

ROAD REPAIR AND ACCOUNTABILITY ACT OF 2017
PROJECT BASELINE AGREEMENT

Route 101-Upgrade TMS Elements at hubs & at the Los Angeles Regional Transportation Management Center (LARTMC) (07-36320)

Resolution **SHOPP-P-2425-02B**
(to be completed by CTC)

1. FUNDING PROGRAM

- ☐ Active Transportation Program
- ☐ Local Partnership Program (Competitive)
- ☐ Solutions for Congested Corridors Program
- ☒ State Highway Operation and Protection Program
- ☐ Trade Corridor Enhancement Program

2. PARTIES AND DATE

- 2.1 This Project Baseline Agreement (Agreement) effective on **October 17, 2024** (will be completed by CTC), is made by and between the California Transportation Commission (Commission), the California Department of Transportation (Caltrans), the Project Applicant, Caltrans, and the Implementing Agency, Caltrans, sometimes collectively referred to as the "Parties".

3. RECITAL

- 3.1 Whereas at its **3/22/2024** meeting the Commission approved the State Highway Operation and Protection Program and included in this program of projects the Route 101-Upgrade TMS Elements at hubs & at the Los Angeles Regional Transportation Management Center (LARTMC), the parties are entering into this Project Baseline Agreement to document the project cost, schedule, scope and benefits, as detailed on the Project Programming Request Form attached hereto as **Exhibit A**, the Project Report attached hereto as **Exhibit B**, the Performance Metrics Form, if applicable, attached hereto as **Exhibit C**, as the baseline for project monitoring by the Commission.
- 3.2 The undersigned Project Applicant certifies that the funding sources cited are committed and expected to be available; the estimated costs represent full project funding; and the scope and description of benefits is the best estimate possible.

4. GENERAL PROVISIONS

The Project Applicant, Implementing Agency, and Caltrans agree to abide by the following provisions:

- 4.1 To meet the requirements of the Road Repair and Accountability Act of 2017 (Senate Bill [SB] 1, Chapter 5, Statutes of 2017) which provides the first significant, stable, and on-going increase in state transportation funding in more than two decades.
- 4.2 To adhere, as applicable, to the provisions of the Commission:
- ☐ Resolution , "Adoption of Program of Projects for the Active Transportation Program", dated
- ☐ Resolution , "Adoption of Program of Projects for the Local Partnership Program", dated
- ☐ Resolution , "Adoption of Program of Projects for the Solutions for Congested Corridors Program", dated
- ☒ Resolution G-24-34, "Adoption of Program of Projects for the State Highway Operation and Protection Program", dated 3/22/2024
- ☐ Resolution , "Adoption of Program of Projects for the Trade Corridor Enhancement Program", dated

- 4.3 All signatories agree to adhere to the Commission's Guidelines. Any conflict between the programs will be resolved at the discretion of the Commission.
- 4.4 All signatories agree to adhere to the Commission's SB 1 Accountability and Transparency Guidelines and policies, and program and project amendment processes.
- 4.5 **Caltrans** agrees to secure funds for any additional costs of the project.
- 4.6 **Caltrans** agrees to report to Caltrans on a quarterly basis; on the progress made toward the implementation of the project, including scope, cost, schedule, and anticipated benefits/performance metric outcomes.
- 4.7 Caltrans agrees to prepare program progress reports on a semi-annual basis and include information appropriate to assess the current state of the overall program and the current status of each project identified in the program report.
- 4.8 **Caltrans** agrees to submit a timely Completion Report and Final Delivery Report as specified in the Commission's SB 1 Accountability and Transparency Guidelines.
- 4.9 **Caltrans** agrees to submit a timely Project Performance Analysis as specified in the Commission's SB 1 Accountability and Transparency Guidelines.
- 4.10 All signatories agree to maintain and make available to the Commission and/or its designated representative, all work related documents, including without limitation engineering, financial and other data, and methodologies and assumptions used in the determination of project benefits and performance metric outcomes during the course of the project, and retain those records for six years from the date of the final closeout of the project. Financial records will be maintained in accordance with Generally Accepted Accounting Principles.
- 4.11 The Inspector General of the Independent Office of Audits and Investigations has the right to audit the project records, including technical and financial data, of the Department of Transportation, the Project Applicant, the Implementing Agency, and any consultant or sub-consultants at any time during the course of the project and for six years from the date of the final closeout of the project, therefore all project records shall be maintained and made available at the time of request. Audits will be conducted in accordance with Generally Accepted Government Auditing Standards.

5. SPECIFIC PROVISIONS AND CONDITIONS

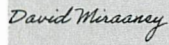
- 5.1 Project Schedule and Cost
See Project Programming Request Form, attached as Exhibit A.
- 5.2 Project Scope
See Project Report or equivalent, attached as Exhibit B. At a minimum, the attachment shall include the cover page, evidence of approval, executive summary, and a link to or electronic copy of the full document.
- 5.3 Performance Metrics
See Performance Metrics Form, if applicable, attached as Exhibit C.

Attachments:

- Exhibit A: Project Programming Request Form
Exhibit B: Project Report
Exhibit C: Performance Metrics Form (*if applicable*)

SIGNATURE PAGE
TO
PROJECT BASELINE AGREEMENT

Project Name Route 101-Upgrade TMS Elements at hubs & at the Los Angeles Regional Transportation Management Center (LARTMC) (07-36320)
Resolution SHOPP-P-2425-02B
(to be completed by CTC)



08/12/2024

David Miraaney

Date

Project Manager

Project Applicant



David Yan (Aug 12, 2024 19:19 PDT)

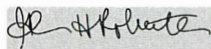
08/12/2024

David Yan

Date

Chief, Office of Program Management

Implementing Agency



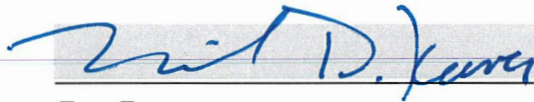
08/19/2024

Gloria Roberts

Date

District Director

California Department of Transportation



10/2/24

Tony Tavares

Date

Director

California Department of Transportation



10/31/2025

Tanisha Taylor

Date

Executive Director

California Transportation Commission

Baseline agreement information was extracted from Caltrans' project data systems. Project description, funding and performance measures are from CTIPS. Project delivery milestones are from PRSM. All information is current and accurate.

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

BASELINE AGREEMENT

Date: 09/10/24 01:11:09 PM

District	EA	Project ID		PPNO	Project Manager
07	36320	0719000312		5642	MIRAANEY, DAVID H
County	Route	Begin Postmile	End Postmile	Implementing Agency	
VEN	101	2.5	13.9	PA&ED	Caltrans
				PS&E	Caltrans
				Right of Way	Caltrans
				Construction	Caltrans

Project Nickname

Mobility - TMS

Location/Description

In Thousand Oaks and Camarillo, from 0.5 mile east of Rancho Road to 0.1 mile west of Route 34; also on Route 23 at Route 101 (PM R3.6); also in Los Angeles County, in the city of Los Angeles on Routes 134, 101, and 170 and at the Los Angeles Regional Transportation Management Center (LARTMC) at 2901 West Broadway. Upgrade Transportation Management System (TMS) elements, install fiber optic lines, and upgrade communication equipment at hubs and at the LARTMC.

Legislative Districts

Assembly: 44, 46, 51 **Senate:** 18, 19, 24, 27 **Congressional:** 26, 29, 34

PERFORMANCE MEASURES

	Primary Asset	Good	Fair	Poor	New	Total	Units
Existing Condition	Transportation Management Systems (Elements)	32.4%	0	67.6%	0	37	Each
Programmed Condition	Transportation Management Systems (Elements)	100%	0	0	0	70	Each

Project Milestone	Actual	Planned
Project Approval and Environmental Document Milestone	05/10/24	
Right of Way Certification Milestone		03/07/25
Ready to List for Advertisement Milestone		03/28/25
Begin Construction Milestone (Approve Contract)		10/24/25

FUNDING (Allocated amounts are shaded)

Component	Fiscal Year	SHOPP					Total
PA&ED	22/23	1,460					1,460
PS&E	23/24	4,379					4,379
RW Support	23/24	41					41
Const Support	24/25	6,931					6,931
RW Capital	24/25	104					104
Const Capital	24/25	42,254					42,254
Total		55,169					55,169

Memorandum

To: Kelly Lamare
Acting Deputy District Director
Program/Project Management
District 7

Date: August 7, 2024

File: 07-363201
07-VEN-101
PID: 0719000312

From: DAVID MIRAANEY
Project Manager
District 7

Subject: SB1 BASELINE AGREEMENT CLARIFICATION MEMORANDUM

This memorandum is written to accompany the SB-1 Baseline Agreement for this Transportation Management Systems project on State Route 101 in Ventura and Los Angeles County. The purpose of this memorandum is to update the project milestones, and Funding table in the Project Report (PR):

- The project milestones are updated as shown in the PPR and PRSM as follows:
 - M200 Planned 5/10/2024 (PPR/PRSM) 4/29/2024 (PR)
 Actual **5/10/2024**
 - M460 Planned 3/28/2025 (PPR/PRSM) 3/31/2025 (PR)

Fund Source	Programming by Fiscal Year								Current Estimate (Escalated)
	Prior	22/23	23/24	24/25	25/26	26/27	Future	Programmed Total	At PAED Total
20.XX.201.315									
Component	In thousands of dollars (\$1,000)								
PA&ED Support		\$1,460						\$1,460	\$1,460
PS&E Support			\$4,379					\$4,379	\$4,379
Right-of-Way Support			\$41					\$41	\$41
Construction Support				\$6,570				\$6,570	\$6,570 \$6,931
Right-of-Way				\$290				\$290	\$104
Construction				\$33,260				\$33,260	\$42,254
Total		\$1,460	\$4,420	\$40,120				\$46,000	\$54,900 \$55,169

If you have any questions, please contact me at (213) 760-6818.

David Miraaney

David Miraaney

8/7/2024

Project Report

For Project Approval

On Route Ven 101

Between PM 2.5 (Ven 23/101 Interchange)

And PM 13.9 (Ven-34)

I have reviewed the right-of-way information contained in this report and the right-of-way data sheet attached hereto, and find the data to be complete, current and accurate:



Dan Murdoch, Deputy District Director, Right of Way

APPROVAL RECOMMENDED:



David H Miraaney, Project Manager

APPROVAL RECOMMENDED:



Rafael Molina, Deputy District Director, Transportation Safety & Operations

04/12/2024

Date

PROJECT APPROVED:

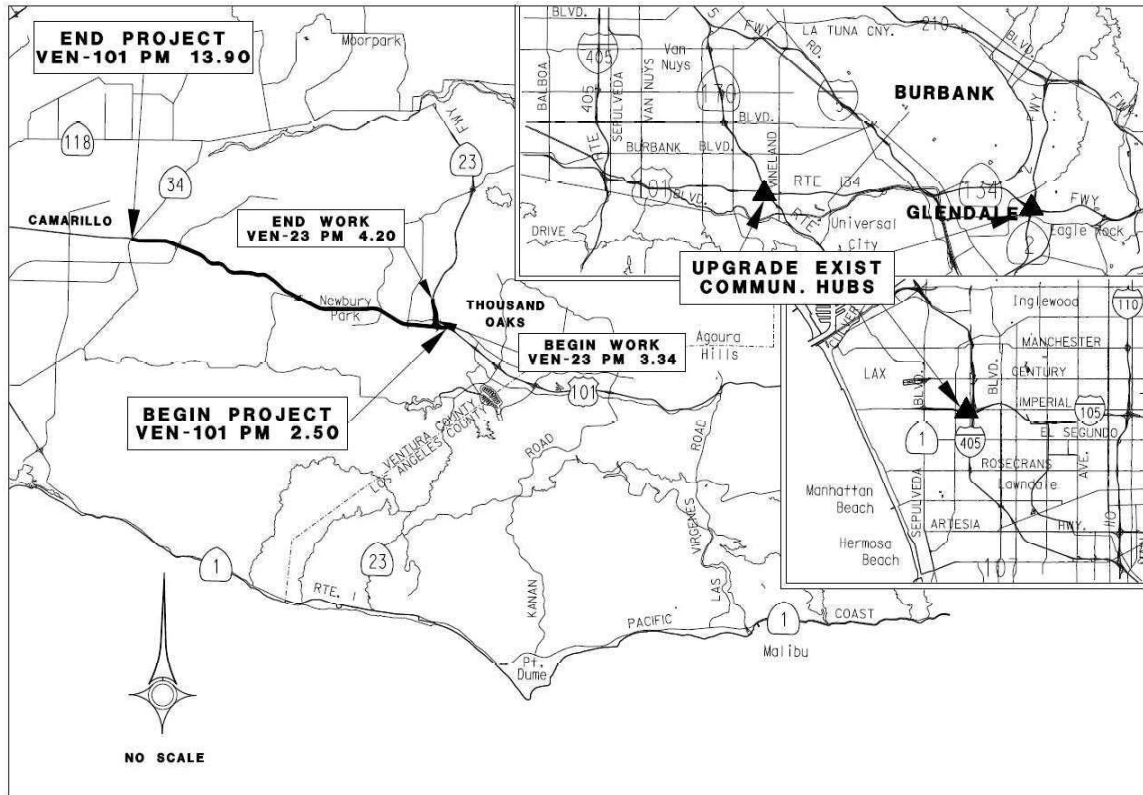


Gloria Roberts, District Director

05/10/2024

Date

Vicinity Map



In Ventura and Los Angeles Counties, on Various Routes at Various Locations.

07-VEN-101-PM 2.5/13.9
07-VEN-23-PM 3.34/4.20
LA-2-PM R18.70 (LARTMC)
LA-101-PM R11.80 (NHD HUB)
LA-105-PM R2.0 (LAX)

This project report has been prepared under the direction of the following registered electrical engineer. The registered electrical engineer attests to the technical information contained herein and the engineering data upon which recommendations, conclusions, and decisions are based.



REGISTERED ELECTRICAL ENGINEER

4/4/2024

DATE



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1. INTRODUCTION

This project is located on the US-101 (Ventura County) starting from east of VEN-23 to west of State Route 34 in Ventura County, and on Ventura Route 23 (VEN-23) starting from north of Rancho Road to north of Hillcrest Drive. The following are the details of the proposed work:

1. Install new fiber optic trunk lines in embedded conduits including Pull Boxes and Splice Vaults along NB right shoulder on VEN-101 from PM 3.0 (at VEN-23) to PM 13.8 (at VEN-34).
2. Install following new Traffic Management System (TMS) field elements:
 - Closed-Circuit Television (CCTV) Camera Systems – (27)
 - Fifteen (15) at Traffic Signal locations.
 - Twelve (12) for Mainline.
 - Changeable Message Sign (CMS) Systems – (2)
 - Vehicle Detection Systems (Connector Metering Systems) – (2)
 - SB Route 23-NB Route 101 Connector.
 - SB Route 23-SB Route 101 Connector.
3. Technology Lifecycle Replacement of existing TMS field elements:
 - Traffic Census Station (CS) – (5)
 - Communication, Power System, Foundations, Pull Boxes, Conduits
 - CCTV Camera System – (1)
 - Camera, Cabling, Wiring, Communication, Power System
 - Traffic Monitoring Stations – (12)
 - Detection Technology, Controller/Central Processing Unit (CPU), Cabling, Wiring, Communication, Power System, Foundations, Pull Boxes, Conduits
 - CMS System – (1)
 - CMS Panel, Controller/CPU, Cabling, Wiring, Communication, Power System
 - Traffic Signals – (7)
 - Signal Heads, Detection, Loops, Communication
4. Install Communication breakouts for the following existing TMS elements:
 - Ramp Metering Systems (RMS) – (2)
 - CCTV Camera System – (1)
 - Vehicle Detection Systems – (2)
 - Traffic Signals – (15)
5. Upgrade Communication Hubs on LA-105 (PM R2.0) at I-405 (LAX), on LA-2 (PM R18.7) at LA-134 (LARTMC), and on LA-101 (PM 11.8) at LA-170 (North Hollywood).

