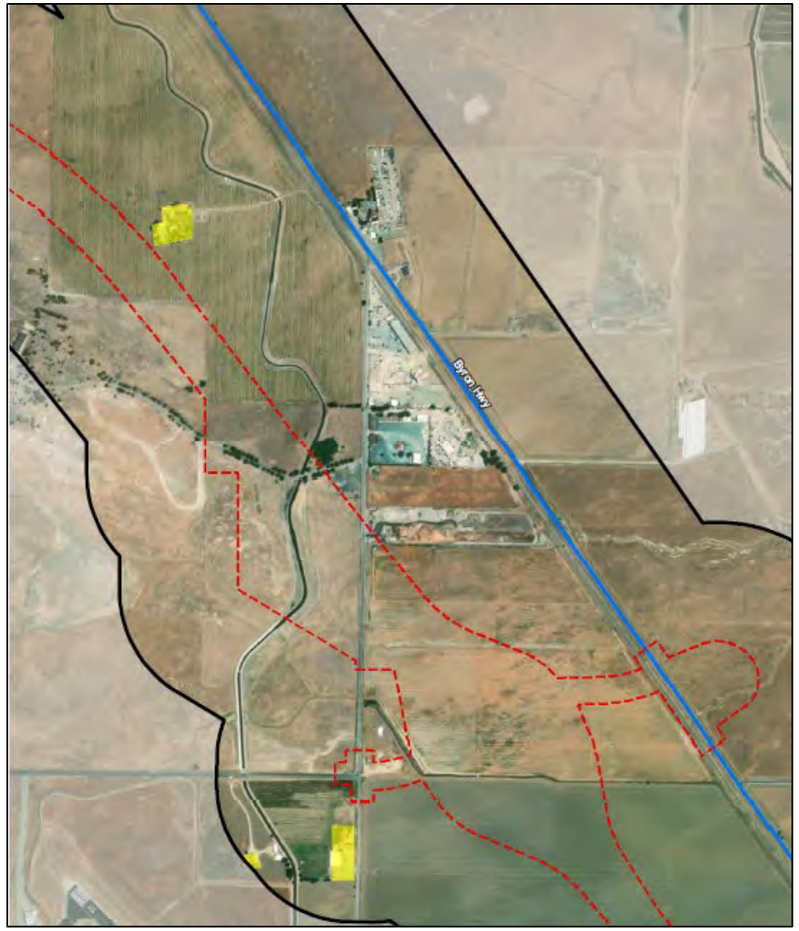
- High concentrations of sensitive receptors along Byron Highway, Camino Diablo, and State Route 4 (sheets 3 and 5)
- Scattered sensitive receptors along Marsh Creek Road (sheet 2)
- Only four residences within 1,000 feet of the IPOC (sheets 10 and 11)
- No sensitive receptors along Vasco Road north of IPOC (sheet 4)



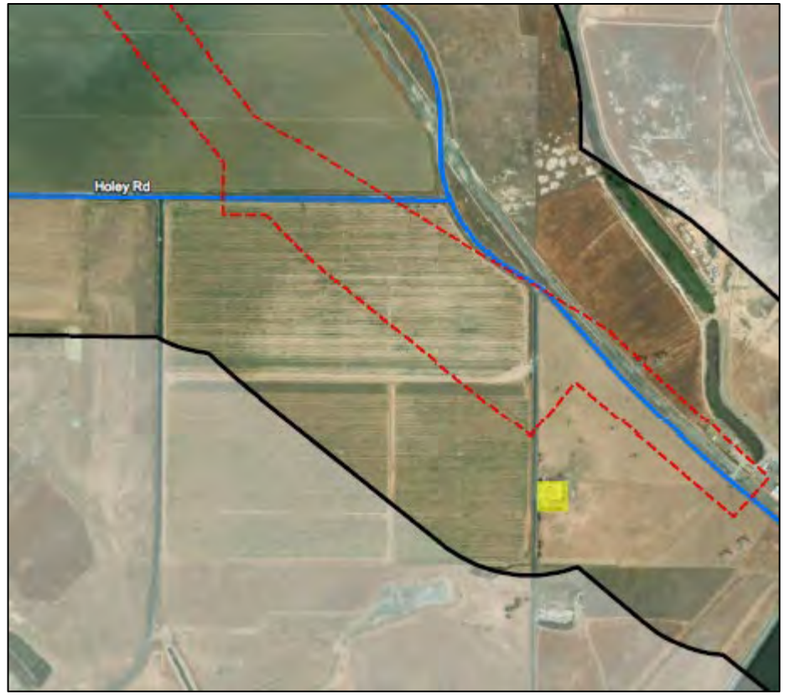
Camino Diablo Road and Bryon Highway (Sheet 3)



IPOC and Byron Highway (Sheet 10)



IPOC and Holey Road (Sheet 11)



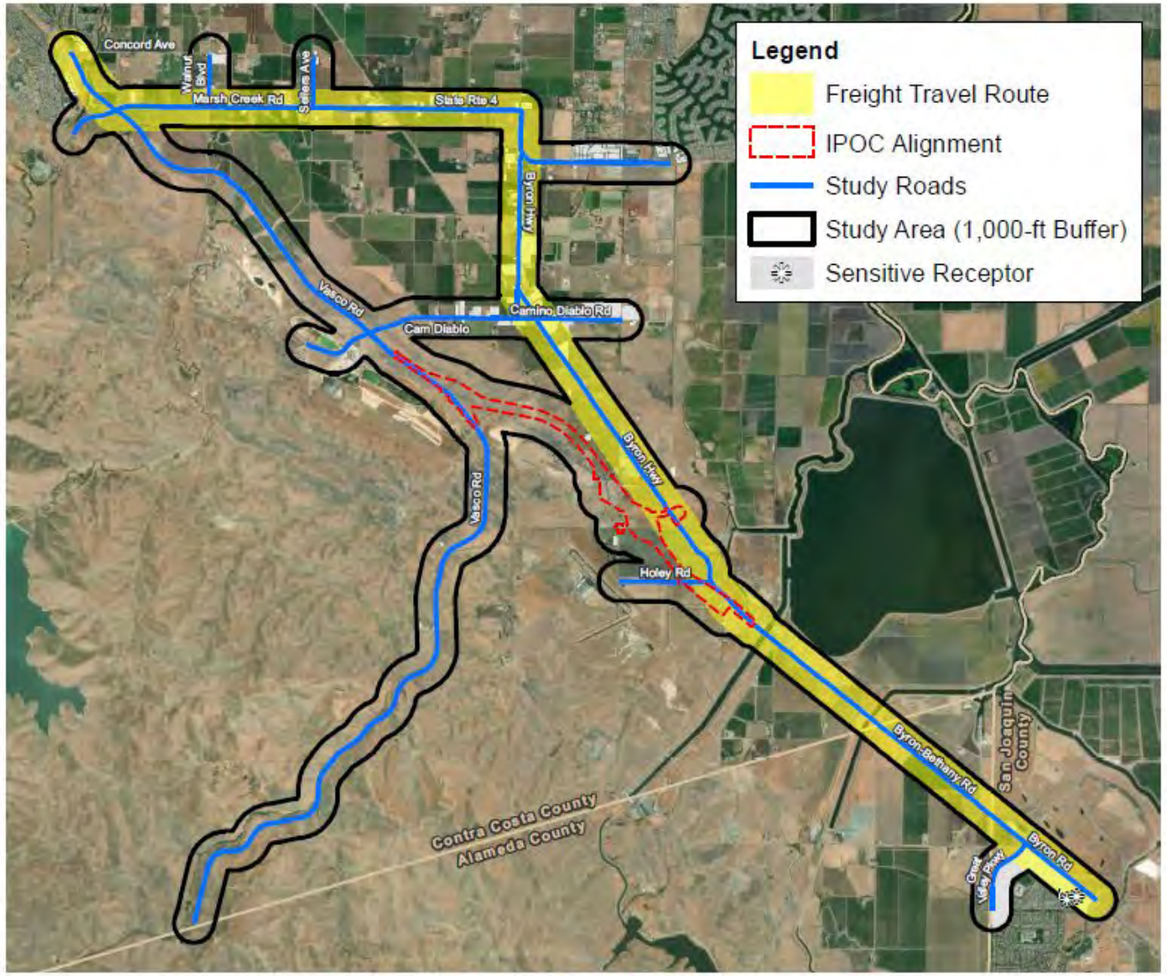
Vasco Road north of IPOC (Sheet 4)

Legend

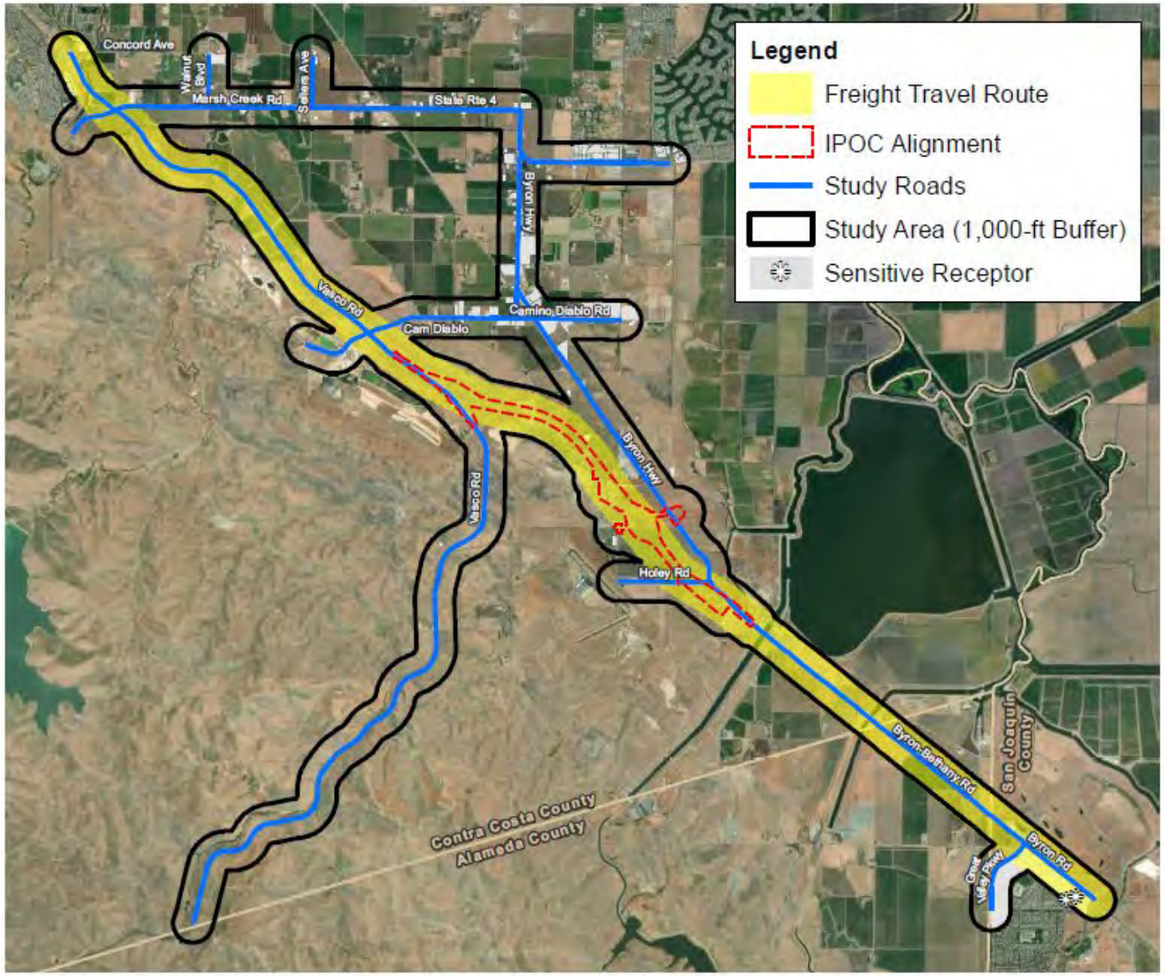
- IPOC Alignment
- Study Roads
- Study Area (1,000-ft Buffer)
- Daycare/Preschool
- School
- Residential
- Neighborhood Park

IPOC Surrounding Land Uses

- Tracy and Lathrop are key regional trucking and intermodal distribution centers for the Bay Area
- Manufacturing and wholesale expected to increase significantly in east Contra Costa and west San Joaquin



Freight Travel Without IPOC



Freight Travel With IPOC

IPOC Purpose and Need

The purpose of the IPOC is to allow for immediate benefits to the public for the most critical transportation needs, including reduced regional/non-local traffic through the town of Byron and improved access to Byron Airport, while deferring other improvements until additional funding becomes available for the Ultimate SR 239 Project

Need

- ✓ REDUCE regional/non-local traffic through the community of Bryon
- ✓ IMPROVE regional mobility
- ✓ IMPROVE access to Byron Airport

Project of No Air Quality Concern – IPOC and Roadway Facilities

Opening Year (2030) Facility AADT and Truck Volumes

Roadway	Total AADT			Truck AADT			% Trucks	
	No Build	Build	Δ [a]	No Build	Build	Δ [a]	No Build	Build
IPOC Roadway	n/a [b]	8,320	**+8,320**	n/a [b]	660	**+660**	n/a [b]	8%
Vasco Rd. between IPOC and Camino Diablo	29,020	36,510	**+7,490**	980	1,230	**+250**	3%	3%
Vasco Rd. between Camino Diablo and Marsh Creek Rd.	30,650	31,860	**+1,210**	770	800	**+30**	3%	3%
Vasco Rd. south of IPOC	29,020	29,020	0	980	980	0	3%	3%
Byron Hwy between SR 4 and Camino Diablo	19,800	18,580	-1,220	1,660	1,560	-100	8%	8%
Byron Hwy between Camino Diablo and Holey Rd.	23,950	15,790	-8,160	1,710	1,130	-580	7%	7%
Byron Hwy between Holey Rd. and Great Valley Pkwy	23,830	23,830	0	1,800	1,800	0	8%	8%
Camino Diablo between Byron Hwy and Vasco Rd.	18,150	10,510	-7,640	610	350	-260	3%	3%

Notes: **Bold underline** indicates an increase in traffic volumes from No Build conditions. Truck AADT has been rounded to the nearest whole number.

[a] Delta (Build minus No Build)

[b] The IPOC roadway is a new transportation facility and as such, there are no values for the No Build.

Project of No Air Quality Concern – IPOC and Roadway Facilities

Horizon Year (2050) Facility AADT and Truck Volumes

Roadway	Total AADT			Truck AADT			% Trucks	
	No Build	Build	Δ [a]	No Build	Build	Δ [a]	No Build	Build
IPOC Roadway	n/a [b]	11,380	**+11,380**	n/a [b]	900	**+900**	n/a [b]	8%
Vasco Rd. between IPOC and Camino Diablo	34,760	43,270	**+8,510**	1,170	1,450	**+280**	3%	3%
Vasco Rd. between Camino Diablo and Marsh Creek Rd.	34,440	36,250	**+1,810**	870	910	**+40**	3%	3%
Vasco Rd. south of IPOC	34,760	34,760	0	1,170	1,170	0	3%	3%
Byron Hwy between SR 4 and Camino Diablo	25,130	23,320	-1,810	2,110	1,960	-150	8%	8%
Byron Hwy between Camino Diablo and Holey Rd.	29,840	19,400	-10,440	2,130	1,390	-740	7%	7%
Byron Hwy between Holey Rd. and Great Valley Pkwy	29,230	29,230	0	2,210	2,210	0	8%	8%
Camino Diablo between Byron Hwy and Vasco Rd.	22,390	12,940	-9,450	750	420	-330	3%	3%

Notes: **Bold underline** indicates an increase in traffic volumes from No Build conditions. Truck AADT has been rounded to the nearest whole number.

[a] Delta (Build minus No Build)

[b] The IPOC roadway is a new transportation facility and as such, there are no values for the No Build.