6. Additional work

- Replace two (2) existing Weigh-in-Motion (WIM) systems with new WIMs including Controllers per current standards.
- Construct Maintenance Vehicle Pullouts (MVP) at 20 different locations.
- Remove 500 LF (Length in Feet) existing Metal Beam Guardrail (MBGR) and install approximately 3400 LF new Midwest Guardrail Systems (MGS) at 17 different locations including 17 End Anchor Assemblies and 15 Alternative In-line Terminal Systems.
- Construct approximately 1500 SQYD (Square Yards) Vegetation Growth Control pads under the new MGS.

Project Limits	07-VEN-101-PM 2.5/13.9 07-VEN-23-PM 3.34/4.20 LA-2 (PM R18.70), LA-101 (PM R11.80), LA-105 (PM R2.0)	
Number of Alternatives	2	
Programmable Project	Alternative A – Build Alternative	
Funding Source	SHOPP Mobility Programs – 20.20.201.315	
Funding Year	2024/2025	
Type of Facility	Freeway	
Number of Structures	None	
SHOPP Project Output	11.2 Fiber Optic miles, 70 TMS elements, 20 MVPs, 3 HUBs, 2 WIMs, 3400 LF MGS, 6.8 Locations of Vegetation Control	
Anticipated Environmental/ Determination or Document	CEQA Exemption/NEPA Categorical Exclusion (CE/CE)	
Legal Description	On VEN-101 from VEN-23 to east of VEN-34 (North Lewis Road), and on VEN-23 at VEN-101 in Ventura County; and on LA-2 at LA-134, LA-101 at LA-170, and LA-105 in Los Angeles County	
Project Development	5	
PIR Level	2	
Capital Outlay Project Cost	Current Cost Estimate (\$1000):	Escalated Cost Estimate (\$1000):
Support		
PA&ED	1,460	1460
PS&E	4,379	4,379
R/W (Right-of-Way)	41	41
CONS (Construction)	5,494	6,570
Capital		
R/W	90	104
CONS	36,121	42,254
Total	47,600	54,900

2. RECOMMENDATION

It is recommended that this project be included in the 2022 State Highway Operation and Protection Program (SHOPP) cycle; and to be funded in 2024/25 fiscal year from Program - 20.20.20.315 (Mobility). This report is prepared to Documentation Level 2.

3. BACKGROUND

VEN-101 is a freeway and a designated north-south US-Highway (US-101) in the State of California. Within the project limits, VEN-101 is a 6-lane freeway that runs in the east-west direction through the Cities of Thousand Oaks and Camarillo in Ventura County. VEN-101, also known as the Ventura Freeway, is a heavily traveled commuter route serving greater Los Angeles area and connecting Los Angeles and Ventura Counties. This corridor is facing increasing traffic congestion due to continued regional growth, and at present there is no electronic traffic management system installed within this segment of the freeway corridor. Also, within the project limits, there are two existing WIM systems that need life-cycle replacements for proper monitoring of truck traffic loads. This project addresses the above deficiencies within the corridor and proposes to install new TMS infrastructure including installation of new fiber optic, power cables, and various field elements, upgrade WIM systems, and will utilize IP technology to collect and communicate real-time traffic information. The proposed work will minimize or reduce the effects of traffic congestion and improve overall efficiency and operations of the freeway corridor.

4. PURPOSE AND NEED

Purpose:

The purpose of this TMS upgrade project is to improve the operational and communication efficiency of the freeway system, reduce maintenance needs/costs, and sustain the existing TMS system performance for all TMS elements along the project corridor.

Need:

VEN-101 is a heavily traveled commuter route connecting Los Angeles and Ventura Counties. With continued regional growth, the VEN-101 corridor is facing increasing traffic congestion which needs to be managed and minimized. With no integrated Transportation Management System currently existing within the corridor, VEN-101 demands to have a new TMS infrastructure installed including CCTV cameras, TMS, CS, CMS, RMS, and other field elements. The new Transportation Management System is needed to help communicate real-time traffic information to minimize traffic congestion, and to improve travel reliability within the freeway corridor. Also, within the project limits, there are two existing WIM systems that would need life-cycle replacements for proper monitoring of truck traffic loads passing through the corridor.

A. Problem, Deficiencies, Justification

The existing communication system consists of a fiber optic trunk line and a twisted pair copper distribution system, which connects all Intelligent Transportation System (ITS) elements to the trunk line. This system is difficult to maintain and the hardware supporting the copper system is increasingly difficult to purchase from suppliers as suppliers are moving from supporting copper systems to supporting fiber optic systems. Also, widespread copper cable theft throughout the nation has resulted in extensive and costly repairs, necessitating a need for Caltrans to replace the copper cables with fiber optic cables. Much of the equipment of the TMS field elements along the corridor have reached their end of life and need life-cycle replacements.

B. Regional and System Planning

This proposed project is on the U.S. Route 101. This project will meet the needs and objectives of the Transportation Management System for District 7 Congestion Relief Program - 2007 Update.

C. Traffic

Traffic Volumes

The 2021 Traffic Volumes on California State Highways Annual Average Daily Traffic (AADT) for the project limits are shown below:

PM	Description	Back AADT	Ahead AADT
3.107	THOUSAND OAKS, JCT. RTE. 23 NORTH	180000	179000
4.060	THOUSAND OAKS, MOORPARK ROAD	179000	174000
5.046	THOUSAND OAKS, LYNN ROAD	174000	168000
6.186	THOUSAND OAKS, VENTU PARK ROAD	168000	150000
7.017	THOUSAND OAKS, BORCHARD ROAD	150000	135000
7.885	THOUSAND OAKS, WENDY DR	135000	110000
10.738	CAMARILLO, CAMARILLO SPRINGS ROAD	110000	123000
12.298	CAMARILLO, PLEASANT VALLEY ROAD	123000	126000
13.848	CAMARILLO, JCT. RTE. 34	126000	134000

Traffic Collisions

Based on the latest three years of Caltrans Traffic Accident Surveillance and Analysis System (TASAS) – Table B collision data report, there were a total 1526 collisions occurred within the project limits of VEN-101 including 5 fatal and 468 injury collisions between April 1, 2016 to March 31, 2019 as shown in Table 8.1 below. As provided in the TASAS collision report the overall traffic collision rates within the project limits was close to (NB), or less than (SB) those of the statewide average for similar state facilities.

Table 8.1: TASAS Collision Data from 04/01/2016 to 03/31/2019 for VEN-101 (PM 3.0-13.8)

VEN-101	Number of Collisions/ Significance			Collision Rates - Actual (MVM)*			Collision Rates - Average (MVM)*		
Post Miles	F ¹	F+I ²	Total ³	F ¹	F+I ²	Total ³	F ¹	F+I ²	Total ³
3.000 - 13.801 (NB)	4	273	863	0.004	0.30	0.96	0.004	0.28	0.89
3.000 - 13.801 (SB)	1	200	663	0.001	0.22	0.74	0.004	0.28	0.89

Notes: * MVM: Per million vehicle miles (1) F: Fatal collisions (2) F+ I: Fatal + Injury collisions
(3) All reported collisions

5. ALTERNATIVES

5A. Viable Alternatives

Alternative A - Programmable Project Alternative

The following are the details of the proposed work:

1. Install new fiber optic trunk lines in embedded conduits including Pull Boxes and Splice Vaults along NB right shoulder on VEN-101 from PM 3.0 (at VEN-23) to PM 13.8 (at VEN-34).
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- 6. Additional work
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 - Construct Maintenance Vehicle Pullouts (MVP) at 20 different locations.
 - Remove 500 LF (Length in Feet) existing Metal Beam Guardrail (MBGR) and install approximately 3400 LF new Midwest Guardrail Systems (MGS) at 17 different locations including 17 End Anchor Assemblies and 15 Alternative In-line Terminal Systems.
 - Construct approximately 1500 SQYD (Square Yards) Vegetation Growth Control pads under the new MGS.

Discussions

All work will be completed within Caltrans Right of Way. Approximate locations of all proposed field elements are listed in Attachment B. More accurate details will be provided during the PS&E phase.

5B. Rejected Alternatives

Alternative B - No Build Alternative

This alternative would leave the existing facilities in their present condition with no Transportation Management System available within the corridor. The condition of both recurring and non-recurring congestions would get worse and installation costs for the proposed TMS elements would be higher in the future. This alternative does not meet the purpose and need of the project, and therefore, this alternative is not recommended.

6. CONSIDERATIONS REQUIRING DISCUSSION

6A. Hazardous Waste

A Hazardous Waste Assessment for the project has been prepared by District Hazardous Waste Branch on December 27, 2023 (see Attachment G). According to this report, the following hazardous waste issues are anticipated:

- a. Aerially Deposited Lead (ADL): Potential of ADL contamination may exist at the project location, especially during construction of the MVPs and installation of traffic management system elements. The contractor shall prepare a project specific Lead Compliance Plan (LCP) to prevent or minimize worker exposure to lead in the soil.
- b. Electronic Wastes: All electrical equipment and materials requiring disposal shall be properly packaged and transported to a duly permitted Class I hazardous waste disposal facility.

6B. Value Analysis

This project meets the \$25 million minimum construction cost threshold criteria, and therefore, a Value Analysis study will be required.

6C. Resource Conservation

This project does not involve any resource conservation.

6D. Right-of-Way Issues

All construction work within the project limits will be performed within Caltrans Right-of-Way. No R/W acquisitions nor any temporary construction easements are anticipated. Railroad flagging related to construction activity is needed (See Attachment E).

Utilities:

Utilities impacts are anticipated per R/W Data Sheet. As recommended in the R/W data sheet, the anticipated utility relocation cost is \$40,000 (escalated \$53,905) (See Attachment E).

6E. Environmental Compliance

The project is CEQA categorically exempt Class I(c) and Categorical Excluded under NEPA. The Categorical Exemption/Categorical Exclusion Determination Form is included in Attachment F.

Hazardous waste disposal

A Hazardous Waste Assessment for the project has been prepared by District Hazardous Waste Branch on December 27, 2023 (see Attachment G).

6F. Air Quality Conformity

An Air Quality and Greenhouse Gas Assessment has been prepared for the project (See attachment H).

6G. Title VI Considerations

Title VI of the Civil Rights Act of 1964 states:

No person in the United States shall, on the ground of race, color, or national Origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance. Related federal statutes and state law further those protections to include sex, disability, religion, sexual orientation, and age. More information about Caltrans' adherence to Title VI, including the Nondiscrimination Policy Statement, is located at the Title VI Program website.

6H. Noise Abatement Decision Report

Based on the scope of work, this project is not a Type I project as defined in the 2020 Traffic Noise Analysis Protocol and it is not expected to raise traffic noise levels or cause a substantial noise increase. Therefore, a detailed noise study is not required for this project. However, potential construction noise impacts would need to be addressed since there are noise sensitive receptors in the vicinity of the project. Section 14-8.02, Sound Control Requirements, of Caltrans standard specifications states that construction noise levels should not exceed sustained 86 dBA at 50 feet from the job site activities from 9 p.m. to 6 a.m. These requirements also state that noise levels generated during construction shall comply with applicable local, state, and federal regulations.

7. OTHER CONSIDERATIONS AS APPROPRIATE

Maintenance and Worker's Safety:

This project has identified and proposed construction of 20 MVPs along with around 1500 SQYD (6.8 Locations) of Vegetation Control pads under 3400 LF MGS at various locations within project limits to enhance maintenance and worker's safety.

Contaminated Material:

Based on the Preliminary Hazardous Waste Assessment report, it is anticipated that there will be potentially hazardous waste contamination due to excess soils with ADL and electronic waste during construction of this project. All excess contaminated materials are to be properly contained and disposed off-site to a permitted Class I hazardous waste disposal facility.

Resource Conservation:

This project does not involve any resource conservation.

Value Analysis:

This project meets the \$25 million minimum construction cost threshold criteria, and therefore, a Value Analysis study will be required.

Transportation Management Plan:

A Transportation Management Plan (TMP) Data Sheet has been prepared for the project (Attachment K). The key elements of TMP are Press Release, Internet, Lane Closure, and COZEEP. The hours available for contractor's operations will be regulated to off-peak hours and detailed within the special provisions to minimize the impact on existing traffic flows.

Complete Streets:

Complete Street requirements apply to this project as this project will have impact to pedestrian and bicyclist facilities.

Broadband and Advanced Technologies:

California Assembly Bill 1549 (Wood, Chapter 505, Statutes of 2016) requires that Caltrans, during the planning phase of specified Caltrans-led highway construction projects, notify broadband deployment companies and organizations on its Internet Web site of transportation projects that involve construction methods suitable for the installation of broadband.

Terrence Theobald of Ventura County expressed interest in partnering on this project. This option will be further explored during PS&E phase.

8. FUNDING, PROGRAMMING AND ESTIMATE

Funding:

It has been determined that this project is eligible for Federal-aid funding.

To address the cost increases in construction support and construction capital, the project manager has submitted a Project Change Request (PCR) to District Programming.

Programming

The table below provides the current programmed information for the project cost component, and the current cost estimate by component. The current cost estimate for support is escalated to the middle of each component at a rate of 3.5% per year for each component. The construction capital cost is escalated to mid construction at a rate of 4.89% for FY 24/25 and 3.80% for FY 25/26 and beyond. The Right of Way capital is escalated at 8% to \$104,000.00.

Fund Source	Programming by Fiscal Year								Current Estimate (Escalated)
20.XX.201.315	Prior	22/23	23/24	24/25	25/26	26/27	Future	Programmed Total	At PAED Total
Component	In thousands of dollars (\$1,000)								
PA&ED Support		\$1,460						\$1,460	\$1,460
PS&E Support			\$4,379					\$4,379	\$4,379
Right-of-Way Support			\$41					\$41	\$41
Construction Support				\$6,570				\$6,570	\$6,570
Right-of-Way				\$290				\$290	\$104
Construction				\$33,260				\$33,260	\$42,254
Total		\$1,460	\$4,420	\$40,120				\$46,000	\$54,900

The support cost ratio is 29.4%.

A programing amendment will be requested for approval to address the total project cost increase and increase in performance outputs.

9. DELIVERY SCHEDULE

Project Milestones		Milestone Date (Month/Day/Year)	Milestone Designation (Target/Actual)
PROGRAM PROJECT	M015	4/01/2022	A
BEGIN PAED	M020	9/01/2022	A
PA & ED	M200	4/12/2024	T
START PS&E	M210	4/29/2024	T
PRE-60% PS&E		07/19/2024	T
60% PS&E	M313	08/30/2024	T
PRE-95% PS&E		11/08/2024	T
95% PS&E	M315	12/20/2024	T
PS&E TO DOE	M377	01/31/2025	T
DRAFT STRUCTURES PS&E	M378	02/14/2025	T
PROJECT PS&E	M380	03/07/2025	T
RIGHT OF WAY CERTIFICATION	M410	03/07/2025	T
READY TO LIST	M460	03/31/2025	T
FUND ALLOCATION	M470	5/16/2025	T
HEADQUARTERS ADVERTISE	M480	6/13/2025	T
AWARD	M495	8/15/2025	T
APPROVE CONTRACT	M500	10/24/2025	T
CONTRACT ACCEPTANCE	M600	10/29/2027	T
END PROJECT	M800	10/30/2029	T

10. RISKS

The Risk Register for this project has been prepared by the Risk Manager and approved on 3/21/2024. The Risk Register has identified 20 potential risks for this project which will be further evaluated and updated during the future phases of the project.

11. EXTERNAL AGENCY COORDINATION

Federal Highway Administration (FHWA)

This project is considered as an Assigned Project in accordance with the current FHWA and Department of Transportation (Caltrans) Joint Stewardship and Oversight Agreement.

12. PROJECT REVIEW

Title/Office	Reviewer Name	Date of Review
Project Manager	David Miraaney	01/12/2024
Scoping Team Field Review	Nathan Sy	10/30/2023
SHOPP Program Manager	Chan Kuoch	01/17/2024
District Asset Manager	Roger Yoh	01/17/2024
Program Advisor – TMS Support	Candace Fung	01/17/2024
Program Advisor – Truck Services	Patricia Amadi	01/17/2024
Program Advisor – Traffic Safety	Ashraf Hanna	01/17/2024
Program Advisor – Roadside Preservation	Kathleen Hamer	01/17/2024
Risk Manager	Cardiel Bugarian	01/17/2024
Design C	Yessuf Tegegne	01/17/2024
Transportation Safety	Emmanuel Balanza	01/17/2024
Constructability	Kyle Kunitake	01/17/2024
Right-of-Way	Michelle Graves	01/5/2024
Environmental Planning	Susan Tse Koo	12/27/2023
Storm Water	Sunny Liem	01/17/2024
Quality Review	Quality Review Team	01/17/2024
Air Quality	Andrew Yoon	12/1/2023
Noise and Vibration	Jin S. Lee	04/19/2023

13. PROJECT PERSONNEL

Name/Title	Office	Contact
David H. Miraaney, Project Manger	Program and Project Management	213-760-6800
Patrick P. Lui, TEE	Transportation Safety and Operations/Office of ITS	213-628-6132
Nathan Gabriel Sy, TEE	Transportation Safety and Operations/Office of ITS	213-269-1587
Susan Tse Environmental Scientist	Division of Environmental Planning	213-269-1106
Zoltan Elo, Office Chief	District Right of Way	213-713-7763

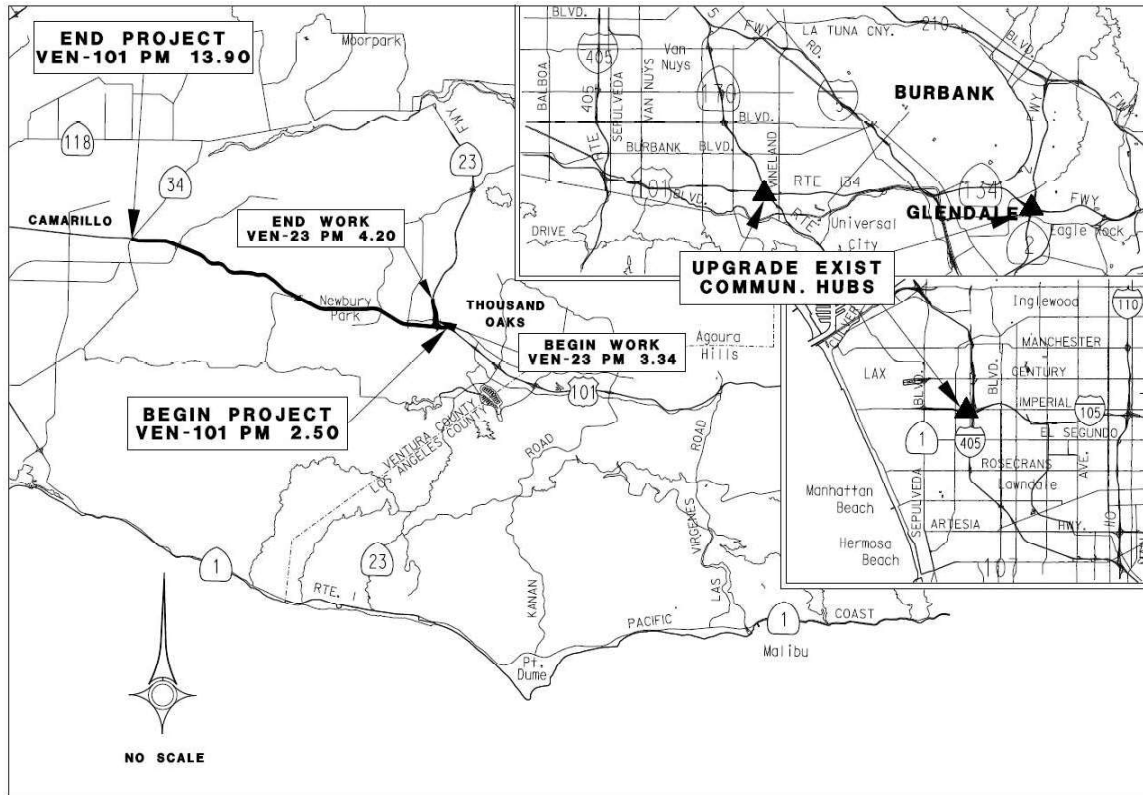
14. ATTACHMENTS

- A. Project Vicinity Map
- B. List of Existing and Proposed TMS Elements
- C. Preliminary Layout Sheets
- D. Project Cost Estimates
- E. Right of Way Data Sheet
- F. Environmental Documents
- G. Hazardous Waste Assessment
- H. Air Quality Analysis
- I. Noise Analysis
- J. Storm Water Data Report
- K. TMP Data Sheet
- L. Risk Register
- M. SHOPP Project Performance Output
- N. Connector Metering Proposal Study

ATTACHMENT A

Project Vicinity Map

Vicinity Map



In Ventura and Los Angeles Counties, on Various Routes at Various Locations.

07-VEN-101-PM 2.5/13.9
07-VEN-23-PM 3.34/4.20
LA-2-PM R18.70 (LARTMC)
LA-101-PM R11.80 (NHD HUB)
LA-105-PM R2.0 (LAX)

ATTACHMENT B

List of Existing and Proposed TMS Elements

CLOSED CIRCUIT TELEVISION (CCTV) CAMERA									
ITEM#	TMS ID	LOCATION	ROUTE	PM	DIRECTION	TECHNOLOGY LIFECYCLE REPLACEMENT	STRUCTURE LIFECYCLE REPLACEMENT	INSTALL COMMUNICATION BREAKOUT	REMARKS
1	7714	Rancho Road	101	3.2	NB	YES	-	YES	POOR Tech Condition
2	07 CCTV-8002-HC	Ventu Park Rd	101	6.24	SB	-	-	YES	Comm only. Camera upgraded at 34880.
3	NEW	RANCHO ROAD	101	2.85	NB	-	NEW	YES	NEW Camera for Traffic Signal
4	NEW	MOORPARK RD	101	3.93	SB	-	NEW	YES	NEW Camera for Traffic Signal
5	NEW	MOORPARK RD.	101	4.23	NB	-	NEW	YES	NEW Camera for Traffic Signal
6	NEW	LYNN RD	101	4.91	SB	-	NEW	YES	NEW Camera for Traffic Signal
7	NEW	LYNN RD	101	5.27	NB	-	NEW	YES	NEW Camera for Traffic Signal
8	NEW	VENTU PARK RD	101	5.99	NB	-	NEW	YES	NEW Camera for Traffic Signal
9	NEW	VENTU PARK RD	101	6.38	SB	-	NEW	YES	NEW Camera for Traffic Signal
10	NEW	BORCHARD RD	101	7.04	SB	-	NEW	YES	NEW Camera for Traffic Signal
11	NEW	RANCHO CONEJO / BORCHARD	101	7.1	NB	-	NEW	YES	NEW Camera for Traffic Signal
12	NEW	WENDY DR.	101	7.66	NB	-	NEW	YES	NEW Camera for Traffic Signal
13	NEW	WENDY DR.	101	7.92	SB	-	NEW	YES	NEW Camera for Traffic Signal
14	NEW	PLEASANT VALLEY	101	12.3	SB	-	NEW	YES	NEW Camera for Traffic Signal
15	NEW	SANTA ROSA RD	101	12.31	NB	-	NEW	YES	NEW Camera for Traffic Signal
16	NEW	MISSION OAKS/FLYNN RD	101	12.8	NB	-	NEW	YES	NEW Camera for Traffic Signal
17	NEW	DAWSON / PETIT	101	13.67	SB	-	NEW	YES	NEW Camera for Traffic Signal
18	NEW	E/O Moorpark Rd	101	3.68	SB	-	NEW	YES	From PIR. @ SB E/O Moorpark Rd
19	NEW	E/O Wilbur Rd	101	4.46	SB	-	NEW	YES	From PIR. @ SB E/O Wilbur Rd
20	NEW	S/O Lynn Rd	101	5.014	NB	-	NEW	YES	From PIR. @ SB S/O Lynn Rd
21	NEW	S/O Ventu Rd	101	6.12	SB	-	NEW	YES	From PIR. @ SB S/O Ventu Rd
22	NEW	S/O Borchard Rd	101	6.95	NB	-	NEW	YES	From PIR. @ NB S/O Borchard Rd
23	NEW	S/O Wendy Dr	101	7.79	NB	-	NEW	YES	From PIR. @ NB S/O Wendy Dr
24	NEW	N/O Conejo WIM Station	101	9.18	NB	-	NEW	YES	From PIR. @ NB N/O Conejo WIM Station
25	NEW	S/O Camarillo Spring Rd	101	10.12	SB	-	NEW	YES	From PIR. @ SB S/O Camarillo Spring Rd
26	NEW	Camarillo Ruiz	101	11.637	NB	-	NEW	YES	From PIR. @ NB Camarillo Ruiz
27	NEW	S/O Pleasant Valley Rd	101	12.23	SB	-	NEW	YES	From PIR. @ SB S/O Pleasant Valley Rd
28	NEW	Mission Oak Blvd	101	13.12	NB	-	NEW	YES	From PIR. @ NB Mission Oak Blvd
29	NEW	Petit St	101	13.6	SB	-	NEW	YES	From PIR. @ SB Petit St

TRAFFIC SIGNALS									
ITEM#	TMS ID	LOCATION	ROUTE	PM	DIRECTION	TECHNOLOGY LIFECYCLE REPLACEMENT	STRUCTURE LIFECYCLE REPLACEMENT	INSTALL COMMUNICATION BREAKOUT	REMARKS
1	07VEN101-2.85	RANCHO ROAD	101	2.85	NB	YES	-	YES	POOR Tech Condition. SHARE CONDUIT WITH CAMERA
2	07VEN101-3.93	MOORPARK RD	101	3.93	SB	YES	-	YES	POOR Tech Condition. SHARE CONDUIT WITH CAMERA
3	07VEN101-4.23	MOORPARK RD.	101	4.23	NB	YES	-	YES	POOR Tech Condition. SHARE CONDUIT WITH CAMERA
4	07VEN101-4.91	LYNN RD	101	4.91	SB	YES	-	YES	POOR Tech Condition. SHARE CONDUIT WITH CAMERA
5	07VEN101-5.27	LYNN RD	101	5.27	NB	-	-	YES	GOOD Condition. Communication Only. SHARE CONDUIT WITH CAMERA
6	07VEN101-5.99	VENTU PARK RD	101	5.99	NB	YES	-	YES	POOR Tech Condition. SHARE CONDUIT WITH CAMERA
7	07VEN101-6.38	VENTU PARK RD	101	6.38	SB	YES	-	YES	POOR Tech Condition. SHARE CONDUIT WITH CAMERA
8	07VEN101-7.04	BORCHARD RD	101	7.04	SB	-	-	YES	GOOD Condition. Communication Only. SHARE CONDUIT WITH CAMERA
9	07VEN101-7.10	RANCHO CONEJO / BORCHARD	101	7.1	NB	-	-	YES	GOOD Condition. Communication Only. SHARE CONDUIT WITH CAMERA
10	07VEN101-7.66	WENDY DR.	101	7.66	NB	-	-	YES	GOOD Condition. Communication Only. SHARE CONDUIT WITH CAMERA
11	07VEN101-7.92	WENDY DR	101	7.92	SB	-	-	YES	GOOD Condition. Communication Only. SHARE CONDUIT WITH CAMERA
12	07VEN101-12.30	PLEASANT VALLEY	101	12.3	SB	-	-	YES	GOOD Condition. Communication Only. SHARE CONDUIT WITH CAMERA
13	07VEN101-12.31	101FWY NB AT SANTA ROSA RD	101	12.31	NB	-	-	YES	GOOD Condition. Communication Only. SHARE CONDUIT WITH CAMERA
14	07VEN101-12.80	MISSION OAKS/FLYNN RD	101	12.8	NB	YES	-	YES	POOR Tech Condition. SHARE CONDUIT WITH CAMERA
15	07VEN101-13.67	SB 101 FWY at DAWSON / PETIT	101	13.67	SB	-	-	YES	GOOD Condition. Communication Only. SHARE CONDUIT WITH CAMERA

CENSUS STATION (CS)							REMARKS
ITEM#	TMS ID	LOCATION	ROUTE	PM	DIRECTION	TECHNOLOGY LIFECYCLE REPLACEMENT	
1	07-TCS-119-HQ	N/O JCT RTE 23N (THOUSAND OAKS)	101	3.107	BO	YES	POOR Tech Condition
2	07-TCS-457-HQ	N/O BORCHARD RD. S/O WENDY DR	101	7.5	BO	YES	POOR Tech Condition
3	07-TCS-434-HQ	at LEWIS RD (JCT RTE 34)	101	13.848	BO	YES	POOR Tech Condition
4	07-TCS-909-HQ	WENDY DR	101	7.885	BO	YES	POOR Tech Condition
5	07-TCS-908-HQ	S/O PLEASANT VALLEY RD	101	12.298	BO	YES	POOR Tech Condition

CHANGEABLE MESSAGE SIGN (CMS)							REMARKS
ITEM#	TMS ID	LOCATION	ROUTE	PM	DIRECTION	TECHNOLOGY LIFECYCLE REPLACEMENT	
1	07-CMS-98-HQ	VENTU PARK RD	101	6.24	SB	YES	POOR Tech Condition
2	NEW	NEW	101	3.68	SB	NEW	From PIR. @ SB E/O Moorpark Rd
3	NEW	NEW	101	13.12	NB	NEW	From PIR. @ NB Mission Oak Blvd

RAMP METERING SYSTEMS (RMS)							REMARKS
ITEM#	TMS ID	LOCATION	ROUTE	PM	DIRECTION	TECHNOLOGY LIFECYCLE REPLACEMENT	
1	07-FRM-4479-HQ	Moorpark	101	3.92	SB	-	GOOD Tech Condition. Communication Only
2	07-FRM-4497-HQ	Moorpark	101	4.28	NB	-	GOOD Tech Condition. Communication Only