Project of No Air Quality Concern – Intersections

Comparison of Opening Year (2030) Intersection AM LOS, AADT, and Truck Percentages

Route	Cross Street	Δ , Build vs. No Build			
		AM LOS	Total AADT	% Trucks	Truck AADT
Marsh Creek Rd.	Vineyards Pkwy.	B vs. B	0	0%	0
Marsh Creek Rd.	Vasco Rd.	C vs. B	**+1,200**	0%	**<+10**
Marsh Creek Rd.	Walnut Blvd.	C vs. B	0	0%	0
Marsh Creek Rd.	Sellers Ave.	A vs. B	0	0%	0
Marsh Creek Rd.	Byron Highway	C vs. B	-1,200	0%	-100
Walnut Blvd.	Vasco Rd.	B vs. B	**+1,200**	0%	**<+10**
Byron Highway	SR 4	B vs. B	-1,200	0%	-100
Camino Diablo	Vasco Rd.	C vs. B	**+500**	0%	**<+10**
Camino Diablo	Holway Drive	C vs. B	-7,700	0%	-200
Camino Diablo	Bryon Highway	C vs. B	-8,200	0%	-500
Holey Rd.	Bryon Highway	n/a [a] vs. A	n/a [a]	n/a [a]	n/a [a]
Mountain House Rd.	Bryon Highway	A vs. A	0	0	0
Great Valley Pkwy.	Bryon Highway	B vs. B	0	0	0
Vasco Rd.	IPOC	D vs. n/a [a]	n/a [a]	n/a [a]	n/a [a]
Armstrong Rd.	IPOC	D vs. n/a [a]	n/a [a]	n/a [a]	n/a [a]
Armstrong Rd.	Byron Hot Springs Rd.	B vs. n/a [a]	n/a [a]	n/a [a]	n/a [a]
Armstrong Rd.	Byron Highway	A vs. n/a [a]	n/a [a]	n/a [a]	n/a [a]

Notes: **Bold underline** indicates an increase in traffic volumes from No Build conditions.

[a] Intersection does not exist under the Build or No Build condition.

Project of No Air Quality Concern – Intersections

Comparison of Horizon Year (2050) Intersection AM LOS, AADT, and Truck Percentages

Route	Cross Street	Δ , Build vs. No Build			
		AM LOS	Total AADT	% Trucks	Truck AADT
Marsh Creek Rd.	Vineyards Pkwy.	B vs. B	0	0%	0
Marsh Creek Rd.	Vasco Rd.	C vs. F	**+1,800**	0%	**+100**
Marsh Creek Rd.	Walnut Blvd.	C vs. C	0	0%	0
Marsh Creek Rd.	Sellers Ave.	A vs. A	0	0%	0
Marsh Creek Rd.	Byron Highway	C vs. C	-1,800	0%	-100
Walnut Blvd.	Vasco Rd.	F vs. F	**+1,800**	0%	**+100**
Byron Highway	SR 4	C vs. C	-1,800	0%	-100
Camino Diablo	Vasco Rd.	F vs. F	**+400**	0%	**<+10**
Camino Diablo	Holway Drive	C vs. C	-9,500	0%	-400
Camino Diablo	Bryon Highway	D vs. F	-10,400	0%	-700
Holey Rd.	Bryon Highway	n/a [a] vs. B	n/a [a]	n/a [a]	n/a [a]
Mountain House Rd.	Bryon Highway	A vs. A	0	0	0
Great Valley Pkwy.	Bryon Highway	C vs. C	0	0	0
Vasco Rd.	IPOC	D vs. n/a [a]	n/a [a]	n/a [a]	n/a [a]
Armstrong Rd.	IPOC	E vs. n/a [a]	n/a [a]	n/a [a]	n/a [a]
Armstrong Rd.	Byron Hot Springs Rd.	D vs. n/a [a]	n/a [a]	n/a [a]	n/a [a]
Armstrong Rd.	Byron Highway	A vs. n/a [a]	n/a [a]	n/a [a]	n/a [a]

Notes: **Bold underline** indicates an increase in traffic volumes from No Build conditions.

[a] Intersection does not exist under the Build or No Build condition.

Project of No Air Quality Concern – Summary

- Redistribute traffic from Byron Highway and Camino Diablo to the IPOC and Vasco Road
- Slight increase in AADT, but truck volumes would <u>not</u> be significant
  - 900 truck AADT on IPOC
  - +280 truck AADT on Vasco Road with IPOC (total truck AADT = 1,450)
- Reduction in AADT along Byron Highway and Camino Diablo
- Three new intersections at LOS D, but truck volumes would <u>not</u> be significant
  - Max of 2,400 truck AADT at Vasco Road/IPOC
- Other intersections would generally operate at an equivalent or better peak hour LOS, relative to no build conditions
- <u>Ultimately, the IPOC will redistribute AADT and truck AADT from areas with relatively high concentrations of residential receptors (i.e., along Byron Highway and Camino Diablo) to areas with no existing or planned development (i.e., along the IPOC and Vasco Road</u>

Project Schedule

- Draft EIR/EIS public review period: Summer 2024
- EIR/EIS certification: 2025
- IPOC opening year: 2030

Discussion

For more information, please visit the SR 239 Project website.

https://ccta.net/projects/state-route-239-project/

METROPOLITAN
TRANSPORTATION
COMMISSION

Bay Area Metro Center
375 Beale Street
San Francisco, CA 94105
TEL 415.778.6700
WEB www.mtc.ca.gov

Memorandum

TO: Air Quality Conformity Task Force DATE: April 18, 2023

FR: Megan Nangle W. I.

RE: $PM_{2.5}$ Project Conformity Interagency Consultation

The federally required Transportation Improvement Program or TIP is a comprehensive listing of all Bay Area surface transportation projects that are to receive federal funding, are subject to a federally required action, or are considered regionally significant for air quality conformity purposes over a four-year period. In alignment with Federal Statewide TIP development efforts, MTC has begun the process of developing the 2023 TIP, which will cover the four-year period from FY 2022-23 through FY 2025-26. Like the 2021 TIP, the 2023 TIP must be consistent with the existing Regional Transportation Plan, Plan Bay Area 2050. MTC is scheduled to release the Draft Conformity Analysis for the 2023 TIP on June 15, 2022. Attachment A includes a full schedule for review and approval of the conformity analysis for the 2023 TIP.

Introduction

The purpose of this memo is to clarify the purpose of a follow-up meeting with the Metropolitan Transportation Commission (MTC) Air Quality Conformity Task Force (Task Force) for the Open Road Tolling Conversion Northern Bridges Project ("Project") and to verify that the Project is exempt under 40 Code of Federal Regulations (CFR) 93.126 as programmed in the approved 2021 Regional Transportation Improvement Program (RTIP).

Background

The proposed Project was presented to the Task Force Meeting on January 26, 2023. As part of the presentation and the materials submitted for the Task Force review the following items were discussed:

- Project documentation is being prepared in compliance with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA) as necessary. The California Department of Transportation (Caltrans) is the lead agency under NEPA, and BATA is the lead agency under CEQA. BATA is the project sponsor.
- A CEQA Categorical Exemption and NEPA Categorical Exclusion with supporting technical studies is currently in progress.
- The Project is programmed under the approved 2021 RTIP as part of the Toll Rehabilitation Program (TIP ID REG130002), which identifies that the 7 San Francisco Bay Area state-owned toll bridges under the rehabilitation program are exempt from Air Quality Conformity under ***40 CFR 93.126 – Safety – Widening narrow pavements or reconstructing bridges (no additional travel lanes)***.
- Seeking concurrence that the Project is exempt from Air Quality Conformity prior to completion of CEQA CE/NEPA CE by May 2023, or earlier.
- No public circulation is required.

While concurrence was given by the Task Force during the January 2023 meeting, on February 24, 2023, the Task Force provided a summary of the findings for the January 2023 meeting for the Project, specifically that the Project was not a Project of Air Quality Concern (POAQC) ((40 CFR 93.123(b)(1)) or 40 CFR 93.128). Therefore, the Project is not subject to PM2.5 project level conformity requirement.

Requested Clarification

− Based on the Project description included in the attached documents, ***the proposed Project would not be adding any additional lanes but reconfiguring and restriping existing lanes only at the toll plaza locations***. ***The existing number of lanes upstream and downstream of the toll plazas are proposed to be maintained.*** Further, the Project would reduce the number of lanes at each of the toll plazas as ORT conversion does not require vehicles to diverge and converge again as the project proposes to eliminate the need for vehicles to pass through multiple toll booths. None of the proposed lane reconfigurations result in a lane that would exceed 1-mile in length. ***As a result, no additional travel lanes will be added as part of the proposed Project.***

− Although the Task Force has determined that the Project is not a POAQC, clarification is requested if the Project would instead be exempt under ***40 CFR 93.126 – Safety – Widening narrow pavements or reconstructing bridges (no additional travel lanes) (programmed under RTIP ID# 21-T01-005),*** as originally proposed.

Application of Criteria for a Project of Air Quality Concern
Project Title: Open Road Tolling Conversion Northern Bridges Project
Project Summary for Air Quality Conformity Task Force Meeting: April 27, 2023

Description

- The Bay Area Toll Authority (BATA), in cooperation with the California Department of Transportation (Caltrans), proposes to convert the existing all All-Electronic Tolling (AET) systems to Open Road Tolling (ORT) systems at the Antioch Bridge, Benicia-Martinez Bridge, and Carquinez Bridge in Contra Costa and Solano Counties.
- The purpose of the Open Road Tolling Conversion Northern Bridges Project (Project) is to:
    - Replace aging tolling system infrastructure to improve operational efficiency and mobility for all users through bridge toll plazas; and
    - Enhance safety by eliminating the need to pass through the existing toll plazas.
- Remove the existing toll booths, tolling equipment, and canopy structures.
- Construct new overhead toll gantries.
- The Project is needed to address operational and safety deficiencies for vehicles traveling through the BATA toll collection facilities at toll plaza locations.
- The removal, replacement, or relocation of existing roadway signs, as needed, for the ORT conversion.
- Roadside signpost replacement and installation.
- Extending electrical and communication conduit and fiber would require trenching and/or horizontal directional drilling to bring these services to the electronic tolling equipment, signage, and toll equipment building.
- Trenching for electrical and fiber conduit would be up to 3-ft deep and up to 2-ft wide. Auxiliary cabinets may be required between toll equipment buildings and gantries.
- Modifications to drainage systems, grading, lighting, landscaping, and necessary utility connections/relocations for the new toll collection facilities.
- The Project would not be adding any additional lanes but reconfiguring and restriping existing lanes.
- The Project would reduce the number of lanes at each of the toll plazas.
- None of the proposed lane reconfigurations result in a lane that would exceed 1-mile in length.

Background

- Project documentation is being prepared in compliance with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA) as necessary. Caltrans is the lead agency under NEPA, and BATA is the lead agency under CEQA. BATA is the project sponsor.
- A CEQA Categorical Exemption and NEPA Categorical Exclusion with supporting technical studies currently in progress.
- The Project is programmed under the Toll Rehabilitation Program (TIP ID REG130002), which identifies that the 7 San Francisco Bay Area state-owned toll bridges under the rehabilitation program are exempt from Air Quality Conformity under ***40 Code of Federal Regulations (CFR) 93.126 – Safety – Widening narrow pavements or reconstructing bridges (no additional travel lanes)***.
- Seeking concurrence that the Project is exempt from Air Quality Conformity prior to completion of CEQA CE/NEPA CE by May 2023, or earlier.
- No public circulation is required.

Not a Project of Air Quality Concern (40 CFR 93.123(b)(1))

(i) New or expanded highway projects with significant number/increase in diesel vehicles?

- Not a new or expanded highway project
- Replacement of older tolling technology and reconfiguration of existing lanes—no additional lanes on SR-160, I-680, or I-80 corridors within the Project limits.
- No change in traffic volume or truck percentages on SR-160, I-680, or I-80 corridors within the Project limits

(ii) Affects intersections at LOS D, E, or F with a significant number of diesel vehicles?

- No intersections are modified by this Project.
- No intersections are anticipated to be significantly affected by this Project.

(iii) New bus and rail terminals and transfer points?—Not Applicable

(iv) Expanded bus and rail terminals and transfer points?—Not Applicable

(v) Affects areas identified in PM_{10} or $PM_{2.5}$ implementation plan as site of violation?

- Project does not affect locations identified in an applicable implementation plan or implementation plan submission.
- On January 9, 2013, the U.S. EPA issued a final rule that determined the San Francisco Bay Area air basin has attained the 24-hour PM2.5 National Ambient Air Quality Standards (NAAQS). As a result, new state implementation plan (SIP) provisions are not necessary to demonstrate how the air basin will attain the standard.

RTIP ID# *(required)* 21-T01-005

TIP ID# *(required)* REG130002

Air Quality Conformity Task Force Consideration Date
January 26, 2023

Project Description *(clearly describe project)*
The Bay Area Toll Authority (BATA), in cooperation with the California Department of Transportation (Caltrans), proposes to convert the existing all All-Electronic Tolling (AET) systems to Open Road Tolling (ORT) systems at the Antioch Bridge, Benicia-Martinez Bridge, and Carquinez Bridge. Refer to Attachment A for a figure showing the Project Location.

The proposed Open Road Tolling Conversion Northern Bridges Project (Project) is located at the toll plazas for the Antioch Bridge, Benicia-Martinez Bridge, and Carquinez Bridge in Contra Costa and Solano Counties. Refer to Attachment B for the Project limits. The Project would provide toll discounts to high occupancy vehicles with three or more passengers (HOV 3+) at all three bridge locations. The following describes the proposed conversion activities for each location:

- Antioch Bridge Toll Plaza (Northbound [NB] State Route 160 [SR-160])
    - Remove the existing toll booths, tolling equipment and canopy structure on SR-160 at approximately postmile (PM) 0.7.
    - Construct a new overhead toll gantry.
    - Construct a toll equipment building near the new toll gantry.
    - Restripe to one lane for combined general purpose (GP) lane and high- occupancy vehicle (HOV) lane use at the proposed gantry.
    - Minor pavement widening of up to 5-feet wide for about 200 feet in length at approximately PM 0.8
    - NB Wilbur Avenue on-ramp would remain open with modifications to on-ramp striping and reconstruction of the gore area.
    - Grind and overlay hot mix asphalt (HMA) pavement approximately between PM 0.3 and PM 0.8.
    - Maintain mainline access to and from the toll administration building and parking lot.
    - Install new tolling equipment on new overhead gantry to convert to ORT and install overhead and roadside signage.
    - Connection to a power source would require a temporary construction easement (TCE) within City of Oakley right-of-way (ROW). The approximate 2-feet (ft) wide and 3-ft deep utility trench will extend up to 2-ft in length.

- Benicia-Martinez Bridge Toll Plaza (NB Interstate 680 [I-680])
    - Remove the existing toll booths and toll equipment along NB I-680 between PM 24.5 and PM 24.6 and modify the existing toll canopy structure.
    - Install new electronic tolling equipment on the existing toll plaza canopy to convert to ORT and install overhead and roadside signage.
    - Construct a new toll equipment building adjacent to the existing toll canopy.
    - Restripe to four GP lanes and two HOV lanes on I-680 at the existing toll plaza.
    - Grind and overlay HMA pavement approximately between PM 24.5 and PM 24.9
    - Maintain mainline access to and from the toll administration building and parking lot(s).

- Carquinez Bridge Toll Plaza (Eastbound [EB] Interstate 80 [I-80])
    - Remove the existing toll booths, tolling equipment, and canopy structure along I-80 between PM 0.5 and PM 0.6.
    - Construct a new overhead toll gantry.
    - Construct a new toll equipment building adjacent to the new toll gantry.
    - Restripe to four GP lanes and one HOV lane at the proposed gantry.
    - Reconstruct pavement approximately between PM 0.5 and PM 0.8.
    - Pavement widening in the median of I-80, approximately between PM 0.4 and PM 0.5
    - Grind and overlay HMA pavement approximately between PM 0.35 and PM 0.5, and between PM 0.7 and PM 0.95.
    - Maintain mainline access to and from the toll administration and maintenance building and parking lot(s).
    - Install new tolling equipment on new overhead gantry to convert to ORT and install overhead and roadside signage, which includes replacing overhead signs on the Carquinez Bridge.

All proposed work would primarily occur within Caltrans' ROW, with the exception of a small area located in the City of Oakley, required for utility trenching during construction. Construction is anticipated to take approximately 15 months and is planned to begin in early 2025. Demolition of existing tolling infrastructure would occur following the installation and testing of the new ORT system.

Type of Project:

Toll rehabilitation program – Conversion of existing AET to ORT systems at three toll bridge locations.

County	*Narrative Location/Route & Postmiles*
Contra Costa Solano	The Project includes the conversion of existing AET to ORT systems at three toll plazas: the Antioch Bridge (04-CC-160- PM0.0/0.8), Benicia-Martinez Bridge (04-CC-680-PM23.3/24.9), and Carquinez Bridge (04-CC-80-PM13.4/14.1 & 04-SOL-80-PM 0.0/1.1). **EA#** 04-2W520

Lead Agency:

Contact Person	*Phone#*	*Fax#*	*Email*
Kenneth Young (Caltrans)	(510) 385-5767		kenneth.s.young@dot.ca.gov

Federal Action for which Project-Level PM Conformity is Needed *(check appropriate box)*

X	*Categorical Exclusion (NEPA)*	**EA or Draft EIS**	**FONSI or Final EIS**	**PS&E or Construction**	*Other*

Scheduled Date of Federal Action: Anticipated on or before May 2023

NEPA Delegation – Project Type *(check appropriate box)*

	X	**Section 326 – Categorical Exclusion**	**Section 327 – Non-Categorical Exclusion**

Current Programming Dates *(as appropriate)*

	PE/Environmental	**ENG**	**ROW**	**CON**
Start	April 2021	May 2023	N/A	Jan 2025
End	July 2023	Mar 2024	N/A	Apr 2026

Project Purpose and Need (Summary): *(please be brief)*

The purpose of the Project is to:

- Replace aging tolling system infrastructure to improve operational efficiency and mobility for all users through bridge toll plazas; and
- Enhance safety by eliminating the need to pass through the existing toll plazas.