VEHICLE DETECTION SYSTEMS (VDS)							REMARKS
ITEM#	TMS ID	LOCATION	ROUTE	PM	DIRECTION	TECHNOLOGY LIFECYCLE REPLACEMENT	
1	NEW	RT 23 CN	101	2.67	SB	NEW	Connector Metering.
2	NEW	RT 23 CN	101	3.34	NB	NEW	Connector Metering

TRAFFIC MONITORING STATION							REMARKS
ITEM#	TMS ID	LOCATION	ROUTE	PM	DIRECTION	TECHNOLOGY LIFECYCLE REPLACEMENT	
1	4480	LYNN 1	101	4.84	SB	-	GOOD Tech Condition. Communication Only
2	07-FRM-4571-HQ	RTE 23 CN	101	3.34	NB	-	GOOD Tech Condition. Communication Only
3	4636	LYNN 2	101	5.01	SB	YES	POOR Tech Condition
4	07-FRM-4496-HQ	Lynn Rd	101	5.17	NB	YES	POOR Tech Condition
5	4481	VENTU PARK 1	101	6.06	SB	YES	POOR Tech Condition
6	4495	VENTU PARK 1	101	6.15	NB	YES	POOR Tech Condition
7	4482	VENTU PARK 2	101	6.22	SB	YES	POOR Tech Condition
8	4494	VENTU PARK 2	101	6.34	NB	YES	POOR Tech Condition
9	4492	BORCHARD	101	7.23	NB	YES	POOR Tech Condition
10	07-FRM-4485-HQ	Wendy Dr.	101	7.7	SB	YES	POOR Tech Condition
11	07-FRM-4491-HQ	Wendy 1	101	7.86	NB	YES	POOR Tech Condition
12	07-FRM-4490-HQ	Wendy 2	101	8.06	NB	YES	POOR Tech Condition
13	07-FRM-4488-HQ	Pleasant Valley	101	12.31	SB	YES	POOR Tech Condition
14	07-FRM-4487-HQ	Pleasant Valley	101	12.396	NB	YES	POOR Tech Condition

ATTACHMENT C

Preliminary Layout Sheets

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

2. FOR LEGEND, ABBREVIATIONS AND NOTES, SEE SHEET E-1.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
07	VEN			XX XXX

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PLANS APPROVAL DATE

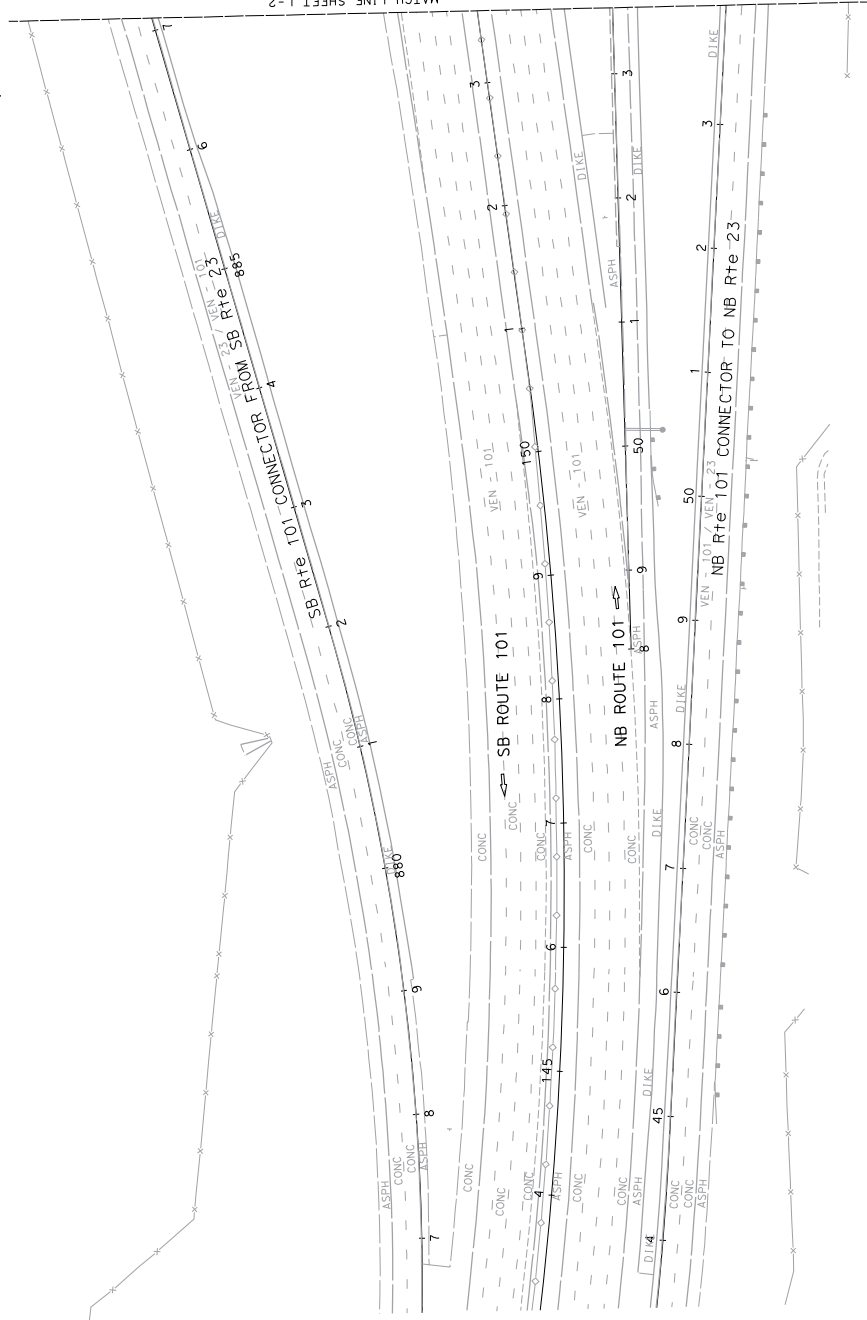
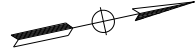
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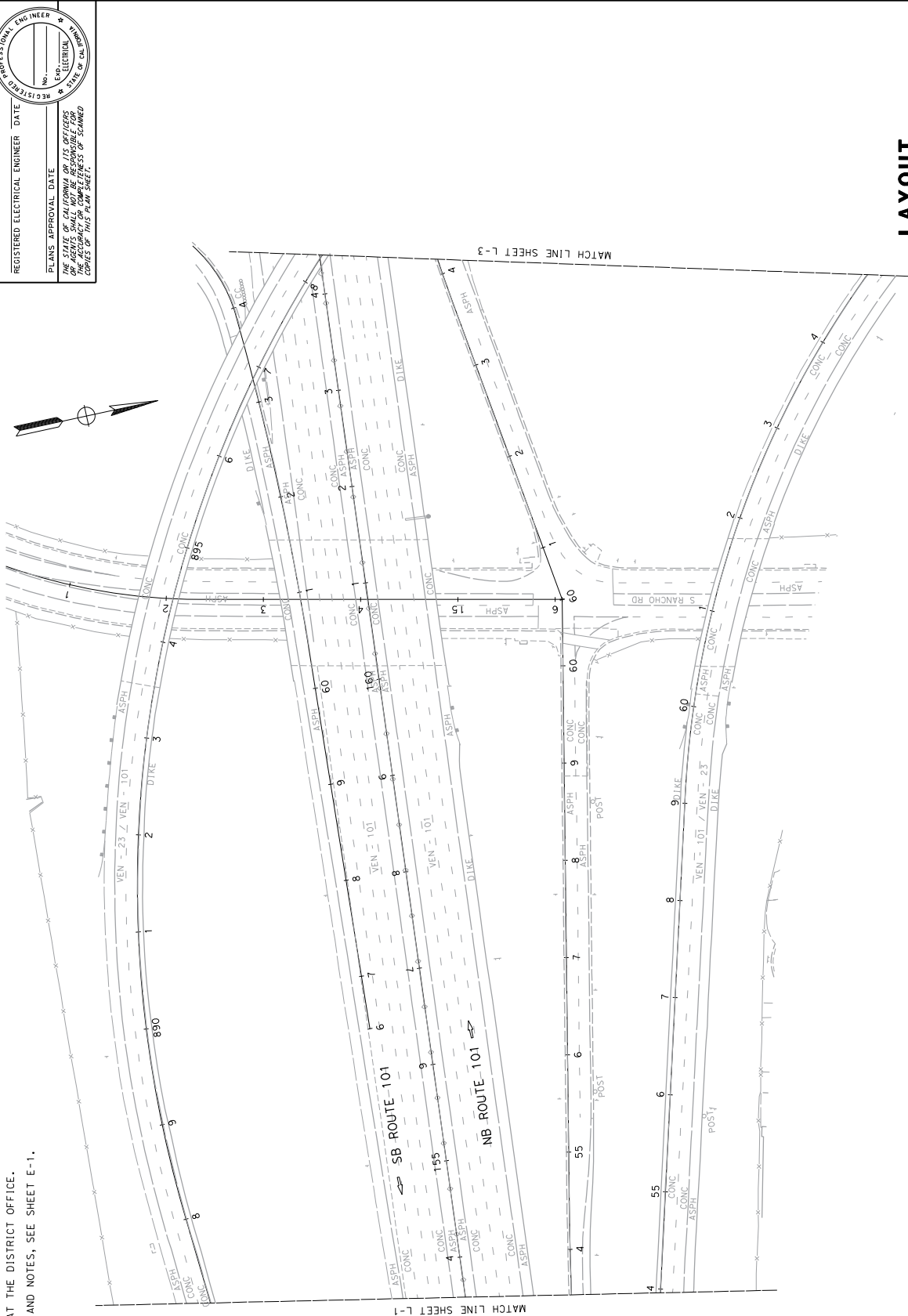
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MATCH 10-11-1978

MATCH LINE SHEET L-4

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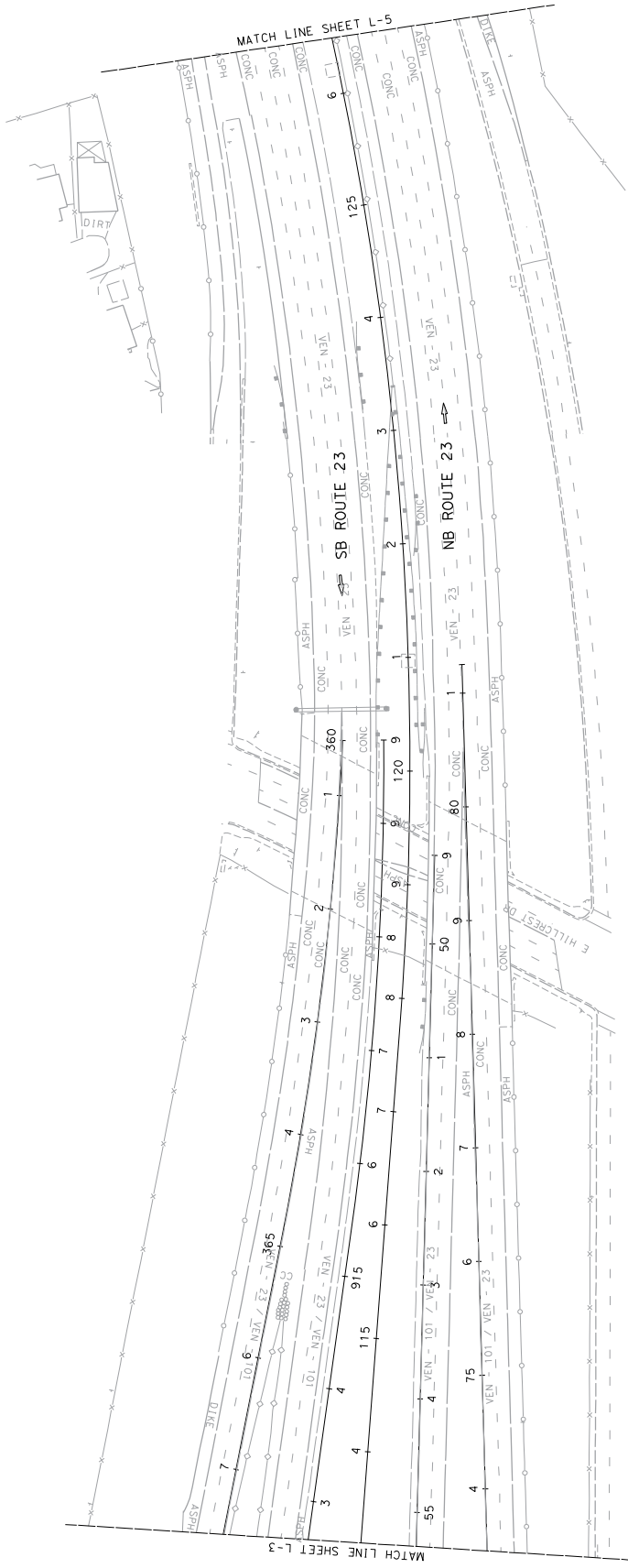
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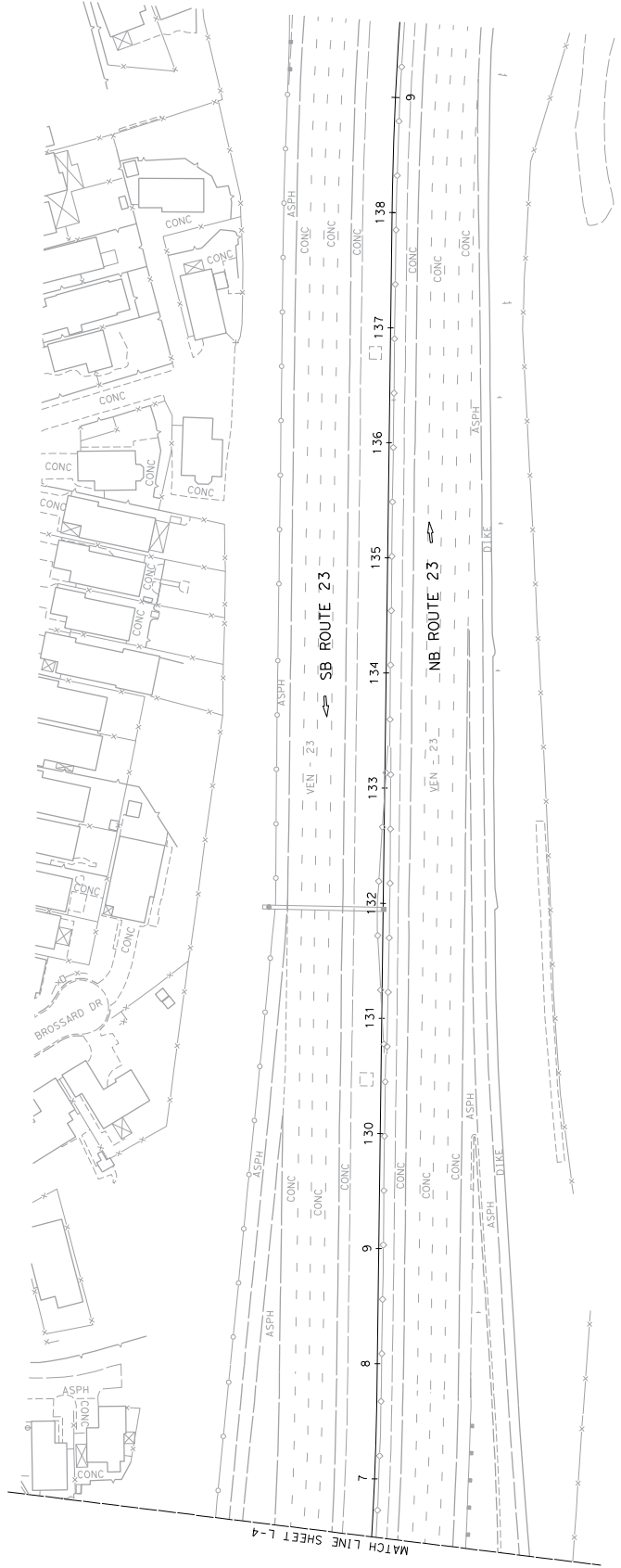
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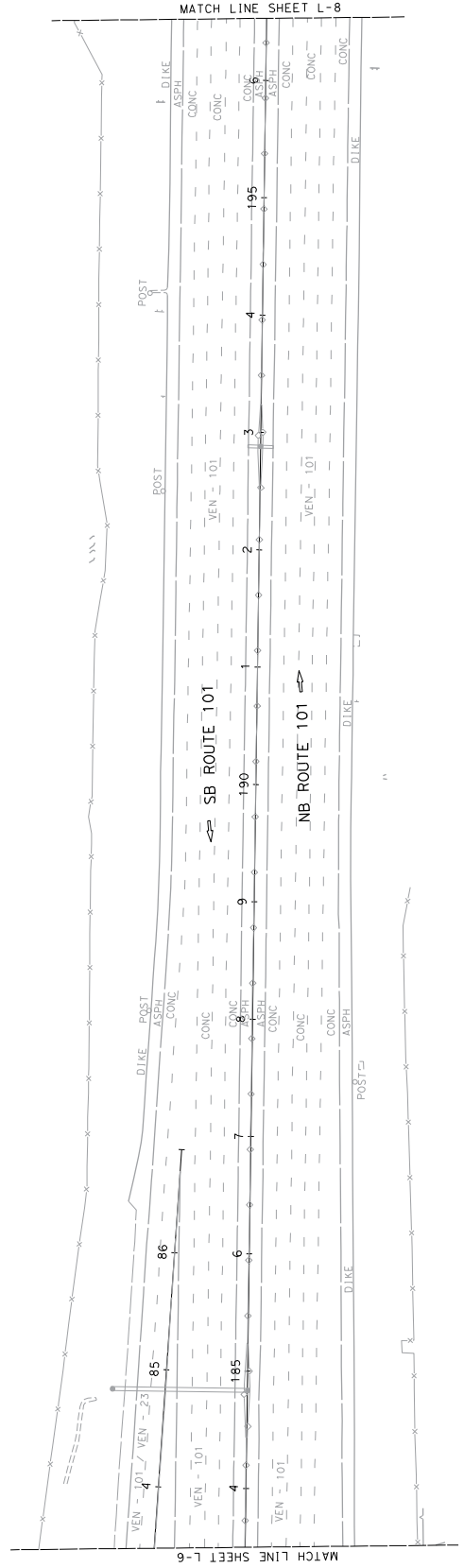
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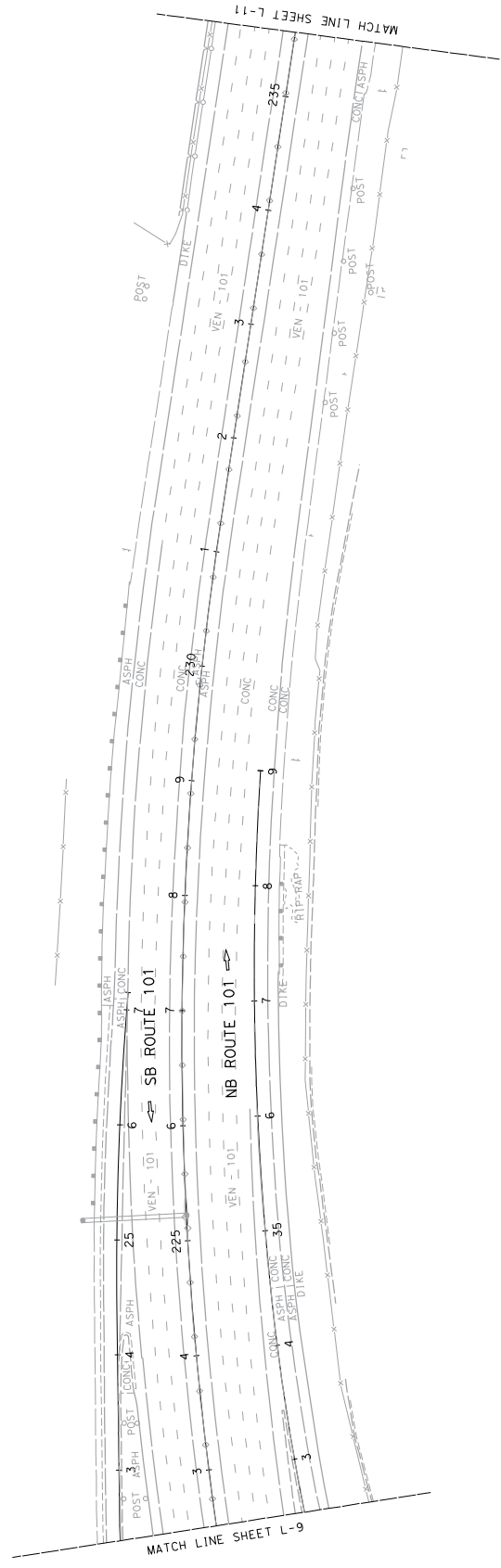
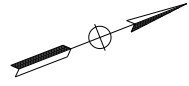
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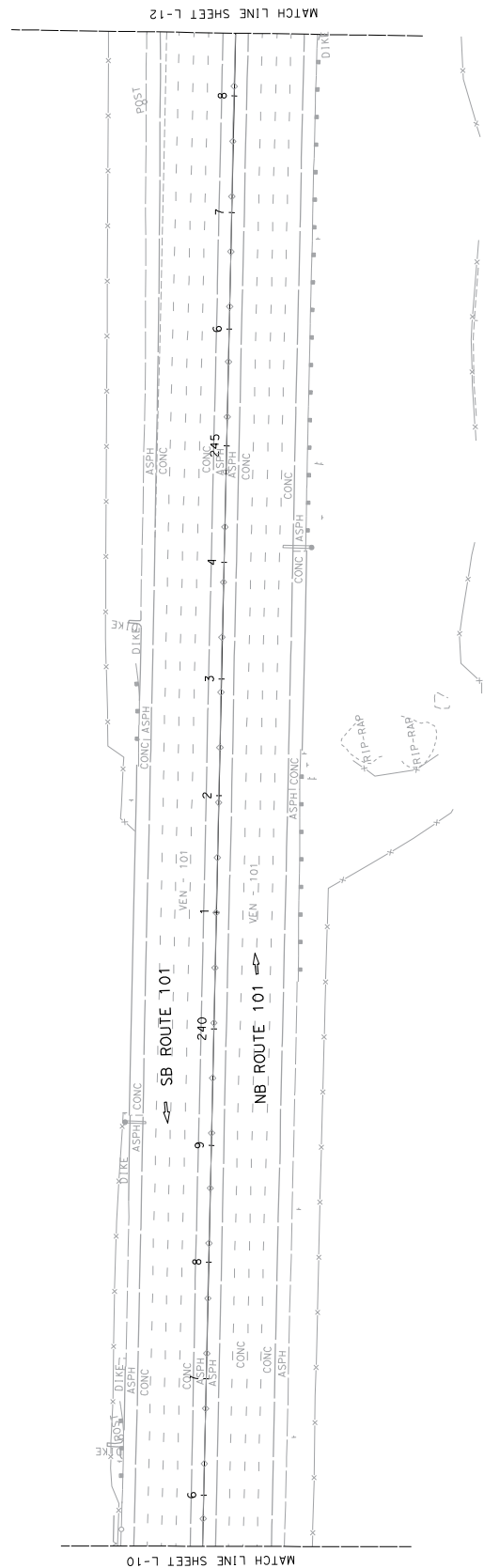
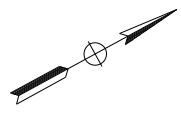
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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
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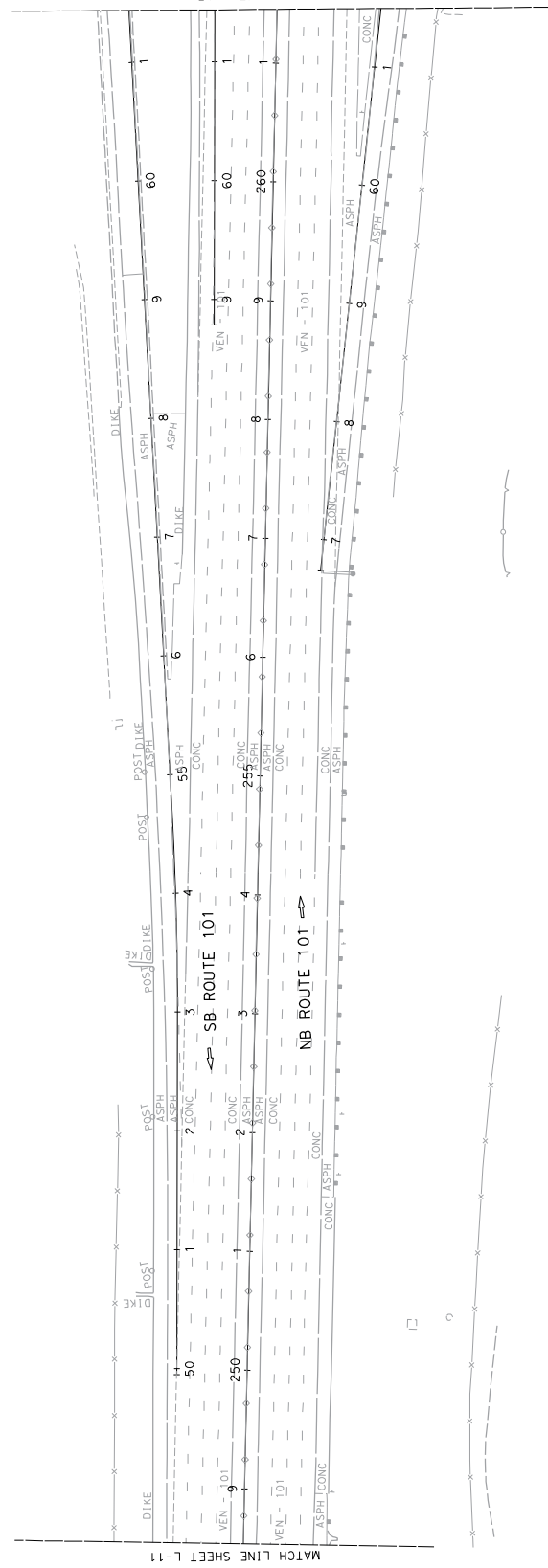
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DIST	COUNTY	ROUTE.	POST-MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	VEN			XX	XXX

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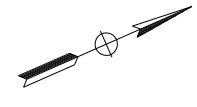
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REGISTERED ELECTRICAL ENGINEER	DATE

PLANS APPROVAL DATE

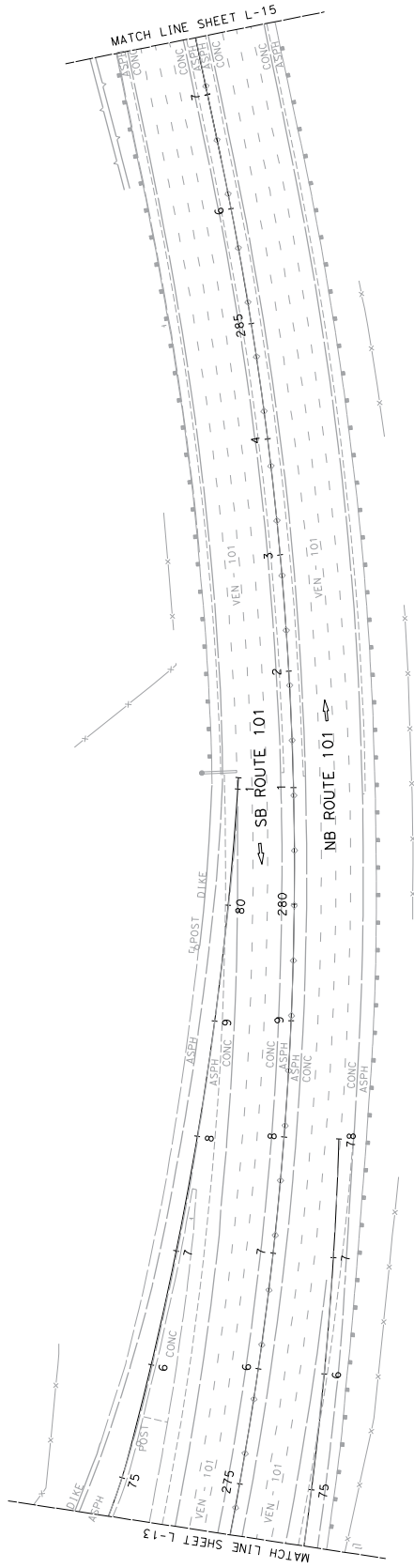
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PROFESSIONAL ENGINEER

NO. _____

EXP. _____

STATE OF CALIFORNIA



LAYOUT

SCALE 1" = 50'

APPROVED FOR ELECTRICAL WORK ONLY

PROJECT NUMBER & PHASE

UNIT

3

2

1

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RELATIVE BORDER SCALE
IS IN INCHES

USERNAME >>
DON FILE >> ... \cyrus\38320 - 014.dgn

BORDER LAST REVISED 8/5/2020

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT
RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

2. FOR LEGEND, ABBREVIATIONS AND NOTES, SEE SHEET E-1.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
07	VEN			XX

REGISTERED ELECTRICAL ENGINEER	DATE	
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PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER

No. _____

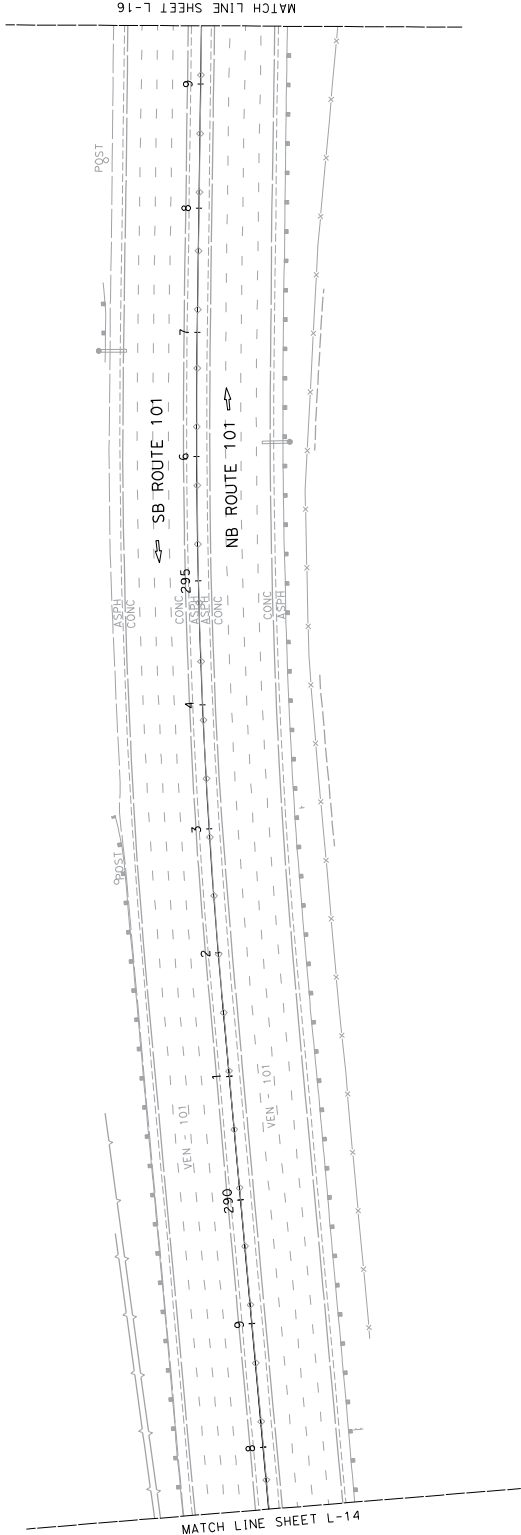
Exp. _____

STATE OF CALIFORNIA

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LAYOUT

SCALE 1" = 50'