The Project is needed to address operational and safety deficiencies for vehicles traveling through the BATA toll collection facilities at the Antioch, Benicia-Martinez, and Carquinez Bridge toll plazas. The existing toll collection system is aging, and improvements are required to meet the technological standards for both the existing AET systems and the proposed ORT systems. The existing toll collection booths and other civil infrastructure that were used during manual toll collection need to be removed to improve travel time and safety.

Surrounding Land Use/Traffic Generators *(especially effect on diesel traffic)*

There are no land uses within or immediately adjacent to the Project limits that would generate traffic.

Brief summary of assumptions and methodology used for conducting analysis
The traffic volume forecasting was based on the traffic data obtained from BATA, INRIX, Caltrans Performance Measurement System (PeMS), and historical counts. Annual growth rates were calculated per the BATA transaction data at each toll plaza and applied to develop the Opening Year (2025) forecasts. Existing Year (2022) and Opening Year (2025) traffic conditions were evaluated.

Traffic analysis was performed using Highway Capacity Manual 6th Edition methodologies on freeway mainline, weaving, or ramp junctions with the FreeVal software tool. A California Environmental Quality Act (CEQA) Vehicle Miles Traveled (VMT) analysis is not required based on Section 5.1 of the Transportation Analysis under CEQA (TAC).

Opening Year: If facility is a highway or street, Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

Refer to Attachment C for the Opening Year (2025) level of service (LOS) and average annual daily traffic (AADT) data extracted from the Traffic Analysis Memorandum prepared by HDR (September 2022).

RTP Horizon Year / Design Year: If facility is a highway or street, Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

The ORT conversion at the three toll plazas is classified as operational improvement project per Highway Design Manual Chapter 103.2, 7th Edition, Caltrans, December 31, 2020. These operational improvements are designed based on current average daily traffic (ADT); thus, the minimum 20-year design period is not required. Therefore, no Design Year data is provided for this Project.

Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT
N/A

RTP Horizon Year / Design Year: If facility is an interchange (s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT
N/A

Opening Year: If facility is a bus, rail or intermodal facility/terminal/transfer point, # of bus arrivals for Build and No Build, % and # of bus arrivals will be diesel buses
N/A

RTP Horizon Year / Design Year: If facility is a bus, rail or intermodal facility/terminal/transfer point, # of bus arrivals for Build and No Build, % and # of bus arrivals will be diesel buses
N/A

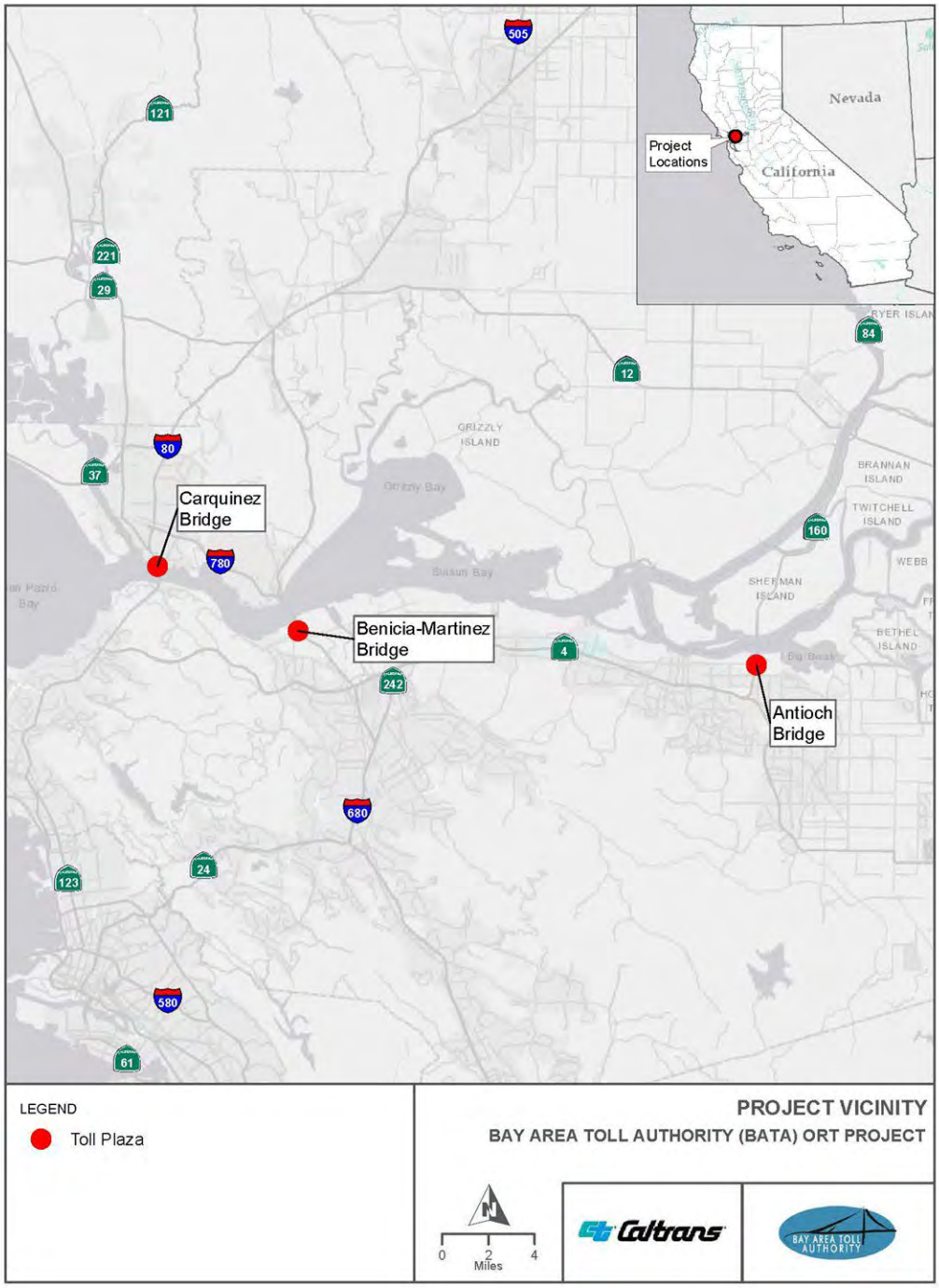
Describe potential traffic redistribution effects of congestion relief *(impact on other facilities)*
This Project proposes to convert existing toll collection booths to ORT systems at three bridge locations. Construction of the proposed Project is not anticipated to adversely impact highway traffic. The travel patterns would remain the same for all three bridge toll plaza locations. No traffic redistribution effects are anticipated for this Project. However, the proposed Project is expected to improve the travel speed and reduce turbulence, including speed variances and lane changing adjacent to the toll plazas, resulting in overall improvements of safety and efficiency on highway operations.

Comments/Explanation/Details (please be brief)

Based on the Project description provided, above, the proposed Project would not be adding any additional lanes but reconfiguring and restriping existing lanes. In addition, the Project would reduce the number of lanes at each of the toll plazas. None of the proposed lane reconfigurations result in a lane that would exceed 1-mile in length. Please refer to Attachment D, for further information regarding the congestion relief improvements at the existing bridge toll facility locations.

Further, based on the adopted Metropolitan Transportation Commission (MTC) 2021 Transportation Improvement Program (TIP) for the fiscal year, the Project is programmed under the Toll Rehabilitation Program (TIP ID REG130002), which identifies that the 7 San Francisco Bay Area state-owned toll bridges under the rehabilitation program are exempt from Air Quality Conformity under 40 Code of Federal Regulations (CFR) 93.126 – Safety – Widening narrow pavements or reconstructing bridges (no additional travel lanes).

Attachment A: Location Map



Attachment B – Project Limits Map

Project Limits

Rail Line

EA 04-2W520

04-CC-680-PM 23.3/24.9

PROJECT LIMITS

BENICIA-MARTINEZ BRIDGE TOLL PLAZA

BAY AREA TOLL AUTHORITY (BATA) ORT PROJECT

0 0.1 0.2

Miles

Caltrans

BAY AREA TOLL AUTHORITY

Path: \\WAL_FILSRV1\Projects\GIS\Projects\BATA\7.2_WIP\map_docs\ATTACHMENT_IMPACTAREA_MAPBOOKS.aprx

Project Limits

Railroad

EA 04-2W520

04-CC-80-PM 13.7/14.1 , 04-SOL-80-PM 0.0/1.1

PROJECT LIMITS

CARQUINEZ BRIDGE TOLL PLAZA

BAY AREA TOLL AUTHORITY (BATA) ORT PROJECT

0 0.1 0.2
Miles

Caltrans

BAY AREA TOLL AUTHORITY

Path: \\WAL_FILSRV1\Projects\GIS\Projects\BATA\7.2_WIP\map_docs\ATTACHMENT_IMPACTAREA_MAPBOOKS.aprx

Attachment C – Opening Year (2025) LOS and AADT Data

Opening Year (2025) Level of Service (LOS)

Mainline Segment	Opening Year (2025) LOS No Build Alternative				Opening Year (2025) LOS Build Alternative			
	AM		PM		AM		PM	
	GP	HOV	GP	HOV	GP	HOV	GP	HOV
Antioch Bridge								
Main St Off-Ramp to Main St Loop On-Ramp	A	--	A	--	A	--	A	--
Main St Loop On-Ramp to Wilbur Ave Off-Ramp	A	--	A	--	A	--	A	--
Wilbur Ave Off-Ramp to Wilbur Ave On-Ramp	A	--	A	--	A	--	B	--
Wilbur Ave On-Ramp to Antioch Bridge Toll Plaza	F	A	F	C	A	--	C	--
Antioch Bridge Toll Plaza to Antioch Bridge	A	--	C	--	A	--	C	--
Benicia-Martinez Bridge								
Waterfront Rd Off-Ramp to Waterfront Rd On-Ramp	A	D	A	D	B	--	C	--
Waterfront Rd On-Ramp to Benicia-Martinez Bridge Toll Plaza	C	B	D	C	B	A	C	A
Benicia-Martinez Bridge Toll Plaza to Benicia-Martinez Bridge	A	B	A	C	B	--	D	--
Carquinez Bridge								
Carquinez Bridge to Carquinez Bridge Toll Plaza	F	A	F	B	B	A	C	B
Carquinez Bridge Toll Plaza to Sonoma Blvd (SR29) Off-Ramp	B	--	D	--	B	--	D	--
Sonoma Blvd (SR29) Off-Ramp to Sequoia Ave Off-Ramp	B	--	D	--	B	--	D	--

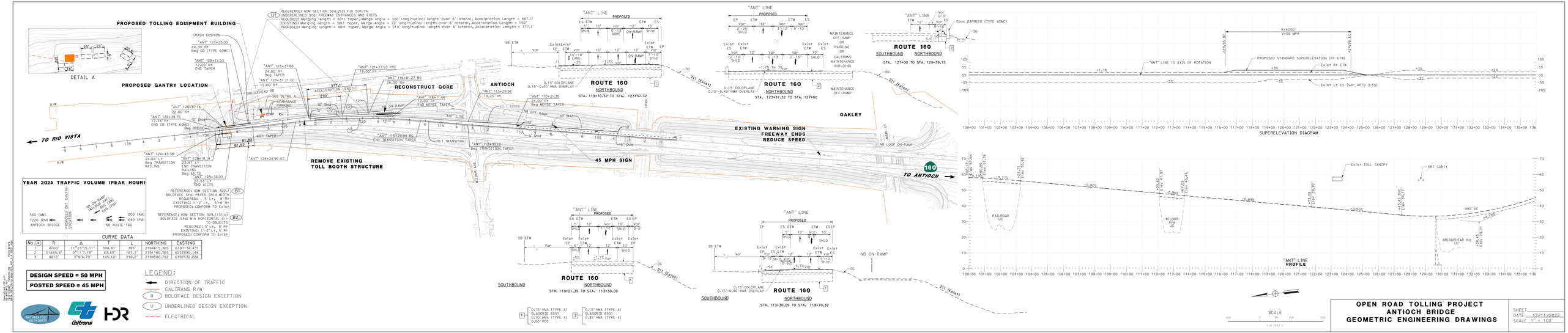
Note: St=Street; Ave=Avenue; Rd=Road; Blvd=Boulevard; -- Not Applicable.

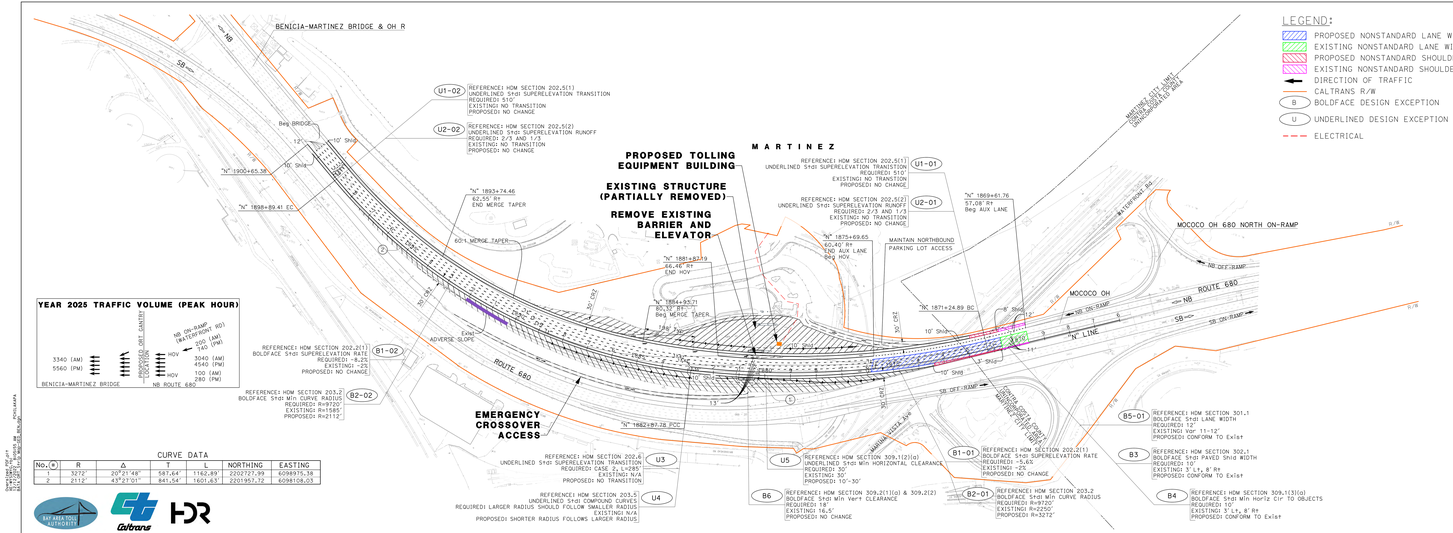
Opening Year (2025) Annual Average Daily Traffic (AADT)

Mainline Segment	Alternative	Direction	AADT	(AADT)ruck%	Truck AADT
Antioch Bridge					
Main St Off-Ramp to Main St Loop On-Ramp	No Build/Build	NB	3,590	7%	250
Main St Loop On-Ramp to Wilbur Ave Off-Ramp	No Build/Build	NB	7,300		510
Wilbur Ave Off-Ramp to Wilbur Ave On-Ramp	No Build/Build	NB	5,310		370
Wilbur Ave On-Ramp to Antioch Bridge	No Build/Build	NB	11,140		780
Benicia-Martinez Bridge					
Waterfront Rd Off-Ramp to Waterfront Rd On-Ramp	No Build/Build	NB	56,540	7%	3,960
Waterfront Rd On-Ramp to Benicia-Martinez Bridge	No Build/Build	NB	61,800		4,330
Carquinez Bridge					
Carquinez Bridge to Sonoma Blvd (SR29) Off-Ramp	No Build/Build	NB/EB	72,080	5%	3,600
Sonoma Blvd (SR29) Off-Ramp to Sequoia Ave Off-Ramp	No Build/Build	NB/EB	66,720		3,340

Note: ADT=Average Daily Traffic; St=Street; Ave=Avenue; Rd=Road; Blvd=Boulevard.