L-15

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PROJECT NUMBER & PHASE

UNIT

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BORDER LAST REVISED 8/5/2020

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT
RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

2. FOR LEGEND, ABBREVIATIONS AND NOTES, SEE SHEET E-1.

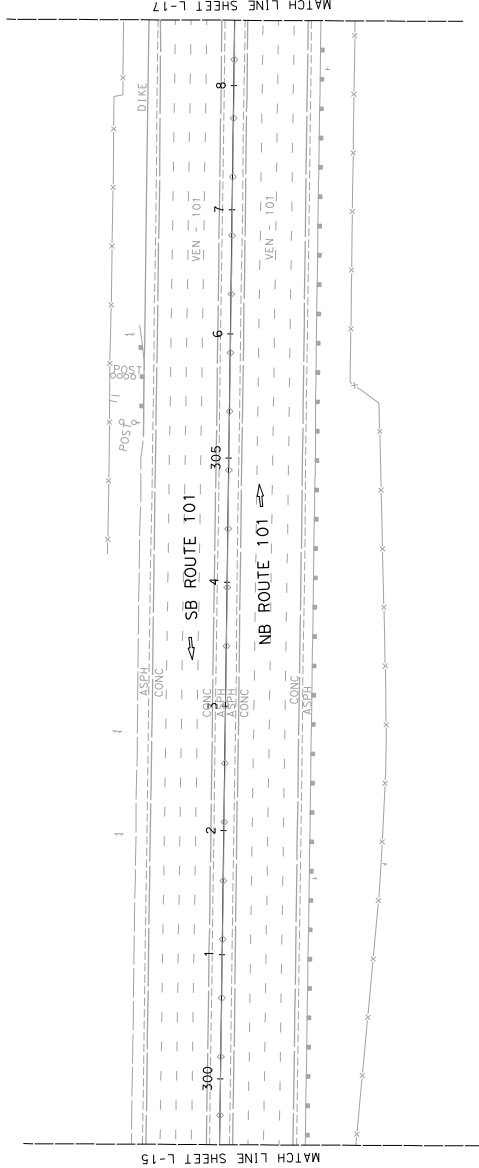
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
07	VEN			XX XXX
REGISTERED ELECTRICAL ENGINEER			DATE	
PLANS APPROVAL DATE				
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PROFESSIONAL ENGINEER

No. _____

Exp. _____

STATE OF CALIFORNIA



LAYOUT

SCALE 1" = 50'

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PROJECT NUMBER & PHASE

UNIT

RELATIVE BORDER SCALE
IS IN INCHES

L-16

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

2. FOR LEGEND, ABBREVIATIONS AND NOTES, SEE SHEET E-1.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
07	VEN			XX XXX

REGISTERED ELECTRICAL ENGINEER	DATE
PLANS APPROVAL DATE	

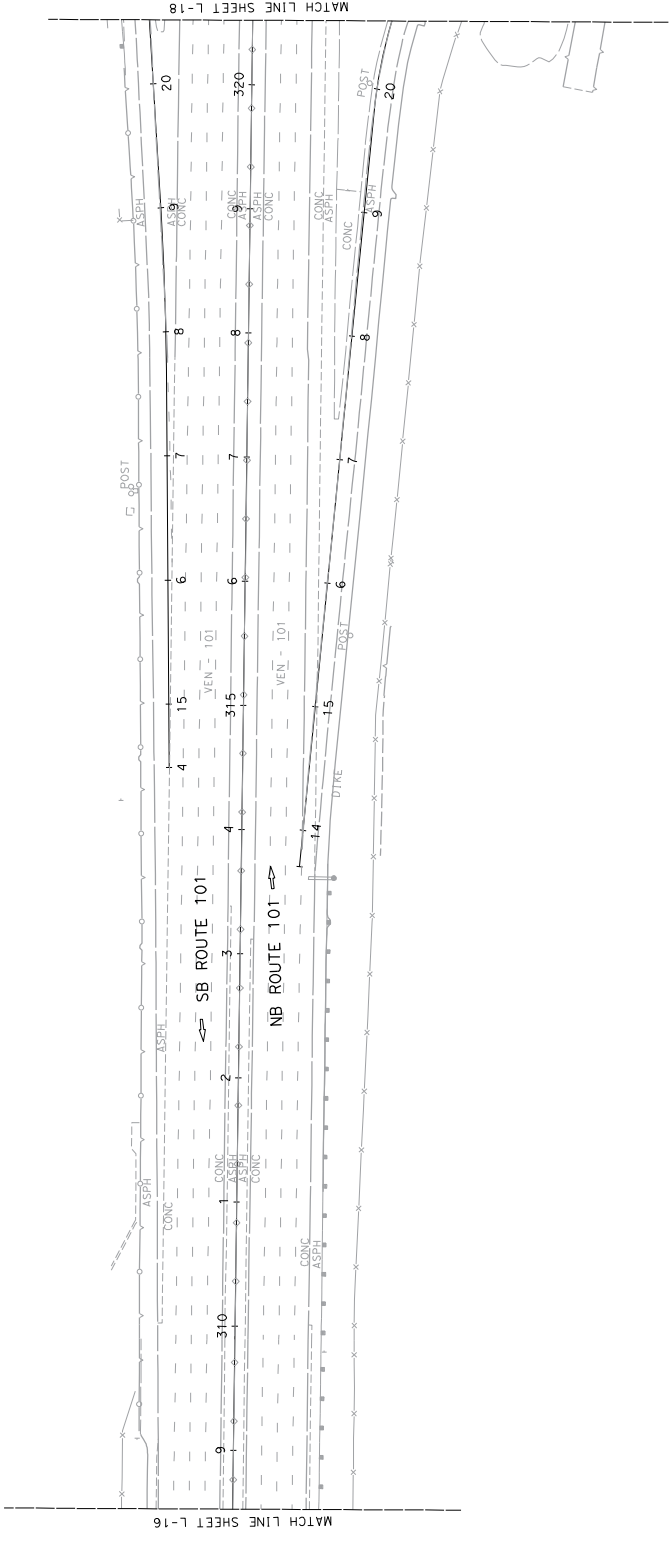
PROFESSIONAL ENGINEER

NO. _____

EXP. _____

STATE OF CALIFORNIA

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LAYOUT

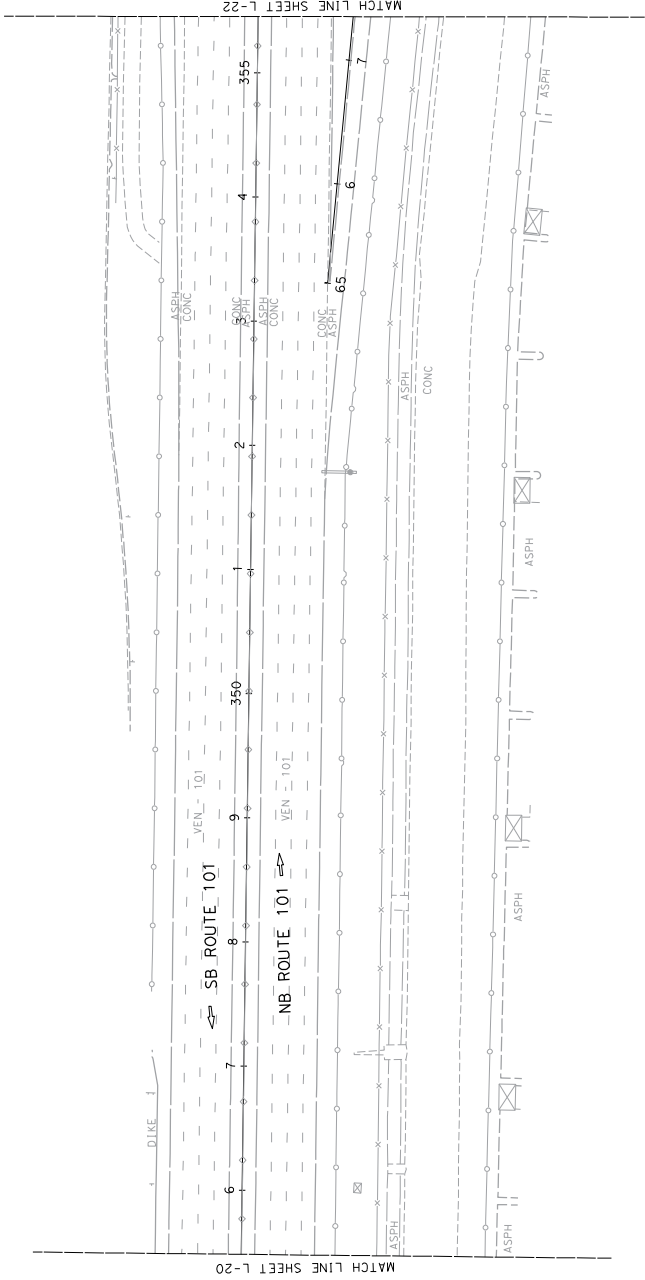
SCALE 1" = 50'

APPROVED FOR ELECTRICAL WORK ONLY

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT
RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

2. FOR LEGEND, ABBREVIATIONS AND NOTES, SEE SHEET E-1.



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
07	VEN			XX XXX

REGISTERED ELECTRICAL ENGINEER DATE

PLANS APPROVAL DATE

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PROFESSIONAL ENGINEER
No. _____
Exp. _____
STATE OF CALIFORNIA

LAYOUT

SCALE 1" = 50'

APPROVED FOR ELECTRICAL WORK ONLY

UNIT	PROJECT NUMBER & PHASE
0 1 2 3	

NOTES:

- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
- FOR LEGEND, ABBREVIATIONS AND NOTES, SEE SHEET E-1.

DIS	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL SHEETS
07	VEN			XX XXX

REGISTERED ELECTRICAL ENGINEER

DATE

PLANS APPROVAL DATE

REGISTERED ELECTRICAL ENGINEER

PROFESSIONAL ENGINEER

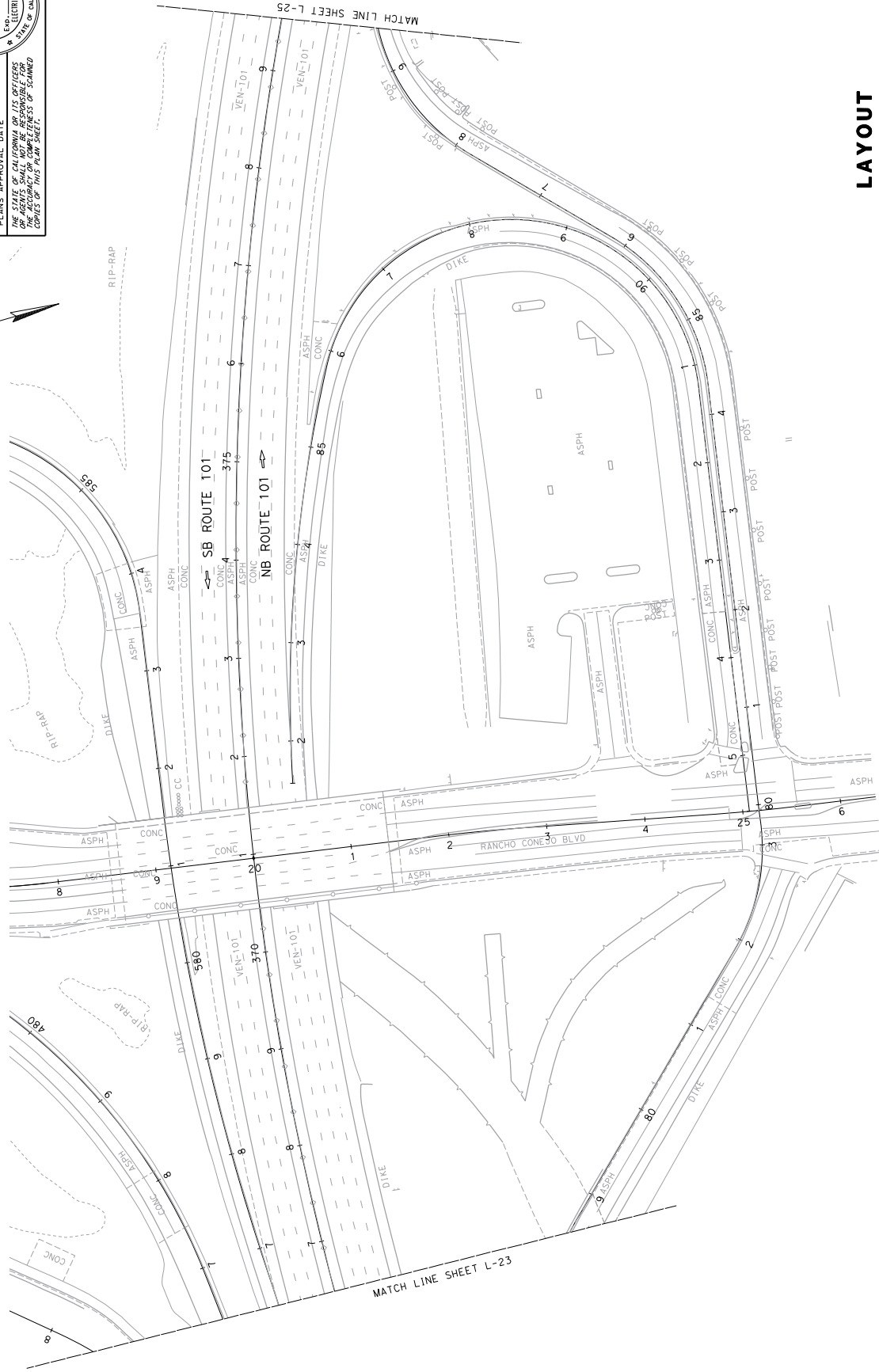
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END.

REGISTERED

STATE OF CALIFORNIA

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LAYOUT

SCALE 1" = 50'

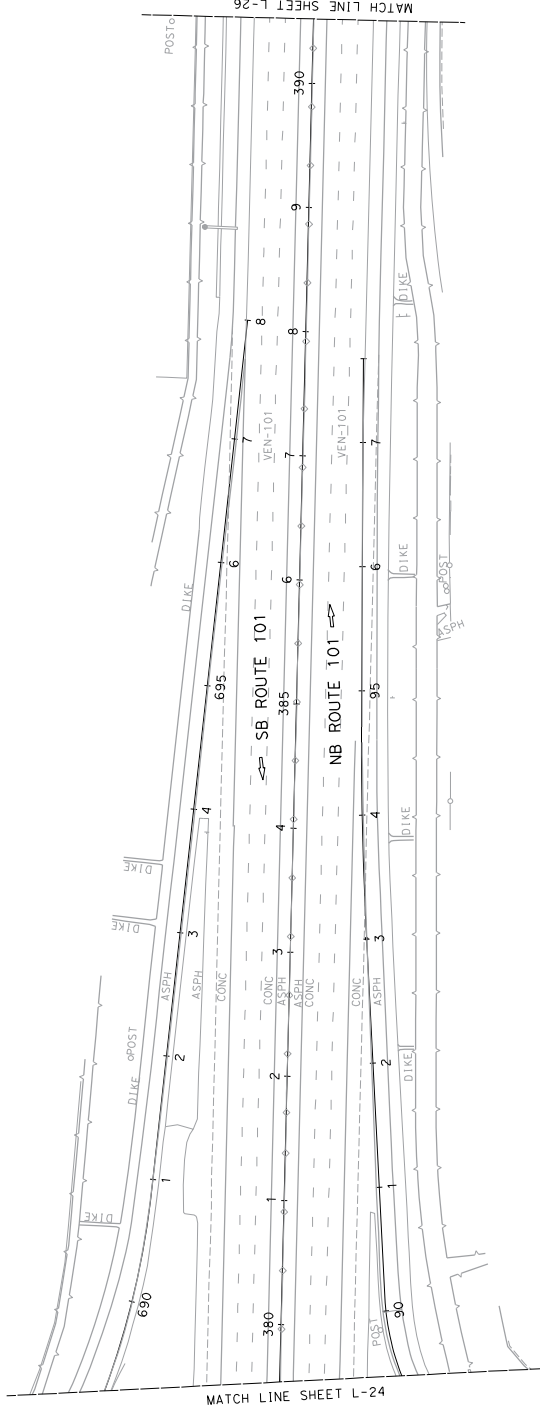
L-24

APPROVED FOR ELECTRICAL WORK ONLY

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

2. FOR LEGEND, ABBREVIATIONS AND NOTES, SEE SHEET E-1.



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
07	VEN			XX XXX

REGISTERED ELECTRICAL ENGINEER DATE

PLANS APPROVAL DATE

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LAYOUT

SCALE 1" = 50'

APPROVED FOR ELECTRICAL WORK ONLY

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT
RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

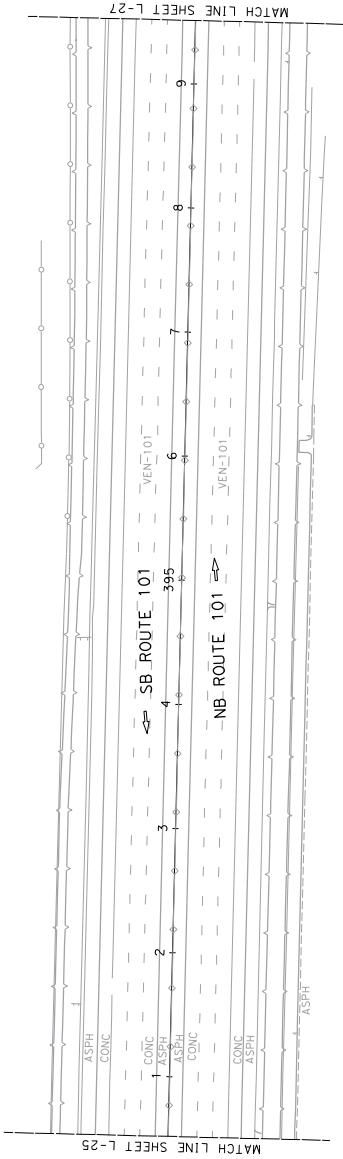
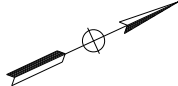
2. FOR LEGEND, ABBREVIATIONS AND NOTES, SEE SHEET E-1.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
07	VEN			XX XXX
REGISTERED ELECTRICAL ENGINEER DATE				
PLANS APPROVAL DATE				
THE STATE OF CALIFORNIA OR ITS OFFICERS THESE PLANS HAVE BEEN REVIEWED AND APPROVED FOR THE THE ACCURACY OF THE INFORMATION AND THE COMPLETENESS OF THE COPIES OF THIS PLAN SHEET.				

REGISTERED PROFESSIONAL ENGINEER

No. _____ Exp. _____

STATE OF CALIFORNIA



LAYOUT

SCALE 1" = 50'

L-26

APPROVED FOR ELECTRICAL WORK ONLY

PROJECT NUMBER & PHASE

UNIT

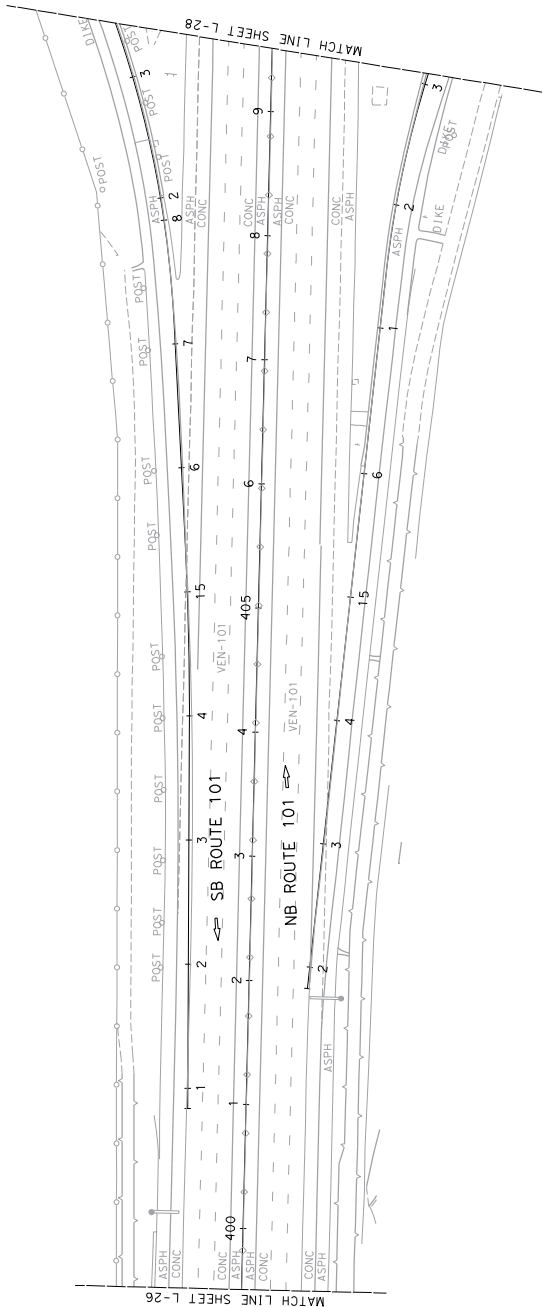
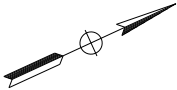
RELATIVE BORDER SCALE
IS IN INCHES

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

2. FOR LEGEND, ABBREVIATIONS AND NOTES, SEE SHEET E-1.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
07	VEN			XX XXX
REGISTERED ELECTRICAL ENGINEER DATE			PLANS APPROVAL DATE	
PROFESSIONAL ENGINEER			REGISTERED ELECTRICAL ENGINEER	
THE STATE OF CALIFORNIA OR ITS OFFICERS			THE STATE OF CALIFORNIA OR ITS OFFICERS	
THE ACCURACY OR COMPLETENESS OF SCANNED			THE ACCURACY OR COMPLETENESS OF SCANNED	
COPIES OF THIS PLAN SHEET.			COPIES OF THIS PLAN SHEET.	



LAYOUT

SCALE 1" = 50'

APPROVED FOR ELECTRICAL WORK ONLY

L-27

LAYOUT

SCALE 1" = 50'

APPROVED FOR ELECTRICAL WORK ONLY

PROJECT NUMBER & PHASE

UNIT

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BORDER LAST REVISED 8/5/2020

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Stevens OFFICE OF ITS

FUNCTIONAL SUPERVISOR

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CALCULATED-BY	

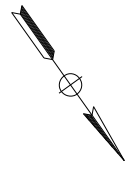
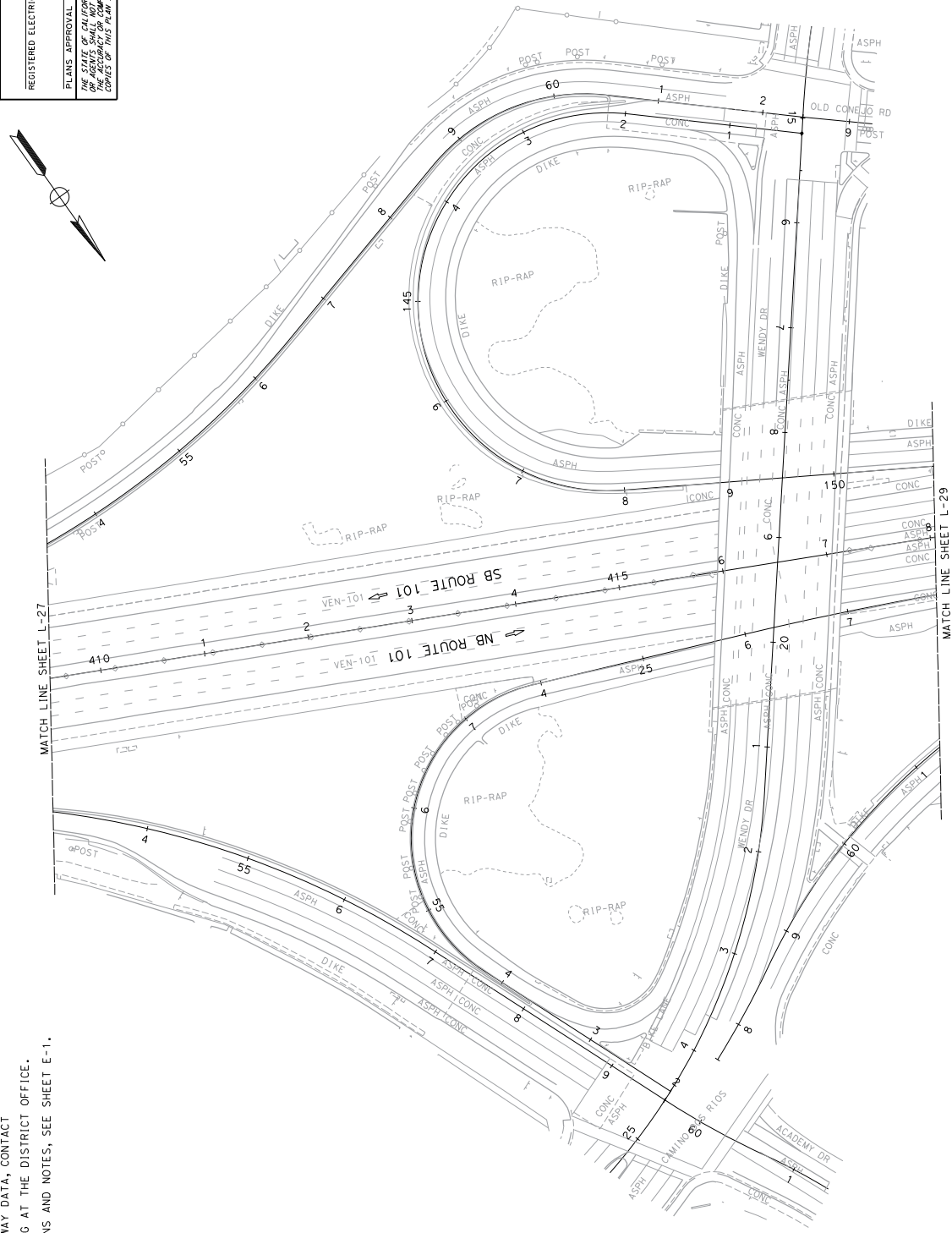
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CALCULATED BY	

REVISOR BY	DATE REVISED
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NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. FOR LEGEND, ABBREVIATIONS AND NOTES, SEE SHEET E-1.



DIST	COUNTY	ROUTE.	POST-MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	VEN			XX	XXX

The seal is circular with "REGISTERED PROFESSIONAL ENGINEER" around the top and "STATE OF CALIFORNIA" around the bottom. In the center, it says "No. 9680 ELECTRICAL".

REGISTERED ELECTRICAL ENGINEER DATE _____

PLANS APPROVAL DATE _____

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NOTES:

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DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
07	VEN			XX XXX

REGISTERED ELECTRICAL ENGINEER	DATE
PLANS APPROVAL DATE	

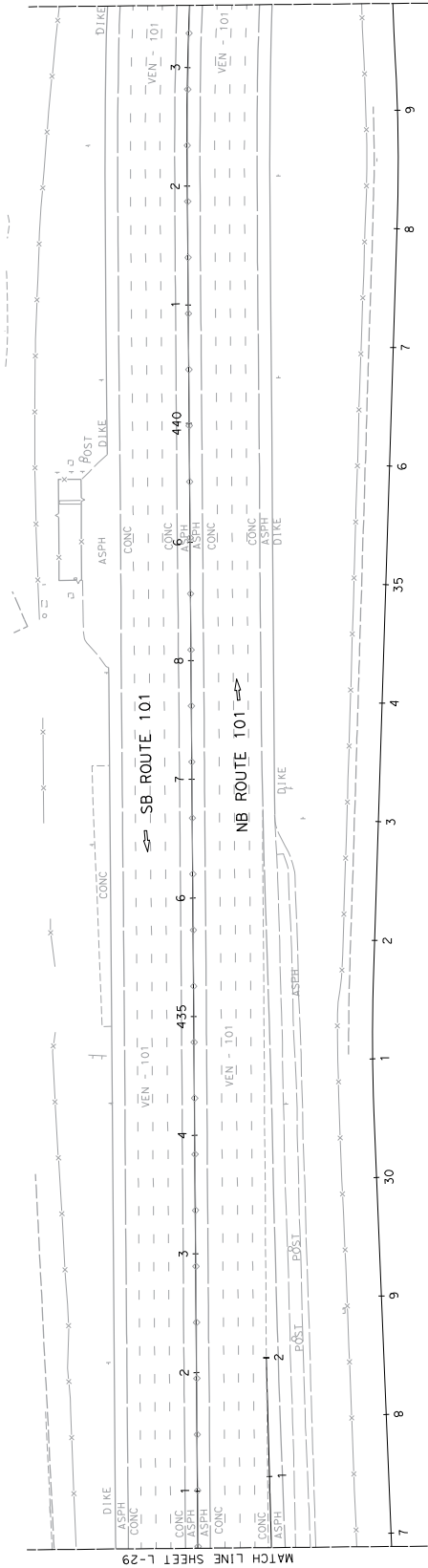
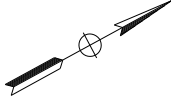
PROFESSIONAL ENGINEER

NO. _____

EXP. _____

STATE OF CALIFORNIA

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LAYOUT

SCALE 1" = 50'