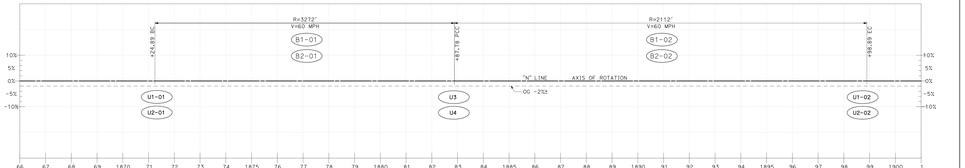
Attachment D – Preliminary Geometric Design Concepts


PROPOSED TOLLING EQUIPMENT BUILDING
DETAIL A
PROPOSED GANTRY LOCATION
U1 REFERENCE: HDM SECTION 504.2(2) FIG 504.24
UNDERLINED 5thI FREEWAY ENTRANCES AND EXITS
REQUIRED: Merging length = 501' taper, Merge Angle = 300' longitudinal length over 6' lateral, Acceleration Length = 467.1'
EXISTING: Merging length = 301' taper, Merge Angle = 72' longitudinal length over 6' lateral, Acceleration Length = 150'
PROPOSED: Merging length = 401' taper, Merge Angle = 210' longitudinal length over 6' lateral, Acceleration Length = 377.1'
RECONSTRUCT GORE
REMOVE EXISTING TOLL BOOTH STRUCTURE
45 MPH SIGN
EXISTING WARNING SIGN FREEWAY ENDS REDUCE SPEED
TO RIO VISTA
TO ANTIOCH
ANTIOCH
OAKLEY
YEAR 2025 TRAFFIC VOLUME (PEAK HOUR)
560 (AM)
1220 (PM)
ANTIOCH BRIDGE
NB ON-RAMP (NB AM) (SB PM)
NB ROUTE 160
200 (AM)
640 (PM)
B1 REFERENCE: HDM SECTION 302.7
BOLDFACE 5thI 4'W 5'H Ctrl WIDTH REQUIRED: 5' LT, 8' RT
EXISTING: 1'-2' LT, 5'-6' RT
PROPOSED: CONFORM TO Exist
B2 REFERENCE: HDM SECTION 309.1(3)(d)
BOLDFACE 5thI MIN HORIZONTAL Clr TO OBJECTS
REQUIRED: 5' LT, 8' RT
EXISTING: 1'-2' LT, 5' RT
PROPOSED: CONFORM TO Exist
CURVE DATA
NO. R Δ L NORTHING EASTING
1 4000' 11°23'15.11" 398.81' 795' 2194615.365 6197154.431
2 51845.8' 0°11'7.18" 83.85' 167.7' 2191160.365 6252890.148
3 4012' 3°0'6.79" 105.12' 210.2' 2194500.782 6197132.286
DESIGN SPEED = 50 MPH
POSTED SPEED = 45 MPH
LEGEND:
DIRECTION OF TRAFFIC
CALTRANS R/W
B BOLDFACE DESIGN EXCEPTION
U UNDERLINED DESIGN EXCEPTION
ELECTRICAL
ROUTE 160 NORTHBOUND STA. 119+70.32 TO STA. 123+37.32
ROUTE 160 NORTHBOUND STA. 123+37.32 TO STA. 127+00
ROUTE 160 SOUTHBOUND NORTHBOUND STA. 127+00 TO STA. 129+39.75
ROUTE 160 SOUTHBOUND NORTHBOUND STA. 110+21.35 TO STA. 113+30.09
ROUTE 160 SOUTHBOUND NORTHBOUND STA. 113+30.09 TO STA. 119+70.32
SUPERELEVATION DIAGRAM
PROFILE
SCALE
OPEN ROAD TOLLING PROJECT
ANTIOCH BRIDGE
GEOMETRIC ENGINEERING DRAWINGS
SHEET
DATE 12/11/2022
SCALE 1" = 100'

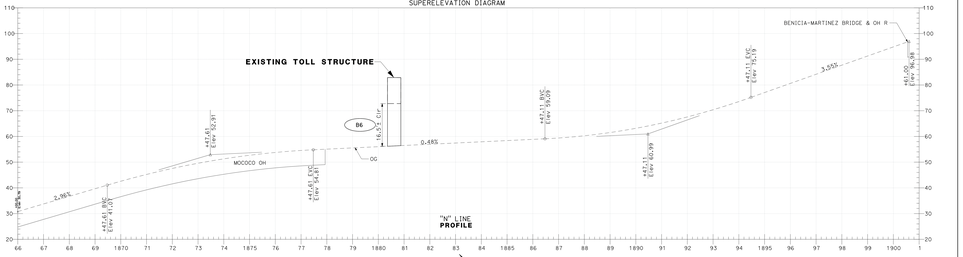


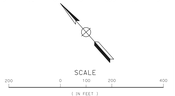
CURVE DATA

No.	R	Δ	T	L	NORTHING	EASTING
1	3272'	20°21'48"	587.64'	1162.89	2202727.99	6098975.38
2	2112'	43°27'01"	841.54'	1601.65'	2201957.72	6098108.03



SUPERELEVATION DIAGRAM



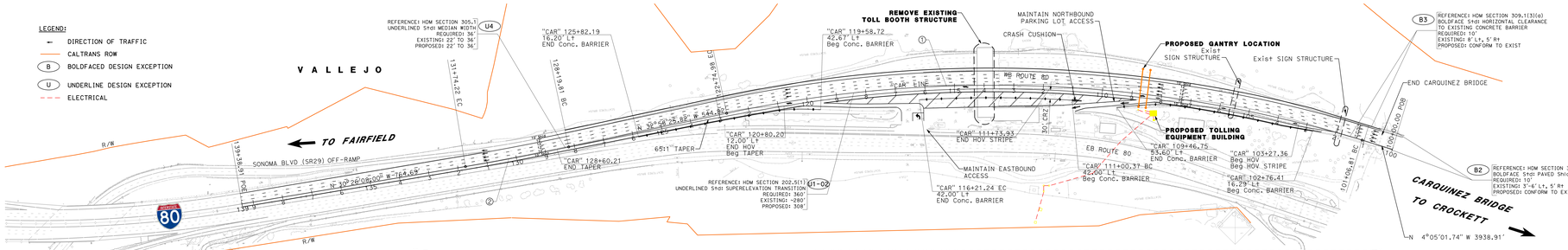


OPEN ROAD TOLLING PROJECT
BENICIA-MARTINEZ BRIDGE
GEOMETRIC ENGINEERING DRAWINGS

SHEET
DATE 12/12/2022
SCALE 1" = 100'

LEGEND:

- DIRECTION OF TRAFFIC
- CALTRANS ROW
- (B) BOLDFACED DESIGN EXCEPTION
- (U) UNDERLINE DESIGN EXCEPTION
- ELECTRICAL



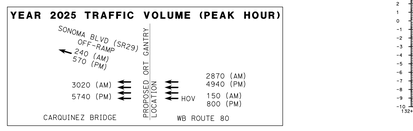
REFERENCE: HDM SECTION 305.1
UNDERLINED Std: MEDIAN WIDTH
REQUIRED: 36'
EXISTING: 22' TO 36'
PROPOSED: 22' TO 36'
(U4)

REFERENCE: HDM SECTION 202.5(1)
UNDERLINED Std: SUPERELEVATION TRANSITION
REQUIRED: 360'
EXISTING: -280'
PROPOSED: 308'
(U1-02)

REFERENCE: HDM SECTION 309.1(3)(a)
BOLDFACE Std: HORIZONTAL CLEARANCE
TO EXISTING CONCRETE BARRIER
REQUIRED: 10'
EXISTING: 8' Lt, 5' Rt
PROPOSED: CONFORM TO EXIST
(B3)

REFERENCE: HDM SECTION 302.1
BOLDFACE Std: PAVED Shld WIDTH
REQUIRED: 10'
EXISTING: 3'-6' Lt, 5' Rt
PROPOSED: CONFORM TO EXIST
(B2)

YEAR 2025 TRAFFIC VOLUME (PEAK HOUR)

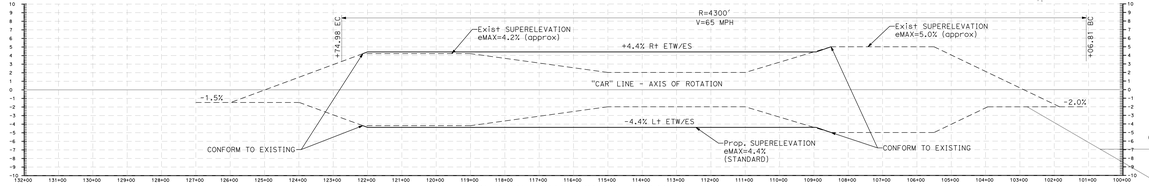


CURVE DATA

No.	R	Δ	T	L	NORTHING	EASTING
1	4300'	23°53'24"	1107.65'	2168.17'	1785504.823	6492403.432
2	8000'	2°32'18"	177.23'	354.41'	1792656.235	6502425.614

DESIGN SPEED = 65 MPH

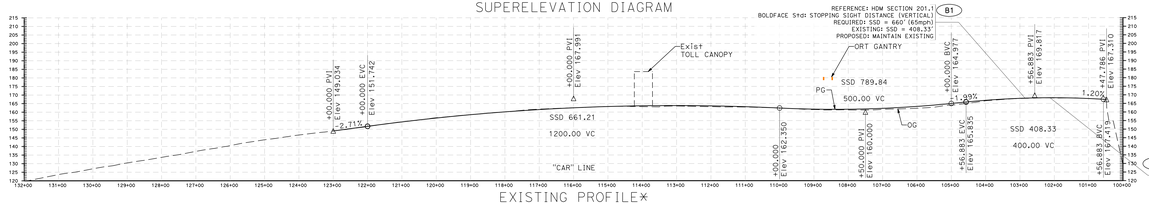
POSTED SPEED = 65 MPH



SUPERELEVATION DIAGRAM

(U1-01) REFERENCE: HDM SECTION 202.5(1)
UNDERLINED Std: SUPERELEVATION TRANSITION
REQUIRED: 360'
EXISTING: -261'
PROPOSED: -261'

(U2-01) REFERENCE: HDM SECTION 202.5(2)
UNDERLINED Std: SUPERELEVATION RUNOFF
REQUIRED: 2/3 AND 1/3
EXISTING: ALL ON CURVE
PROPOSED: NO CHANGE

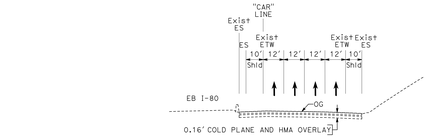


EXISTING PROFILE*

* PROFILE AS-BUILTS NOT AVAILABLE. BEST FIT IS SHOWN BASED ON TOPO

REFERENCE: HDM SECTION 201.1
BOLDFACE Std: STOPPING SIGHT DISTANCE (VERTICAL)
REQUIRED: SSD = 660' (65mph)
EXISTING: SSD = 409.33'
PROPOSED: MAINTAIN EXISTING
(B1)

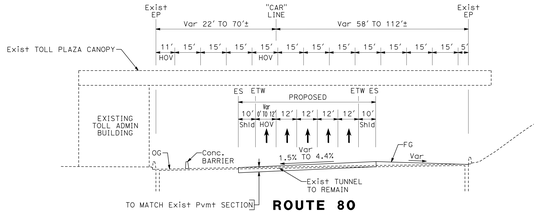
(U3) REFERENCE: HDM SECTION 204.4
UNDERLINED Std: VERTICAL CURVE LENGTH
REQUIRED: LVC = 650' (65mph)
EXISTING: LVC = 400'
PROPOSED: MAINTAIN EXISTING



ROUTE 80

WESTBOUND

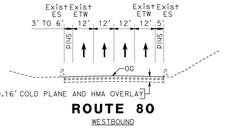
STA. 128+60.21 TO STA. 139+38.91



ROUTE 80

WESTBOUND

STA. 103+27.36 TO STA. 128+60.21



ROUTE 80

WESTBOUND

STA. 100+00 TO STA. 103+27.36

SCALE

200 0 100 200 400

(IN FEET)

DRAFT

OPEN ROAD TOLLING PROJECT
CARQUINEZ BRIDGE
GEOMETRIC ENGINEERING DRAWING

SHEET
DATE 11/29/2022
SCALE 1" = 100'

BAY AREA TOLL AUTHORITY · Caltrans · HDR · Kimley»Horn

Sonoma-Lake-Napa
Carquinez Bridge
Toll Plaza Improvements
EA 4J0-0F0 Ex-Ip Web_GED_GED.dgn
11/29/2022 10:03:07 AM Donny.Huang

Type of Project:

Toll rehabilitation program – Conversion of existing AET to ORT systems at three toll bridge locations.

County	*Narrative Location/Route & Postmiles*
Contra Costa Solano	The Project includes the conversion of existing AET to ORT systems at three toll plazas: the Antioch Bridge (04-CC-160- PM0.0/0.8), Benicia-Martinez Bridge (04-CC-680-PM23.3/24.9), and Carquinez Bridge (04-CC-80-PM13.4/14.1 & 04-SOL-80-PM 0.0/1.1). **EA#** 04-2W520

Lead Agency:

Contact Person	*Phone#*	*Fax#*	*Email*
Kenneth Young (Caltrans)	(510) 385-5767		kenneth.s.young@dot.ca.gov

Federal Action for which Project-Level PM Conformity is Needed *(check appropriate box)*

X	*Categorical Exclusion (NEPA)*	**EA or Draft EIS**	**FONSI or Final EIS**	**PS&E or Construction**	*Other*

Scheduled Date of Federal Action: Anticipated on or before May 2023

NEPA Delegation – Project Type *(check appropriate box)*

	X	**Section 326 – Categorical Exclusion**	**Section 327 – Non-Categorical Exclusion**

Current Programming Dates *(as appropriate)*

	PE/Environmental	**ENG**	**ROW**	**CON**
Start	April 2021	May 2023	N/A	Jan 2025
End	July 2023	Mar 2024	N/A	Apr 2026

Project Purpose and Need (Summary): *(please be brief)*

The purpose of the Project is to:

- Replace aging tolling system infrastructure to improve operational efficiency and mobility for all users through bridge toll plazas; and
- Enhance safety by eliminating the need to pass through the existing toll plazas.

The Project is needed to address operational and safety deficiencies for vehicles traveling through the BATA toll collection facilities at the Antioch, Benicia-Martinez, and Carquinez Bridge toll plazas. The existing toll collection system is aging, and improvements are required to meet the technological standards for both the existing AET systems and the proposed ORT systems. The existing toll collection booths and other civil infrastructure that were used during manual toll collection need to be removed to improve travel time and safety.

Surrounding Land Use/Traffic Generators *(especially effect on diesel traffic)*

There are no land uses within or immediately adjacent to the Project limits that would generate traffic.

Brief summary of assumptions and methodology used for conducting analysis
The traffic volume forecasting was based on the traffic data obtained from BATA, INRIX, Caltrans Performance Measurement System (PeMS), and historical counts. Annual growth rates were calculated per the BATA transaction data at each toll plaza and applied to develop the Opening Year (2025) forecasts. Existing Year (2022) and Opening Year (2025) traffic conditions were evaluated.

Traffic analysis was performed using Highway Capacity Manual 6th Edition methodologies on freeway mainline, weaving, or ramp junctions with the FreeVal software tool. A California Environmental Quality Act (CEQA) Vehicle Miles Traveled (VMT) analysis is not required based on Section 5.1 of the Transportation Analysis under CEQA (TAC).

Opening Year: If facility is a highway or street, Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

Refer to Attachment C for the Opening Year (2025) level of service (LOS) and average annual daily traffic (AADT) data extracted from the Traffic Analysis Memorandum prepared by HDR (September 2022).

RTP Horizon Year / Design Year: If facility is a highway or street, Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

The ORT conversion at the three toll plazas is classified as operational improvement project per Highway Design Manual Chapter 103.2, 7th Edition, Caltrans, December 31, 2020. These operational improvements are designed based on current average daily traffic (ADT); thus, the minimum 20-year design period is not required. Therefore, no Design Year data is provided for this Project.

Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT
N/A

RTP Horizon Year / Design Year: If facility is an interchange (s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT
N/A

Opening Year: If facility is a bus, rail or intermodal facility/terminal/transfer point, # of bus arrivals for Build and No Build, % and # of bus arrivals will be diesel buses
N/A

RTP Horizon Year / Design Year: If facility is a bus, rail or intermodal facility/terminal/transfer point, # of bus arrivals for Build and No Build, % and # of bus arrivals will be diesel buses
N/A

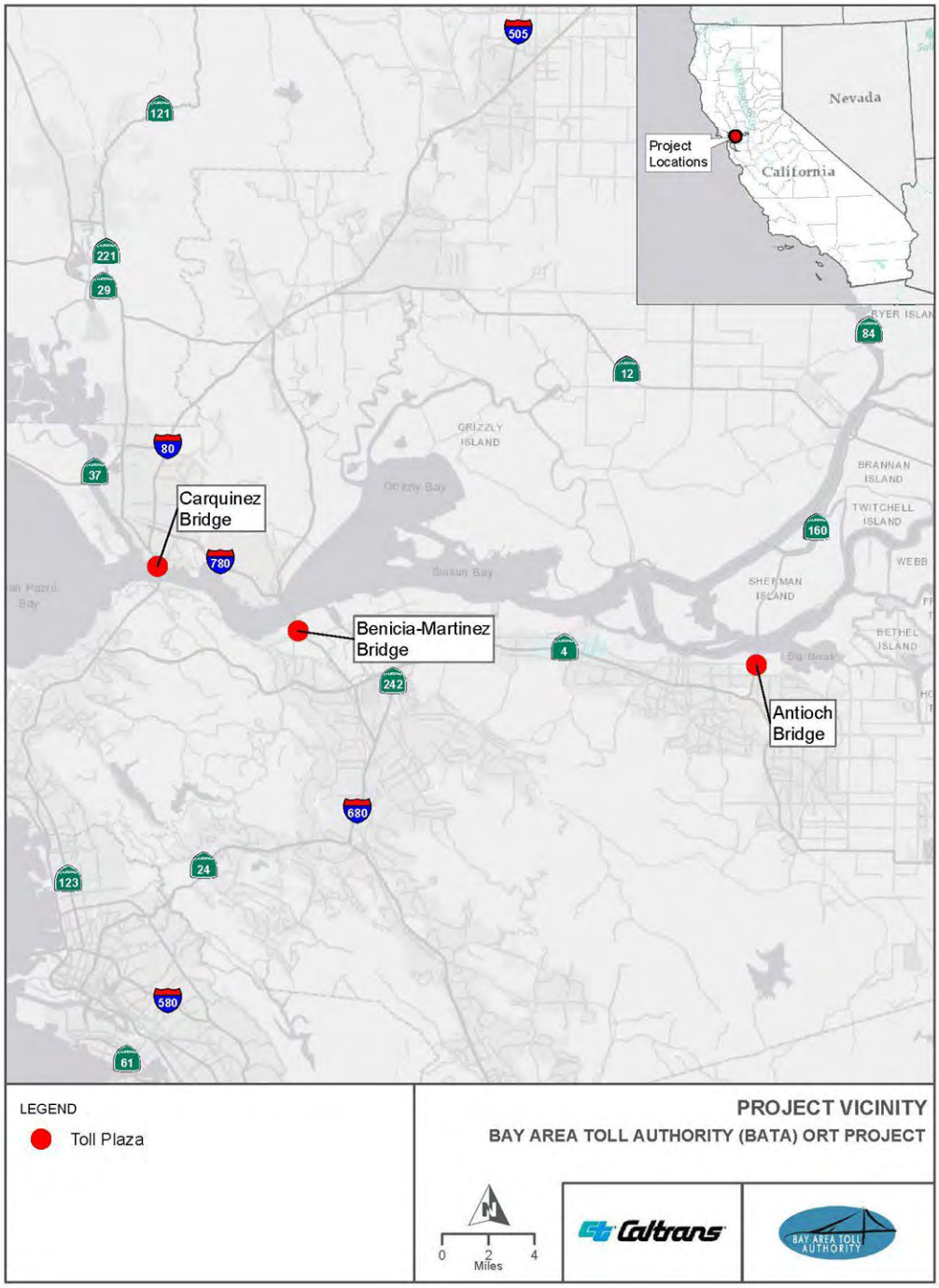
Describe potential traffic redistribution effects of congestion relief *(impact on other facilities)*
This Project proposes to convert existing toll collection booths to ORT systems at three bridge locations. Construction of the proposed Project is not anticipated to adversely impact highway traffic. The travel patterns would remain the same for all three bridge toll plaza locations. No traffic redistribution effects are anticipated for this Project. However, the proposed Project is expected to improve the travel speed and reduce turbulence, including speed variances and lane changing adjacent to the toll plazas, resulting in overall improvements of safety and efficiency on highway operations.

Comments/Explanation/Details (please be brief)

Based on the Project description provided, above, the proposed Project would not be adding any additional lanes but reconfiguring and restriping existing lanes. In addition, the Project would reduce the number of lanes at each of the toll plazas. None of the proposed lane reconfigurations result in a lane that would exceed 1-mile in length. Please refer to Attachment D, for further information regarding the congestion relief improvements at the existing bridge toll facility locations.

Further, based on the adopted Metropolitan Transportation Commission (MTC) 2021 Transportation Improvement Program (TIP) for the fiscal year, the Project is programmed under the Toll Rehabilitation Program (TIP ID REG130002), which identifies that the 7 San Francisco Bay Area state-owned toll bridges under the rehabilitation program are exempt from Air Quality Conformity under 40 Code of Federal Regulations (CFR) 93.126 – Safety – Widening narrow pavements or reconstructing bridges (no additional travel lanes).

Attachment A: Location Map



Attachment B – Project Limits Map

Project Limits

Rail Line

EA 04-2W520

04-CC-680-PM 23.3/24.9

PROJECT LIMITS

BENICIA-MARTINEZ BRIDGE TOLL PLAZA

BAY AREA TOLL AUTHORITY (BATA) ORT PROJECT

0 0.1 0.2

Miles

Caltrans

BAY AREA TOLL AUTHORITY

Path: \\WAL_FILSRV1\Projects\GIS\Projects\BATA\7.2_WIP\map_docs\ATTACHMENT_IMPACTAREA_MAPBOOKS.aprx

Project Limits

Railroad

EA 04-2W520

04-CC-80-PM 13.7/14.1 , 04-SOL-80-PM 0.0/1.1

PROJECT LIMITS

CARQUINEZ BRIDGE TOLL PLAZA

BAY AREA TOLL AUTHORITY (BATA) ORT PROJECT

0 0.1 0.2
Miles

Caltrans

BAY AREA TOLL AUTHORITY

Path: \\WAL_FILSRV1\Projects\GIS\Projects\BATA\7.2_WIP\map_docs\ATTACHMENT_IMPACTAREA_MAPBOOKS.aprx

Attachment C – Opening Year (2025) LOS and AADT Data

Opening Year (2025) Level of Service (LOS)

Mainline Segment	Opening Year (2025) LOS No Build Alternative				Opening Year (2025) LOS Build Alternative			
	AM		PM		AM		PM	
	GP	HOV	GP	HOV	GP	HOV	GP	HOV
Antioch Bridge								
Main St Off-Ramp to Main St Loop On-Ramp	A	--	A	--	A	--	A	--
Main St Loop On-Ramp to Wilbur Ave Off-Ramp	A	--	A	--	A	--	A	--
Wilbur Ave Off-Ramp to Wilbur Ave On-Ramp	A	--	A	--	A	--	B	--
Wilbur Ave On-Ramp to Antioch Bridge Toll Plaza	F	A	F	C	A	--	C	--
Antioch Bridge Toll Plaza to Antioch Bridge	A	--	C	--	A	--	C	--
Benicia-Martinez Bridge								
Waterfront Rd Off-Ramp to Waterfront Rd On-Ramp	A	D	A	D	B	--	C	--
Waterfront Rd On-Ramp to Benicia-Martinez Bridge Toll Plaza	C	B	D	C	B	A	C	A
Benicia-Martinez Bridge Toll Plaza to Benicia-Martinez Bridge	A	B	A	C	B	--	D	--
Carquinez Bridge								
Carquinez Bridge to Carquinez Bridge Toll Plaza	F	A	F	B	B	A	C	B
Carquinez Bridge Toll Plaza to Sonoma Blvd (SR29) Off-Ramp	B	--	D	--	B	--	D	--
Sonoma Blvd (SR29) Off-Ramp to Sequoia Ave Off-Ramp	B	--	D	--	B	--	D	--

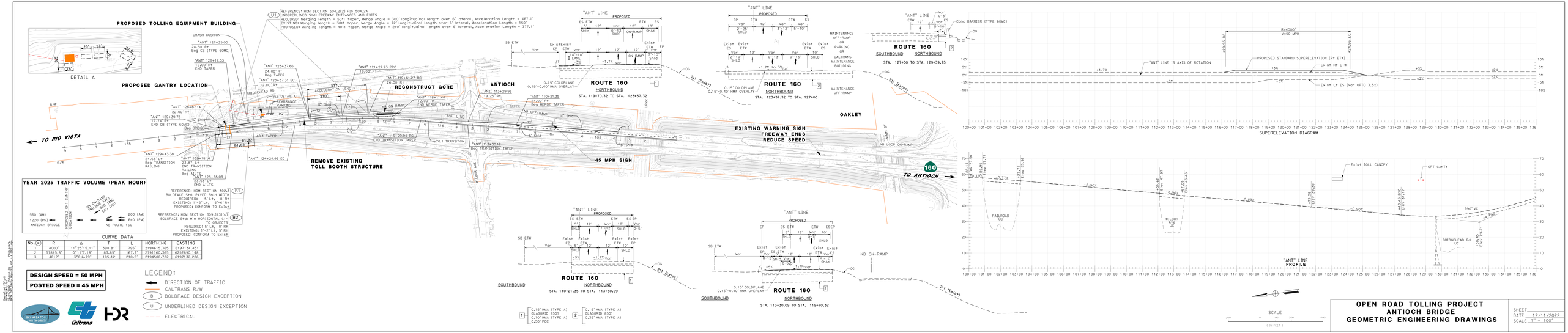
Note: St=Street; Ave=Avenue; Rd=Road; Blvd=Boulevard; -- Not Applicable.

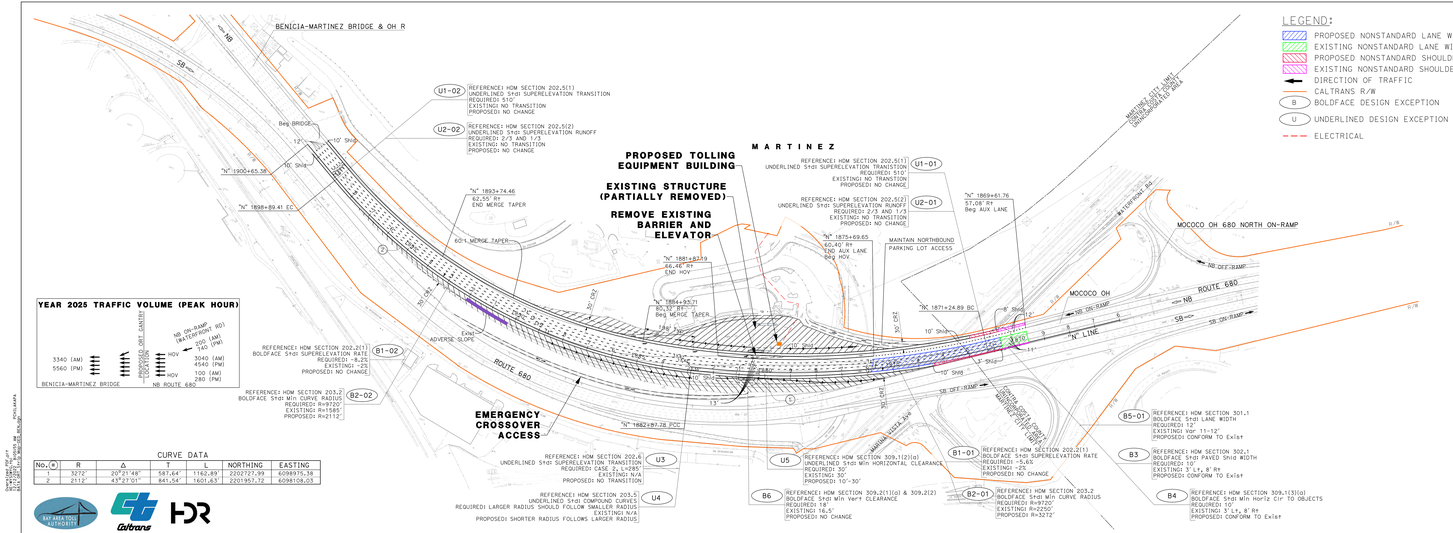
Opening Year (2025) Annual Average Daily Traffic (AADT)

Mainline Segment	Alternative	Direction	AADT	(AADT)ruck%	Truck AADT
Antioch Bridge					
Main St Off-Ramp to Main St Loop On-Ramp	No Build/Build	NB	3,590	7%	250
Main St Loop On-Ramp to Wilbur Ave Off-Ramp	No Build/Build	NB	7,300		510
Wilbur Ave Off-Ramp to Wilbur Ave On-Ramp	No Build/Build	NB	5,310		370
Wilbur Ave On-Ramp to Antioch Bridge	No Build/Build	NB	11,140		780
Benicia-Martinez Bridge					
Waterfront Rd Off-Ramp to Waterfront Rd On-Ramp	No Build/Build	NB	56,540	7%	3,960
Waterfront Rd On-Ramp to Benicia-Martinez Bridge	No Build/Build	NB	61,800		4,330
Carquinez Bridge					
Carquinez Bridge to Sonoma Blvd (SR29) Off-Ramp	No Build/Build	NB/EB	72,080	5%	3,600
Sonoma Blvd (SR29) Off-Ramp to Sequoia Ave Off-Ramp	No Build/Build	NB/EB	66,720		3,340

Note: ADT=Average Daily Traffic; St=Street; Ave=Avenue; Rd=Road; Blvd=Boulevard.

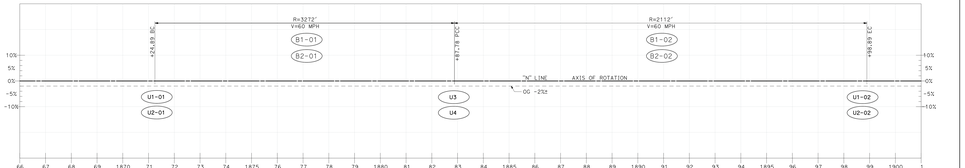
Attachment D – Preliminary Geometric Design Concepts


PROPOSED TOLLING EQUIPMENT BUILDING
DETAIL A
PROPOSED GANTRY LOCATION
U1 REFERENCE: HDM SECTION 504.2(2) FIG 504.24
UNDERLINED 5thI FREEWAY ENTRANCES AND EXITS
REQUIRED: Merging length = 501' taper, Merge Angle = 300' longitudinal length over 6' lateral, Acceleration Length = 467.1'
EXISTING: Merging length = 301' taper, Merge Angle = 72' longitudinal length over 6' lateral, Acceleration Length = 150'
PROPOSED: Merging length = 401' taper, Merge Angle = 210' longitudinal length over 6' lateral, Acceleration Length = 377.1'
RECONSTRUCT GORE
REMOVE EXISTING TOLL BOOTH STRUCTURE
45 MPH SIGN
EXISTING WARNING SIGN FREEWAY ENDS REDUCE SPEED
TO RIO VISTA
TO ANTIOCH
ANTIOCH
OAKLEY
YEAR 2025 TRAFFIC VOLUME (PEAK HOUR)
560 (AM)
1220 (PM)
ANTIOCH BRIDGE
NB ON-RAMP (NB AM) (SB PM)
NB ROUTE 160
200 (AM)
640 (PM)
B1 REFERENCE: HDM SECTION 302.7
BOLDFACE 5thI 4'W 5'H Ctrl WIDTH REQUIRED: 5' LT, 8' RT
EXISTING: 1'-2' LT, 5'-6' RT
PROPOSED: CONFORM TO Exist
B2 REFERENCE: HDM SECTION 309.1(3)(d)
BOLDFACE 5thI MIN HORIZONTAL Clr TO OBJECTS
REQUIRED: 5' LT, 8' RT
EXISTING: 1'-2' LT, 5' RT
PROPOSED: CONFORM TO Exist
CURVE DATA
NO. R Δ L NORTHING EASTING
1 4000' 11°23'15.11" 398.81' 795' 2194615.365 6197154.431
2 51845.8' 0°11'7.18" 83.85' 167.7' 2191160.365 6252890.148
3 4012' 3°0'6.79" 105.12' 210.2' 2194500.782 6197132.286
DESIGN SPEED = 50 MPH
POSTED SPEED = 45 MPH
LEGEND:
DIRECTION OF TRAFFIC
CALTRANS R/W
B BOLDFACE DESIGN EXCEPTION
U UNDERLINED DESIGN EXCEPTION
ELECTRICAL
ROUTE 160 NORTHBOUND STA. 119+70.32 TO STA. 123+37.32
ROUTE 160 NORTHBOUND STA. 123+37.32 TO STA. 127+00
ROUTE 160 SOUTHBOUND NORTHBOUND STA. 127+00 TO STA. 129+39.75
ROUTE 160 SOUTHBOUND NORTHBOUND STA. 110+21.35 TO STA. 113+30.09
ROUTE 160 SOUTHBOUND NORTHBOUND STA. 113+30.09 TO STA. 119+70.32
SUPERELEVATION DIAGRAM
PROFILE
SCALE
OPEN ROAD TOLLING PROJECT
ANTIOCH BRIDGE
GEOMETRIC ENGINEERING DRAWINGS
SHEET
DATE 12/11/2022
SCALE 1" = 100'

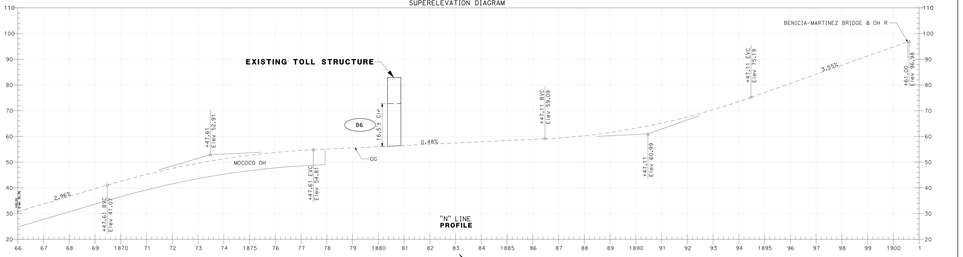


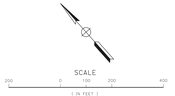
CURVE DATA

No.	R	Δ	T	L	NORTHING	EASTING
1	3272'	20°21'48"	587.64'	1162.89	2202727.99	6098975.38
2	2112'	43°27'01"	841.54'	1601.65'	2201957.72	6098108.03



SUPERELEVATION DIAGRAM



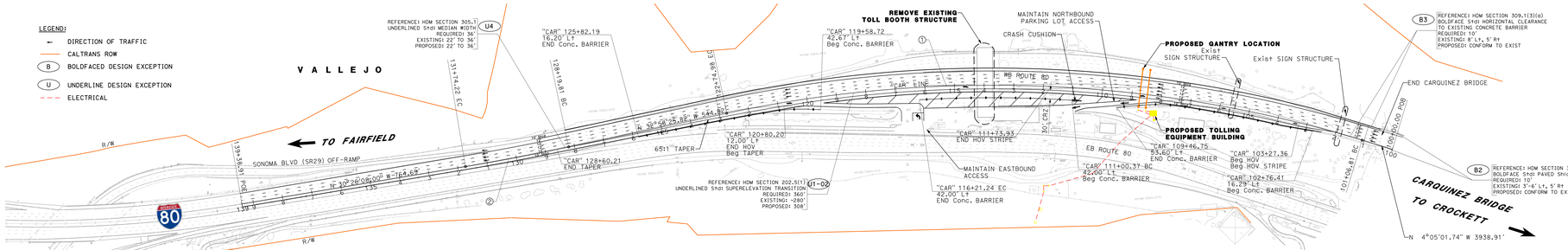


OPEN ROAD TOLLING PROJECT
BENICIA-MARTINEZ BRIDGE
GEOMETRIC ENGINEERING DRAWINGS

SHEET
DATE 12/12/2022
SCALE 1" = 100'

LEGEND:

- DIRECTION OF TRAFFIC
- CALTRANS ROW
- (B) BOLDFACED DESIGN EXCEPTION
- (U) UNDERLINE DESIGN EXCEPTION
- ELECTRICAL



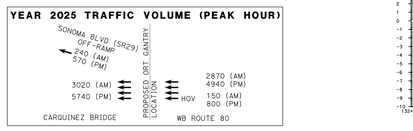
REFERENCE: HDM SECTION 305.1
UNDERLINED Std: MEDIAN WIDTH
REQUIRED: 36'
EXISTING: 22' TO 36'
PROPOSED: 22' TO 36'
(U4)

REFERENCE: HDM SECTION 202.5(1)
UNDERLINED Std: SUPERELEVATION TRANSITION
REQUIRED: 360'
EXISTING: -280'
PROPOSED: 308'
(U1-02)

REFERENCE: HDM SECTION 309.1(3)(a)
BOLDFACE Std: HORIZONTAL CLEARANCE
TO EXISTING CONCRETE BARRIER
REQUIRED: 10'
EXISTING: 8' Lt, 5' Rt
PROPOSED: CONFORM TO EXIST
(B3)

REFERENCE: HDM SECTION 302.1
BOLDFACE Std: PAVED Shld WIDTH
REQUIRED: 10'
EXISTING: 3'-6' Lt, 5' Rt
PROPOSED: CONFORM TO EXIST
(B2)

YEAR 2025 TRAFFIC VOLUME (PEAK HOUR)

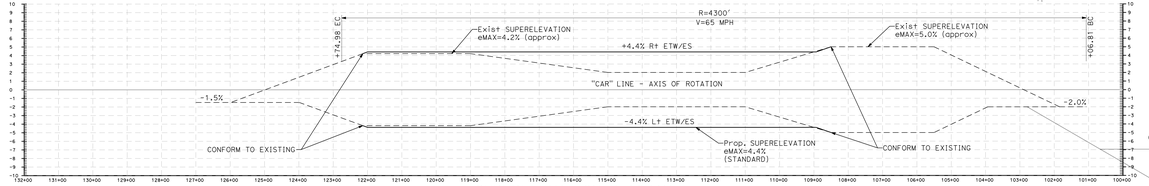


CURVE DATA

No.	R	Δ	T	L	NORTHING	EASTING
1	4300'	23°53'24"	1107.65'	2168.17'	1785504.823	6492403.432
2	8000'	2°32'18"	177.23'	354.41'	1792656.235	6502425.614

DESIGN SPEED = 65 MPH

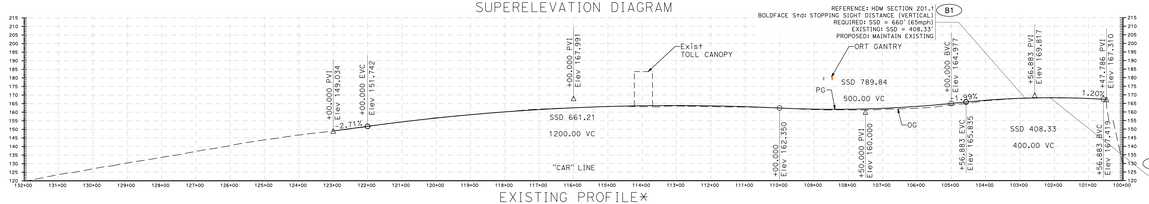
POSTED SPEED = 65 MPH



SUPERELEVATION DIAGRAM

(U1-01) REFERENCE: HDM SECTION 202.5(1)
UNDERLINED Std: SUPERELEVATION TRANSITION
REQUIRED: 360'
EXISTING: -261'
PROPOSED: -261'

(U2-01) REFERENCE: HDM SECTION 202.5(2)
UNDERLINED Std: SUPERELEVATION RUNOFF
REQUIRED: 2/3 AND 1/3
EXISTING: ALL ON CURVE
PROPOSED: NO CHANGE

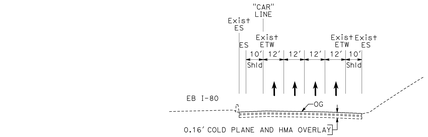


EXISTING PROFILE*

* PROFILE AS-BUILTS NOT AVAILABLE. BEST FIT IS SHOWN BASED ON TOPO

REFERENCE: HDM SECTION 201.1
BOLDFACE Std: STOPPING SIGHT DISTANCE (VERTICAL)
REQUIRED: SSD = 660' (65mph)
EXISTING: SSD = 409.33'
PROPOSED: MAINTAIN EXISTING
(B1)

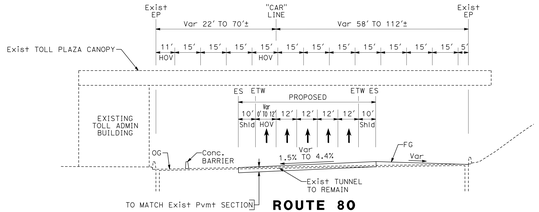
(U3) REFERENCE: HDM SECTION 204.4
UNDERLINED Std: VERTICAL CURVE LENGTH
REQUIRED: LVC = 650' (65mph)
EXISTING: LVC = 400'
PROPOSED: MAINTAIN EXISTING



ROUTE 80

WESTBOUND

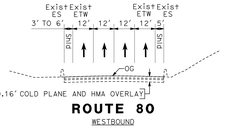
STA. 128+60.21 TO STA. 139+38.91



ROUTE 80

WESTBOUND

STA. 103+27.36 TO STA. 128+60.21



ROUTE 80

WESTBOUND

STA. 100+00 TO STA. 103+27.36

SCALE

200 0 100 200 400

(IN FEET)

DRAFT

OPEN ROAD TOLLING PROJECT
CARQUINEZ BRIDGE
GEOMETRIC ENGINEERING DRAWING

SHEET
DATE 11/29/2022
SCALE 1" = 100'

BAY AREA TOLL AUTHORITY · Caltrans · HDR · Kimley»Horn

Sonoma-Lake-Napa
Carquinez Bridge
Toll Plaza Improvements
EA 4J0-0F0 Ex-Ip Web_GED_GED.dgn
11/29/2022 10:03:07 AM Donny.Huang

Open Road Tolling (ORT) Conversion Northern Bridges Project

Air Quality Conformity Task Force Presentation

April 27, 2023

Agenda

- Background
- Project Overview
- Project Schedule
- Proposed Improvements
- Traffic Findings
- Recommendation/Exemption Concurrence
- Questions

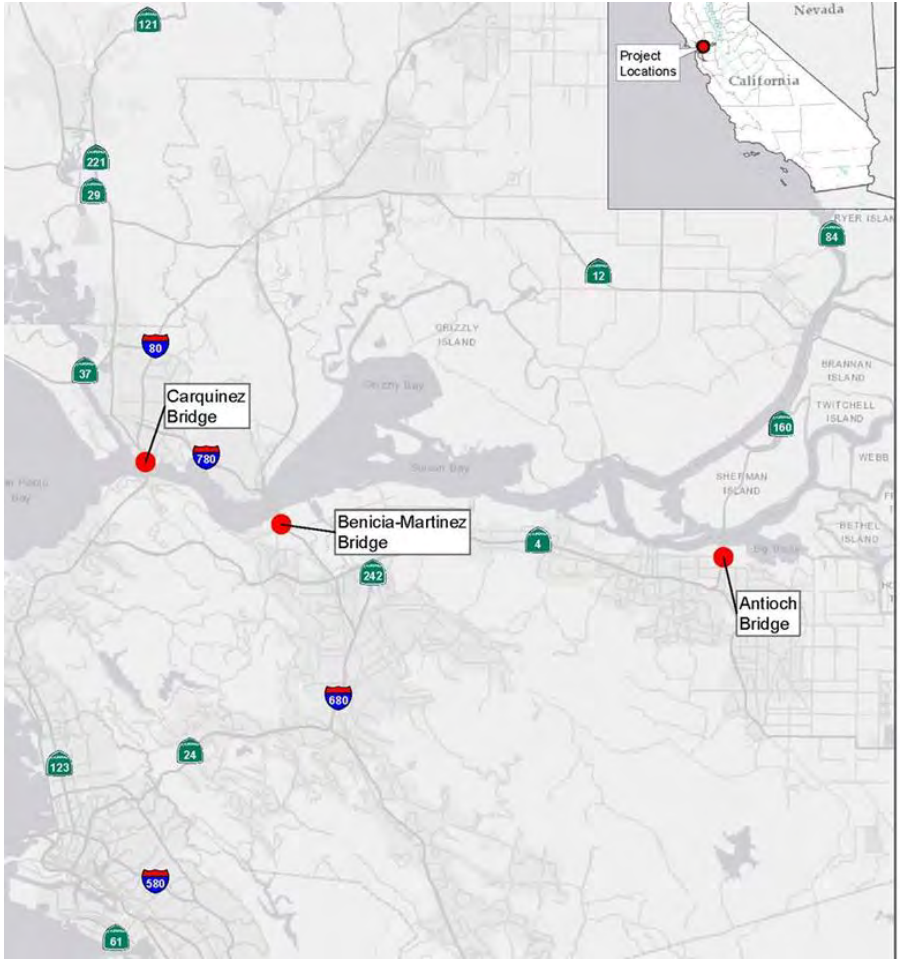
Background

Jan 26, 2023	Feb 24, 2023	April 27, 2023 (today)
• Project programmed under the approved 2021 Regional Transportation Improvements Program (RTIP) as part of the Toll Rehabilitation Program (TIP ID REG130002) • 7 state owned toll bridges under the rehab program are **exempt for Air Quality Conformity under 40 CFR 93.126– Safety – Widening narrow pavements or reconstructing bridges (no additional travel lanes)** • **Request for MTC AQ Task Force to confirm that the Project was still exempt under 40 CFR 93.126 as programmed in the RTIP**	• Received confirmation from the MTC AQ Task Force that the Project is not a Project of Air Quality Concern (POAQC) under 40 CFR 93.123(b)(1) or 40 CFR 93.128	• Follow up discussion regarding the February 24, 2023, findings • Given the proposed improvements which indicate **no additional travel lanes, the Project should remain exempt under 40 CFR 93.126 as programmed in the RTIP**

Project Location

Northern Bridges (EA 04-2W520)

- **Antioch Bridge:** SR-160
  (Contra Costa County)
- **Benicia-Martinez Bridge:** I-680
  (Contra Costa County)
- **Carquinez Bridge:** I-80
  (Contra Costa and Solano Counties)



Proposed Project

- Toll booth demolition
- New toll gantry design and construction / Modify existing canopy
- Modified geometric design (realigning toll plaza approach, lane reduction)
- Construct new toll equipment building
- Pavement and striping improvements
- Project documentation prepared in compliance with CEQA and NEPA
- Caltrans is lead agency under NEPA
- BATA is lead agency under CEQA
- BATA is Project sponsor

Project Purpose and Need

Replace aging tolling infrastructure

Enhance safety at toll plazas

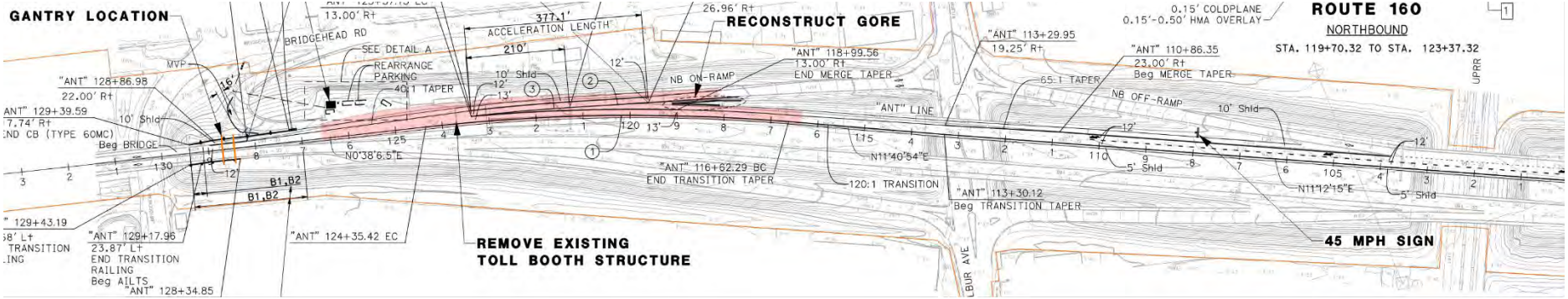
Improve operations through bridge toll plazas

Project Milestone Schedule

MILESTONE	TARGET DATE
PSR-PR & ED	July 2023
PS&E	April 2024
Begin Construction	Oct 2024
End Construction	Apr 2026

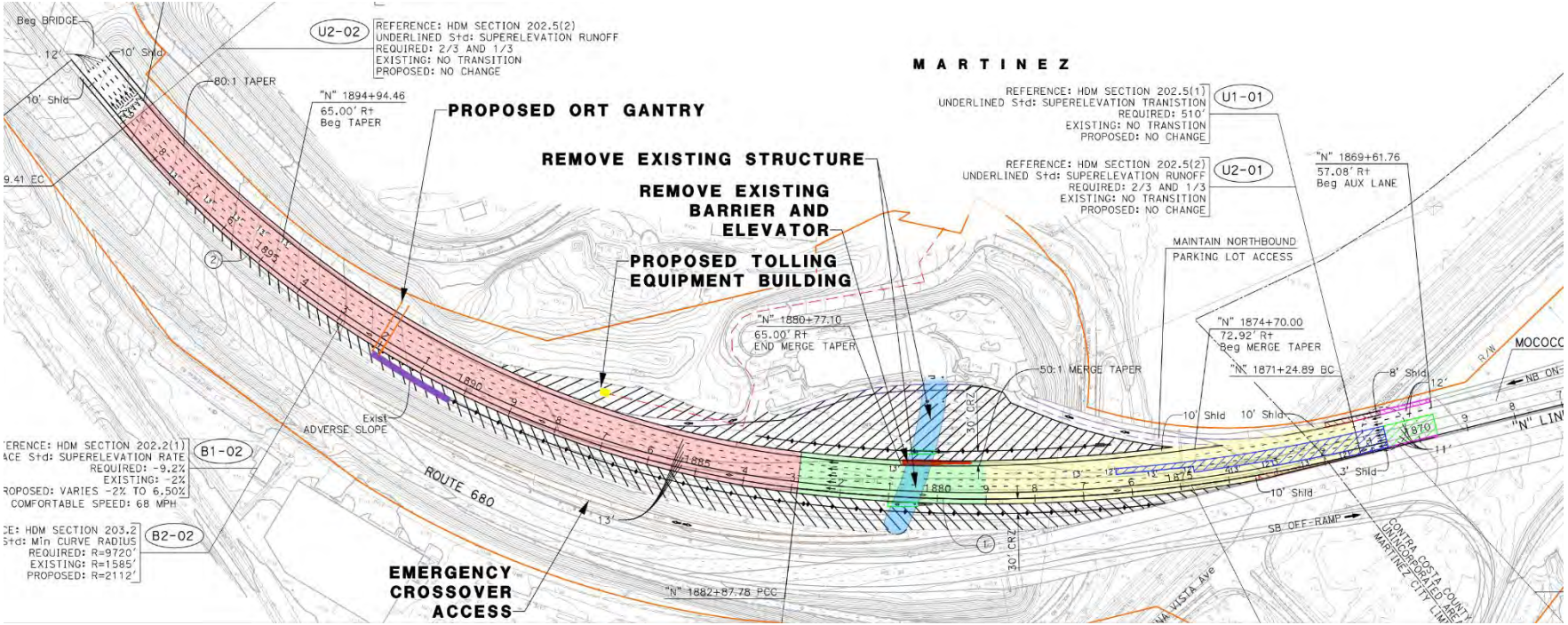
Antioch Bridge Toll Plaza Northbound SR-160

Antioch Bridge Toll Plaza Northbound SR-160



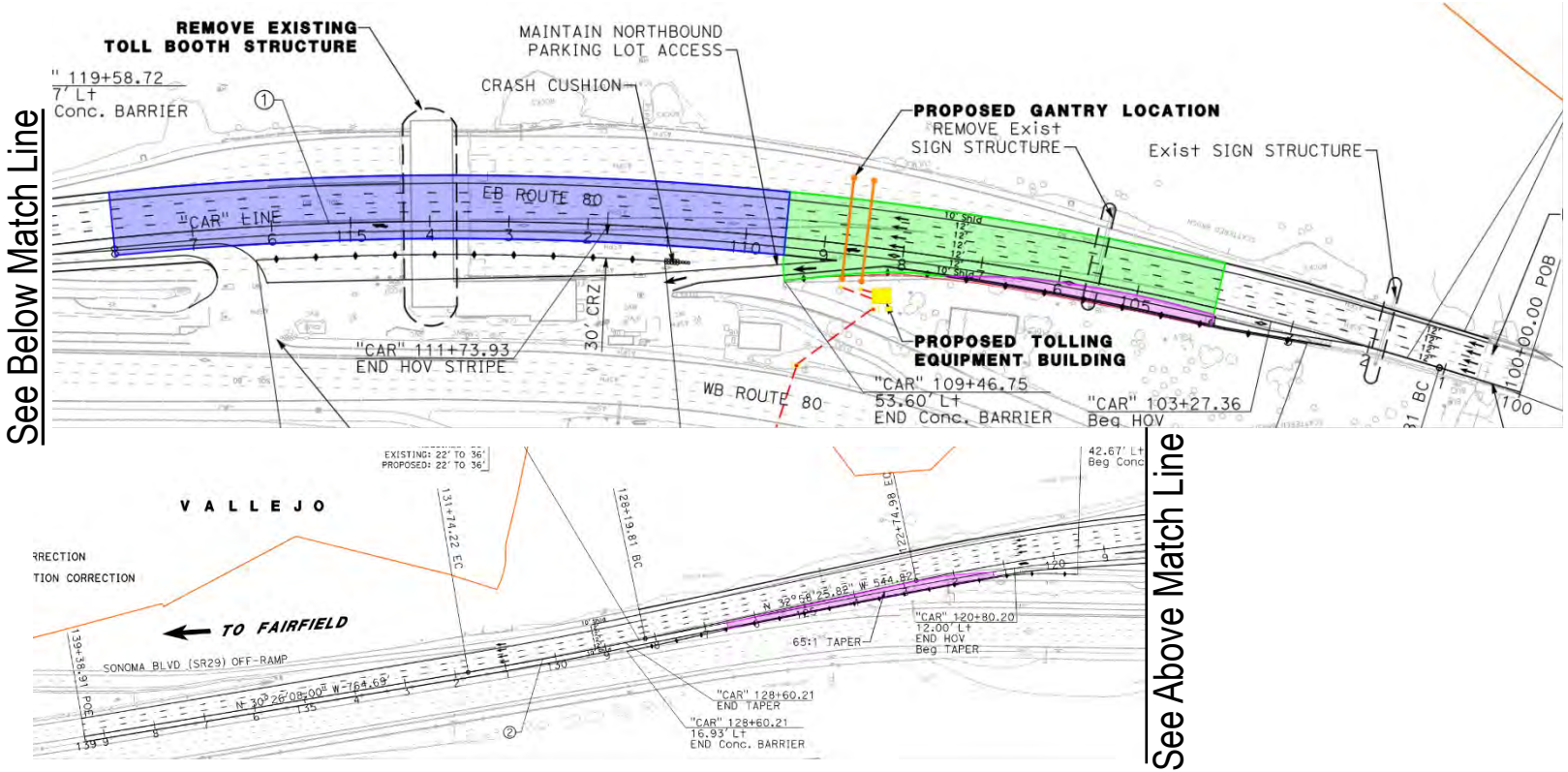
Benicia-Martinez Bridge Toll Plaza Northbound I-680

Benicia-Martinez Bridge Toll Plaza Northbound I-680



Carquinez Bridge Toll Plaza
Eastbound I-80

Carquinez Bridge Toll Plaza Eastbound I-80



Summary of Traffic Findings

- No additional travel lanes, would not increase capacity
- No change in traffic volume or truck percentages as a result of proposed Project
- Construction of proposed Project is not anticipated to adversely impact highway traffic.
- Travel patterns would remain the same for all three locations.
- No traffic redistribution effects are anticipated for this Project.
- Project expected to improve the travel speed and reduce lane changing adjacent to the toll plazas
- Project will result in overall improvements for safety and efficiency on highway operations.

2021 Final TIP Project Listing

TIP ID: **REG130002** **County:** Regional **System:** Tollway **RTP ID:** 21-T01-005 **CTIPS** 20600005317

Sponsor: Metropolitan Transportation Commission (MTC) **Implementing Agency:** Metropolitan Transportation

Project Name: Toll Bridge Rehabilitation Program

Description: Bay Area: On 7 state-owned toll bridges: Rehabilitation program

Air Quality Exempt Code: 1.19 - EXEMPT (40 CFR 93.126) - Widening narrow pavements or reconstructing bridges (no additional travel lanes)

Route: **Post Mile From:** **Post Mile To:** **Toll Credits:**

All funding in thousands of dollars

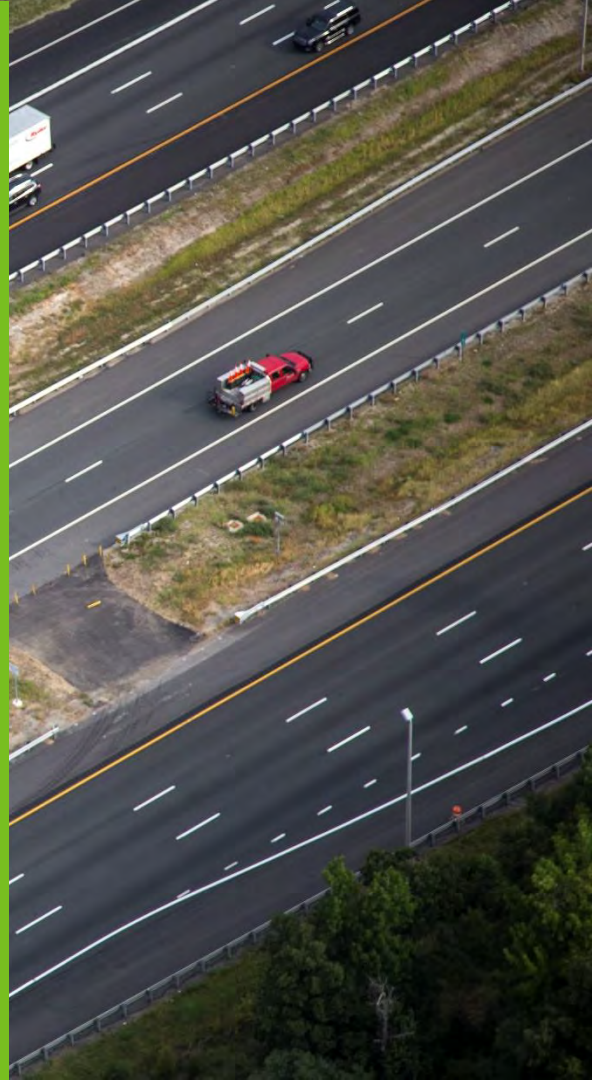
Phase	Fund Source	Prior Years	FY 2022/23	FY 2023/24	FY 2024/25	FY 2024/25	Future Years	Total Programmed
CON	BT	$ 1,038,092	$ 64,453	$ 38,343	$ 35,243	$ 29,413		$ 1,205,544
Total Programmed Funding:		$ 1,038,092	$ 64,453	$ 38,343	$ 35,243	$ 29,413		$ 1,205,544

Recommended Concurrence for Air Quality Conformity Exemption

- No additional travel lanes. The existing number of lanes upstream and downstream of the toll plazas are proposed to be maintained.
- Not a new or expanded highway project, but a replacement of older tolling technology
- Limited to reconfiguration and restriping of existing lanes less than 1-mile in length within the Project limits
- No change in traffic volume or truck percentages as a result of the proposed Project
- No intersections modified or significantly impacted by this Project

Is the proposed Project exempt under 40 CFR 93.126 – Safety – Widening narrow pavements or reconstructing bridges (no additional travel lanes) as programmed in the RTIP?

Questions?



40 CFR 93.126 Exempt Projects List

County	TIP ID	Sponsor	Project Name	Project Description	Additional Description	Project Type under 40 CFR 93.126
ALA	ALA230205	Alameda County	Upper San Lorenzo Creekway Trail	Alameda County : Along the San Lorenzo Creekway Channel, starting from just south of Lewelling Boulevard in San Lorenzo going eastward, making direct connections to Bay Fair, Hayward and Castro Valley BART stations, and the Don Castro Regional Recreation Area. : The project will install a new 8.1 mile bicycle and pedestrian trail.	The Upper San Lorenzo Creekway project will install a new 8.1 mile bicycle and pedestrian trail in central Alameda County. The project includes direct connections to Bay Fair, Hayward, and Castro Valley BART stations and Don Castro Regional Recreation Area.	Air Quality - Bicycle and pedestrian facilities
SCL	FMS ID 10083	Los Gatos	Highway 17 Bicycle and Pedestrian Overcrossing	Los Gatos : On Blossom Hill Road over Highway 17 : bicycle and pedestrian bridge	The Highway 17 Bicycle & Pedestrian Overcrossing Project proposes to construct a separate bicycle and pedestrian bridge over Highway 17 on Blossom Hill Road between Roberts Road West and Roberts Road East (just south of the existing Blossom Hill Road Bridge) to provide a new Class I facility for bicyclists and pedestrians.	Air Quality - Bicycle and pedestrian facilities
SCL	SCL170020	Sunnyvale	Bernardo Avenue Bicycle Underpass	Sunnyvale : Between North and South Bernardo Avenue under the Caltrain tracks : Construct bicycle underpass	Sunnyvale: Between North and South Bernardo Avenue under the Caltrain tracks: Construct bicycle underpass. Bernardo Avenue is a two lane collector roadway that is located in the western portion of the City of Sunnyvale. It stretches from Homestead Road in the south near Cupertino and Middlefield Road in the north near Mountain View. It serves as a major north-south tri-city bicycle route, however there is break in the roadway at Evelyn Avenue due to the Caltrain Railroad tracks. In 2004, the Bernardo Avenue Bicycle Underpass Feasibility Study Report was published, and the City of Sunnyvale is now seeking to continue the process toward constructing a bicycle underpass on Bernardo Avenue at Evelyn Avenue.	Air Quality - Bicycle and pedestrian facilities

METROPOLITAN
TRANSPORTATION
COMMISSION

Bay Area Metro Center
375 Beale Street, Suite 800
San Francisco, CA 94105
415.778.6700
www.mtc.ca.gov

TO: Air Quality Conformity Task Force DATE: April 27, 2023

FR: Adam Crenshaw

RE: Review of the Regional Conformity Status for New and Revised Projects

Staff has prepared the following information in an effort to streamline the review of the regional air quality conformity implications of projects that staff proposes to add into the 2023 TIP through current or future revisions. This item is for advisory purposes only. The inclusion of these projects and project changes in a proposed revision to the TIP is subject to Commission approval in the case of amendments and MTC's Executive Director or Deputy Executive Director in the case of administrative modifications. The final determination of the regional air quality conformity status of these projects will be made by the Federal Highway Administration, the Federal Transit Administration and the Environmental Protection Agency as part of their review of proposed final TIP amendments and by the Executive Director or Deputy Executive Director as part of their review for TIP administrative modifications.

Changes Staff is Proposing to Include in the 2023 TIP

Staff is proposing to add or revise a number of projects in the 2023 TIP. One of the revised projects is a couplet conversion project that may not be treated as exempt from regional-level conformity under 40 CFR 93.126 or 40 CFR 93.127. However, staff believes that the revision to this project in the 2023 TIP would not require an update to the air quality conformity analysis for Plan Bay Area 2050 and the 2023 TIP. The projects are as follows:

1. **Julian and St. James Couplet Conversion**

   TIP ID: SCL210026

   Sponsor: San Jose

   Description: San Jose: Along Julian St from Market Ave to 3rd St, St James from Market St to 4th St, and 3rd St from Julian St to St John St: Convert 1-way to 2-way traffic

Expanded Description: San Jose: Along Julian St from Market St to 3rd St, St James St from Market St to 4th St, 3rd St from Julian St to St. John St: Convert 1-way to 2-way traffic to improve roadway functionality and safety for all roadway users and to improve neighborhood livability. Project would include: 1. Restriping the street for two-way traffic (one lane in each direction), 2. New and modified signals to accommodate two-way traffic and improve signal responsiveness for people walking and bicycling, 3. Streetlights (new pedestrian-scale lighting and conversion of existing lights to smart, energy efficient lighting) 4. Amenities for livability, traffic calming and complete streets, including street trees, wayfinding information, refurbishing non-functional fountains as planters, green backed bicycle sharrows, bike racks, accessible ramps, and high-visibility/decorative crosswalks.

Conformity Issue: This project was previously presented to the Air Quality Conformity Task Force to discuss regional conformity issues and the Task Force determined that the project was non-exempt from regional air quality conformity analysis, but that the project was not regionally significant. We are now proposing the expand the scope of the project to include a couplet-conversion on 3rd St from Julian St to St John St. However, staff believes this change does not require an update to the regional air quality conformity analysis as this section of 3rd St is classified as a major collector. As such, the non-exempt improvements to the project may also be considered not regionally significant.

The description of the other new projects along with the regional air quality category that staff believes best describes the projects are included on Attachment A.

MTC staff is not seeking a determination on the status of these projects for project-level conformity purposes with this item.

Air Quality Conformity Task Force
Summary Meeting Notes
March 27, 2023

Participants:

Rodney Tavitas – Caltrans
Peter Kang – Caltrans
Michael Dorantes – EPA
Emma Maggioncalda – Caltrans
Cid Chiu – Caltrans
Karishma Becha – Caltrans
John Saelee – MTC
Jonathan Goodman – Caltrans
Patrick Pittenger – FHWA
Jacqueline Kahrs – Caltrans
Javier Mendivil – Caltrans
Danielle Keith – Circlepoint
Erika Vaca – Caltrans
Kien Le – Caltrans
Ben Razeghi – WMH
Andrea Gordon – BAAQMD
Scott Steinwert – Circlepoint
Jay Witt – Illingworth & Rodkin, Inc
Adam Crenshaw – MTC
Harold Brazil – MTC
Shilpa Mareddy – Caltrans
Lidia Gaitan – Caltrans

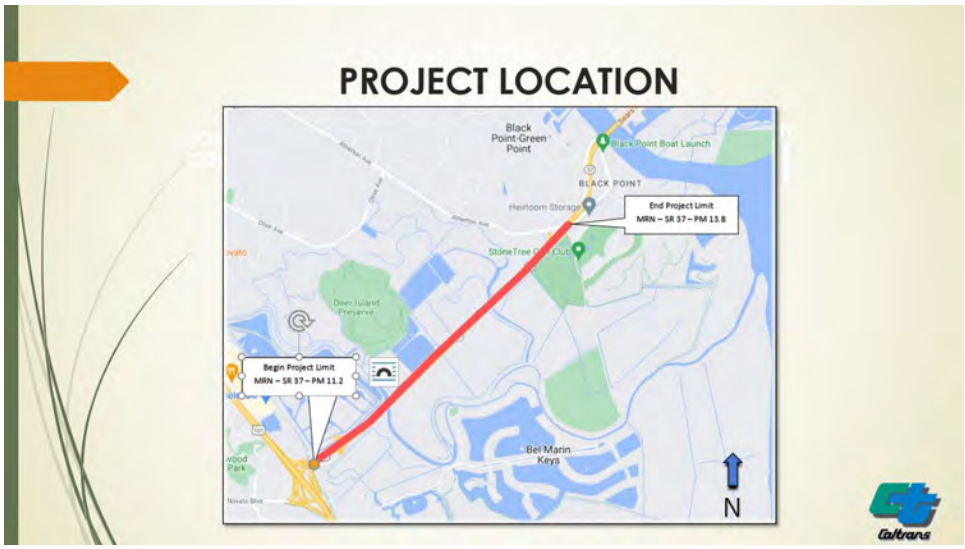
1. **Welcome and Self Introductions**: Harold Brazil (MTC) called the meeting to order at 9:35 am.

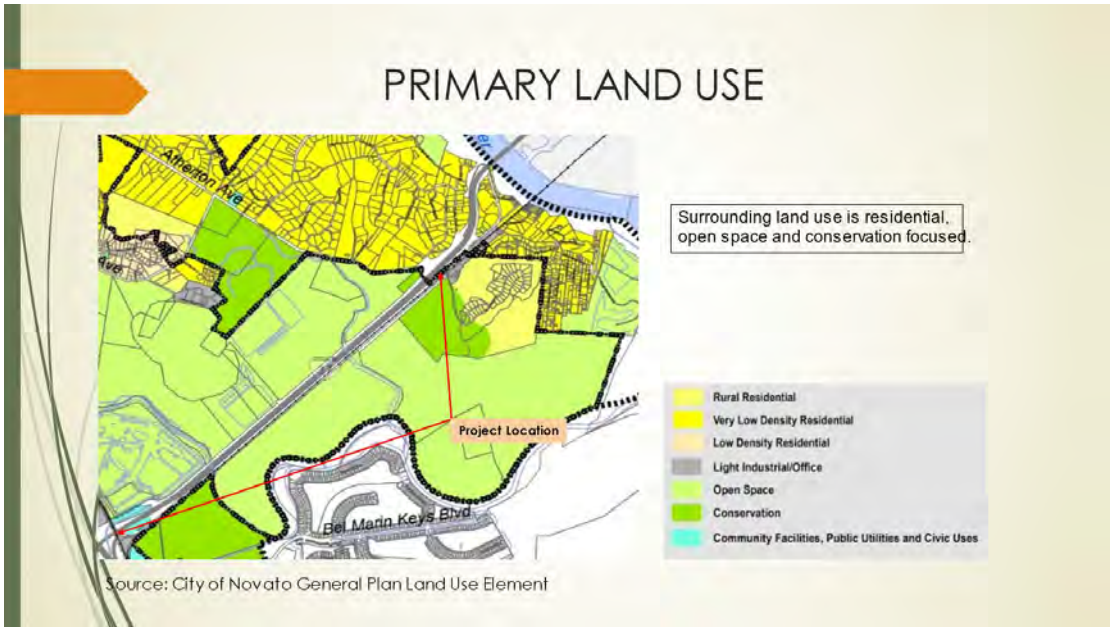
2. **$PM_{2.5}$ Project Conformity Interagency Consultation**

   a. **Consultation to Determine Project of Air Quality Concern Status**

      i. SR 37 Flood Reduction Project

Shilpa Mareddy (Caltrans) began the presentation for the SR 37 Flood Reduction project by identifying the project location which is in Marin County from mile post 11.2 to 13.0 and to Atherton Avenue on the east side at the same interchange going to the next slide. Ms. Mareddy went on to say the primary land use in the area is residential, and most of the space is open and conservation focused. The project is processed under NEPA non categorical exclusion, and the environmental document would be a routine EA.





Ms. Mareddy added that the SR 37 Flood Reduction project was brought to the Task force meeting back in December 2021 and at that time it was determined that the project would be exempt under projects that correct, improve, or eliminate the hazardous locational feature and previously this project was extending both in Marine and Sonoma counties. Ms. Mareddy that the project previously extended between US 101 (MRN 37 PM 11.4) to Atherton Undercrossing (UC) (MRN 37 PM 13.7) and Petaluma River Bridge (SON 37 PM 0.3) to 1 mi west of SR 121 (SON 37 PM 2.8) and included, approximately 5 miles of raised roadway on about a 12 to14 foot high (NAVD88) embankment for sheltered highway or levee segments – the focus of the project was to provide interim solutions on SR-37 from US-101 to SR-121 to accommodate a 25-year storm in the year 2050.

Ms. Mareddy also said that based on the comments received from public scope meeting conducted in November 2021 and the SR 37 Corridor Planning and Environmental Linkages (PEL) study in 2022, Caltrans updated the project's buildout SLR projection threshold from 2050 to 2130 and proposed a build alternative to align with the results of the SR 37 PEL Study.

Ms. Mareddy described the alternatives in the SR 37 Flood Reduction project below:

<u>No Build Alternative</u>
This alternative maintains the existing conditions.

<u>Build Alternatives</u>
The main design features of the Build Alternatives are as follows:

- The project proposes to elevate approximately 2.4 miles of SR 37 on a causeway. The project would raise the existing pavement elevation, which ranges between 3 feet to 9 feet (NAVD 88), to 35 feet (NAVD 88), and the elevated SR 37 would shift approximately 40 feet to the north of the existing alignment.
- The completed causeway would consist of four 12-foot-wide lanes, a 22-foot-wide median with a 2-foot median barrier, 10-foot-wide inside shoulders and 12-foot-wide outside shoulders, with a 14-foot-wide

bicycle or pedestrian path and a total roadway width of 114 feet. There would be no change to the long-term vehicular capacity on SR 37.

- The project would be constructed in 2 phases as discussed below:

  1. Phase 1: Phase 1 extends from approximately PM 11.6 to PM 12.6 and would replace the existing Novato Creek Bridge with a new, longer bridge that would free-span Novato Creek. The existing Novato Creek Bridge (Bridge No. 27-0011 L&R) consists of two separate bridge structures (eastbound and westbound). The new bridge would be a single structure on an alignment shifted approximately 40 feet north of the existing alignment. Two temporary transition bridges on either end of the Novato Creek bridge would connect the new Novato Creek Bridge with the at-grade roadway.

  2. Phase 2: Phase 2, planned to occur 11 years after Phase 1 is completed, would remove the temporary transitional bridges installed in Phase 1 and replace them with a causeway from U.S. 101 to the new Novato Creek Bridge and from the eastern end of the new Novato Creek Bridge to the Atherton Avenue Undercrossing. The project would replace the existing Atherton Avenue undercrossing with the causeway. The causeway would end immediately east of the existing Atherton Avenue undercrossing where it would connect to the existing SR 37 roadway at an elevation of 35 feet.

- The Hanna Ranch Road, Marsh Drive, and Atherton Avenue on- and off-ramps would be reconstructed on elevated structures on the same alignment conforming to the causeway.

Ms. Mareddy concluded her presentation by mentioning the following points:

- The SR 37 Flood Reduction project would address stormwater overtopping and Sea Level Rise.
- The truck volumes along SR 37 are below 8% and less than 10,000.
- The project does not increase capacity or percentage of trucks in the area.
- This project should be considered exempt under 40 CFR 93.126 (Projects that correct, improve, or eliminate a hazardous location or feature).

Patrick Pittenger (FHWA) had two questions:

1. Clarification on the determination needed by the Task Force; No POAQC or exempt project determination?

Ms. Mareddy indicated that Caltrans was seeking an exempt determination and Rodney Tavitas (Caltrans) added the conformity exemption is being requested because there's an anticipated future sea level rise in the project area.

2. When the project was brought to the Task Force in December 2021 and determined to be exempt, was it for the same hazard being addressed currently?

Ms. Mareddy indicated yes, and it was for the sea level rise even at that time, but it's an embankment now, with a 35 feet high bridge.

Michael Dorantes (EPA) asked for the 2050 projections in sea level rise for the area, where is the projections data coming from? Lidia Gaitan (Caltrans) indicated that the Caltrans hydraulics team recommended a 35 feet height for the projected a 2130 year sea level rise. Mr. Dorantes added, the SR 37 Flood Reduction project is fundamentally exempt, based on the fact the project is trying to accommodate for hazards, but projecting that many years into future is unusual and indicted he would quickly confer with EPA senior project planners and make a final determination on the project.

Final Determination: With input from FHWA, FTA, EPA (conducting in-office discussions after the Task Force meeting) and Caltrans (deferring their determination to Caltrans), the Task Force concluded the SR 37 Flood Reduction project was not of air quality concern.

ii. I-680/SR 4 I/C Reconstruction – Ph 1,2a,4 Project

Ben Razeghi (WMH) began the presentation for the I-680/SR 4 I/C Reconstruction – Ph 1,2a,4 project by indicating that the project is proposing to construct several phases of the improvement of the interchange and is included in the current MTC Regional Transportation Plan, 2050 Plan. as well as in the MTC Transportation

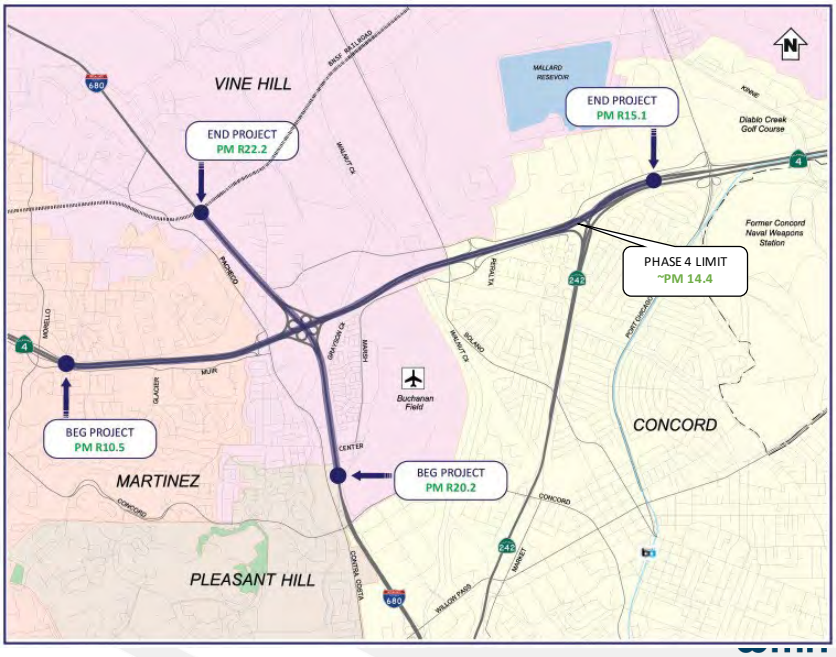
Improvement Program, the 2023 TIP. The proposed project is in the post mile area of Martinez in Contra Costa County and located on where there is a currently a clover lifestyle.

Mr. Razeghi indicated the purpose of the I-680/SR 4 I/C Reconstruction – Ph 1,2a,4 Project project is the following:

- Improve operational efficiency of the I-680/SR 4 Interchange and reduce traffic congestion and delays
- Improve safety by eliminating short weaving and merging sections
- Provide direct local access between I-680 and Pacheco Boulevard
- Accommodate existing and planned growth in travel demand within these segments of I-680 and SR 4
- Project is expected to decrease overall travel time and vehicle delay, and improve speeds through the corridor.
- Ramp widening and ramp metering would alleviate existing queue spillback to the mainline segments
- `To upgrade pedestrian infrastructure within the state right of way, bring the State pedestrian infrastructure to current Americans with Disabilities Act standards, and improve safety, access, and connectivity across Tamalpais Drive OC

Project Limits

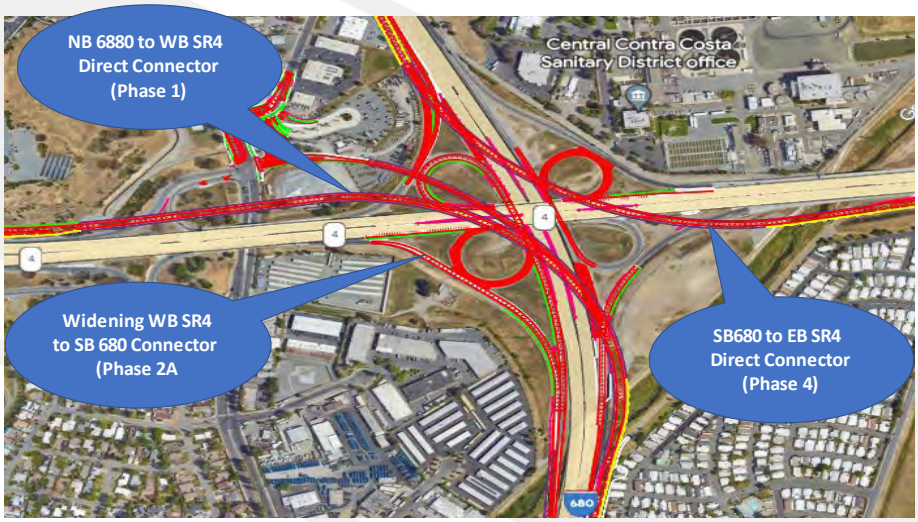
- I-680 – south of Center Ave to south of BNSF Railroad OH (~2 miles)
- SR 4 – Morello Ave to SR 242 (~4 miles)



Mr. Razeghi also provided background information on the e I-680/SR 4 I/C Reconstruction – Ph 1,2a,4 project by identifying the previously completed processes and phases::

- IS/EA (ND/FONSI) approved November 2008 (Project Approval February 2009)
- 5 Phases of Construction
- Independent utility and logical termini
- Implement each phase as funding becomes available
- Phase 3 (SR 4 Widening) - complete construction Fall 2021

- Next Phase Feasibility Study completed December 2019
    - Investigated 5 scenarios to construct remaining phases
    - Phases 1, 2A and 4 (combined) – greatest operational benefit
    - Funds allocated for Design Phase for Phases 1 and 2A.
    - Approval of Phase 4 in RTP October 2021
    - Approval of Phase 4 in TCEP funding (CTC - March 2022)



Interchange Rendering

Mr. Razeghi summarized the potential air quality impacts from the I-680/SR 4 I/C Reconstruction – Ph 1,2a,4 project by indicating:

- Not a new or expanded highway project
- No additional lanes on I-680 or SR 4
- No added vehicular capacity
- No change in traffic volume or truck percentages on I-680 and SR 4
- Traffic delay would improve compared to No Build
- No project changes to land use that would affect diesel traffic percentage

Patrick Pittenger (FHWA) asked about the multiple references to reducing congestion in the presentation and the multiple references to capacity constraint, but the supporting traffic data tables show no differences between the build and no-build alternatives and asked if this could be due to the lack of sensitivity of the travel model used in the I-680/SR 4 I/C Reconstruction – Ph 1,2a,4 project analysis? Mr. Razeghi responded by saying he would take this question and run it by the project team's traffic engineer and get back to the Task Force.

Mr. Pittenger and Rodney Tavitas (Caltrans) added a request to receive the Task Force meeting agenda package a week or more prior to the meeting and Harold Brazil (MTC) indicated MTC would work on the earlier package delivery.

Final Determination: With input from FHWA, FTA, EPA and Caltrans (deferring their determination to FHWA), the Task Force deferred their determination on the I-680/SR 4 I/C Reconstruction – Ph 1,2a,4 project until receipt of travel modeling data representing congestion/capacity constraint impacts from the project.

b. Confirm Projects Are Exempt from $PM_{2.5}$ Conformity

i. Projects Exempt Under 40 CFR 93.126 – Not of Air Quality Concern

Alex Smith (FTA) asked if the new vessel in the Golden Gate Ferry: New Vessel (TIP ID# MRN190001) project on the exempt list will be diesel and also asked if Golden Gate Transit (GGT) has any plan to change fuel types on vessels in the long term.

Final Determination; The Task Force will make their determination on the **2b_POAQC_Exempt_List_031523.pdf** exempt list upon receipt of the information requested by FTA.

3. Consent Calendar

a. February 23, 2023 Air Quality Conformity Task Force Meeting Summary

Final Determination; With input from all members, the Task Force concluded that the consent calendar was approved.

4. Other Items

Patrick Pittenger (FHWA) announced his promotion to director of planning environment and finance for the FHWA Pennsylvania division and the Task Force members expressed their congratulations.