L-30

APPROVED FOR ELECTRICAL WORK ONLY

PROJECT NUMBER & PHASE

UNIT

RELATIVE BORDER SCALE
IS IN INCHES

USERNAME =>
DON FILE => ... \cayote\38320 - 030.dgn

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

2. FOR LEGEND, ABBREVIATIONS AND NOTES, SEE SHEET E-1.

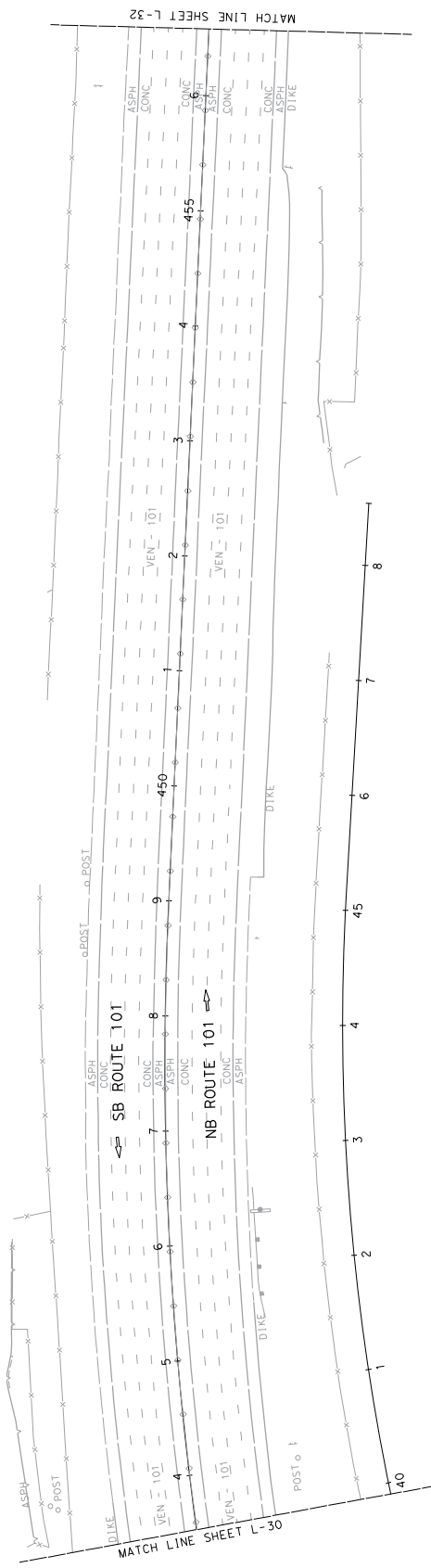
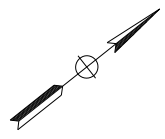
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
07	VEN			XX XXX

REGISTERED ELECTRICAL ENGINEER DATE

PLANS APPROVAL DATE

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PROFESSIONAL ENGINEER No. END. ELEC. STATE OF CALIFORNIA



LAYOUT

SCALE 1" = 50'

L-31

APPROVED FOR ELECTRICAL WORK ONLY

PROJECT NUMBER & PHASE

UNIT

3

RELATIVE BORDER SCALE IS IN INCHES

USERNAME => ...\\coryr4136320 - 031.dgn

BORDER LAST REVISED 8/5/2020

LAST REVISION

TIME PLOTTED => 3:39:47 PM

DATE PLOTTED => 1/9/2024

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

2. FOR LEGEND, ABBREVIATIONS AND NOTES, SEE SHEET E-1.

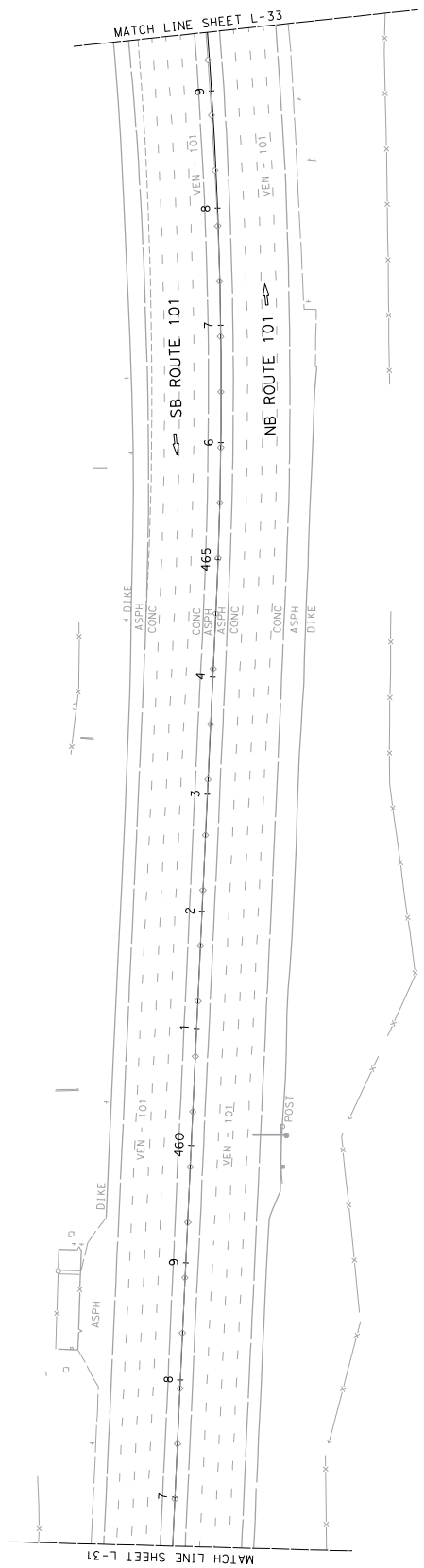
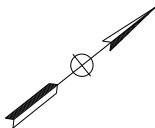
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
07	VEN			XX XXX

REGISTERED ELECTRICAL ENGINEER DATE

PLANS APPROVAL DATE

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PROFESSIONAL ENGINEER No. END. ELEC. STATE OF CALIFORNIA



LAYOUT

SCALE 1" = 50'

APPROVED FOR ELECTRICAL WORK ONLY

L-32

PROJECT NUMBER & PHASE

UNIT

RELATIVE BORDER SCALE IS IN INCHES

USERNAME => ...\\coryr4136320 - 032.dgn

BORDER LAST REVISED 8/5/2020

NOTES:

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- FOR LEGEND, ABBREVIATIONS AND NOTES, SEE SHEET E-1.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL SHEETS
07	VEN			XX XXX

REGISTERED ELECTRICAL ENGINEER

DATE

PLANS APPROVAL DATE

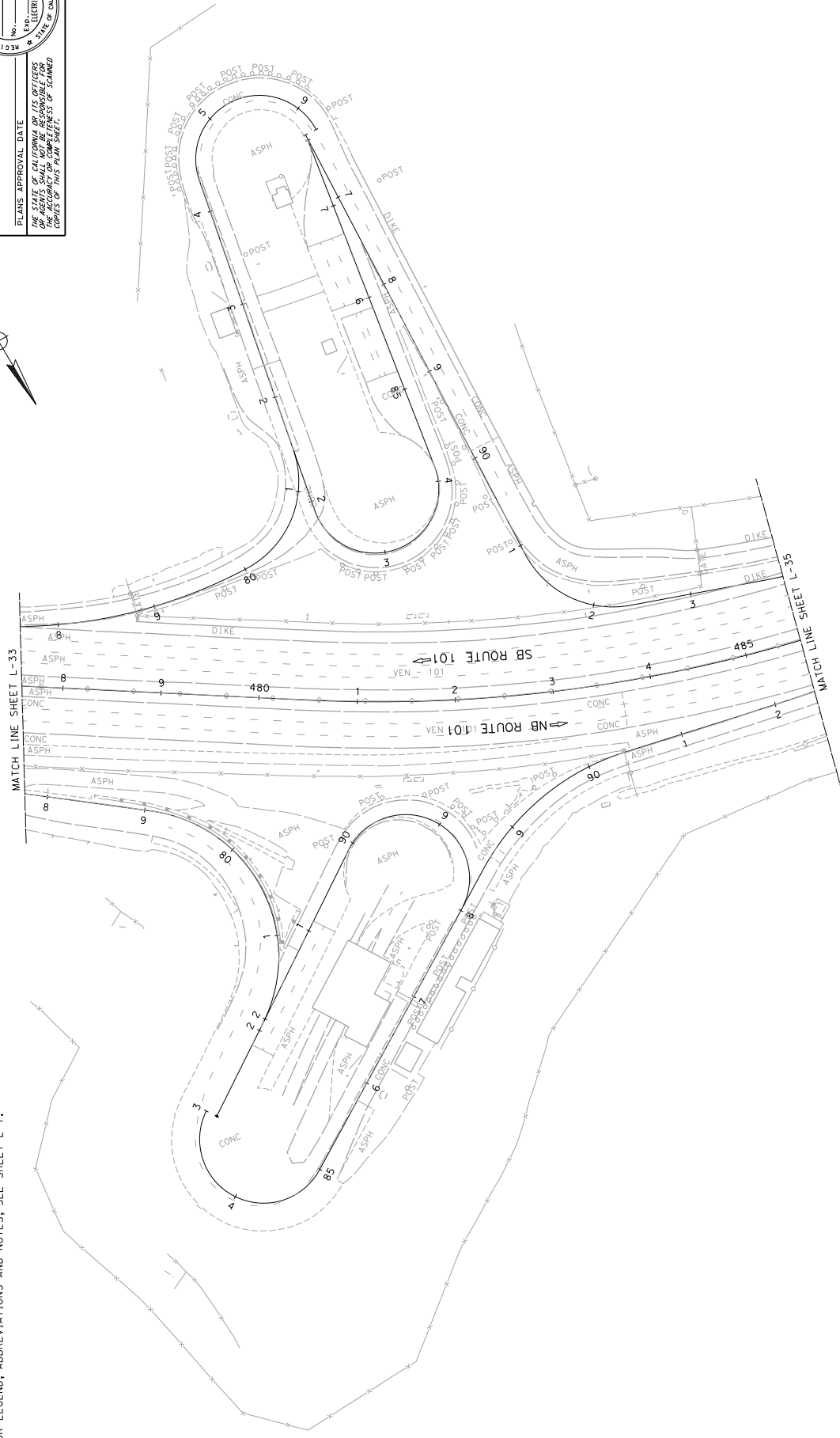
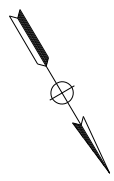
PROFESSIONAL ENGINEER

NO.

EXPIRATION DATE

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LAYOUT

SCALE 1" = 50'

L-34

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NOTES:

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2. FOR LEGEND, ABBREVIATIONS AND NOTES, SEE SHEET E-1.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
07	VEN			XX XXX

REGISTERED ELECTRICAL ENGINEER	DATE
PLANS APPROVAL DATE	

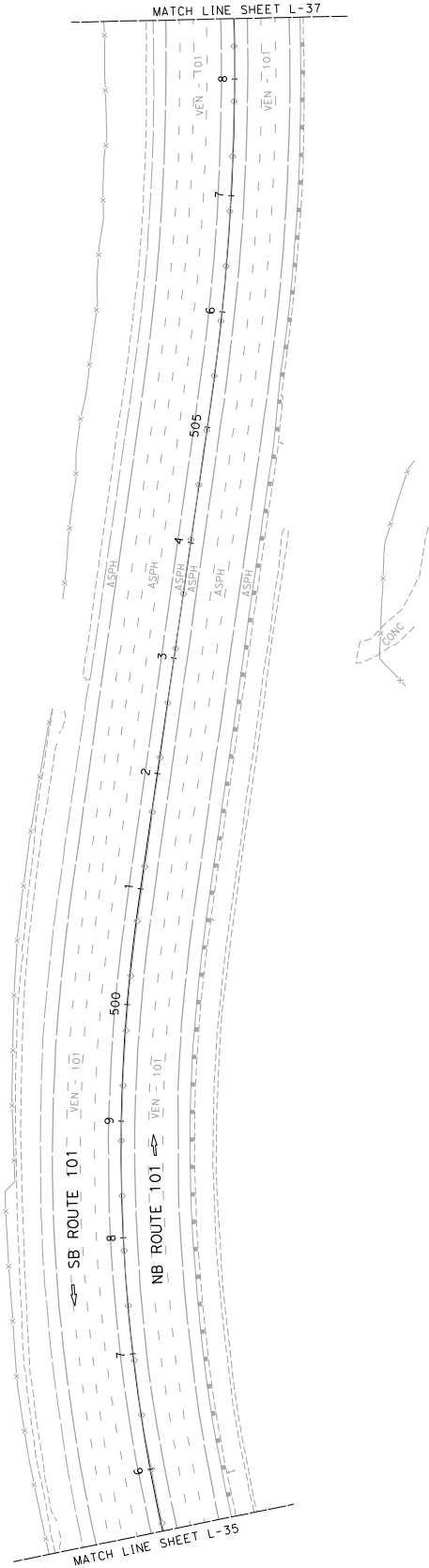
PROFESSIONAL ENGINEER

NO. _____

EXP. _____

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2. FOR LEGEND, ABBREVIATIONS AND NOTES, SEE SHEET E-1.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
07	VEN			XX XXX

REGISTERED ELECTRICAL ENGINEER	DATE
PLANS APPROVAL DATE	

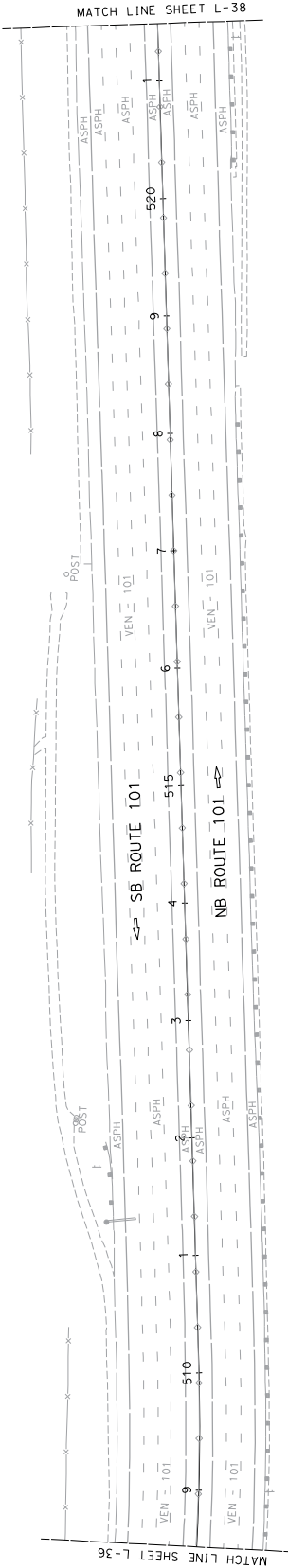
PROFESSIONAL ENGINEER

NO. _____

EXP. _____

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LAYOUT

SCALE 1" = 50'

L-37

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PROJECT NUMBER & PHASE

UNIT

RELATIVE BORDER SCALE
IS IN INCHES

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DON FILE => ... \cayote\38320 - 037.dgn

BORDER LAST REVISED 8/5/2020

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT
RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

2. FOR LEGEND, ABBREVIATIONS AND NOTES, SEE SHEET E-1.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
07	VEN			XX XXX

REGISTERED ELECTRICAL ENGINEER	DATE
PLANS APPROVAL DATE	

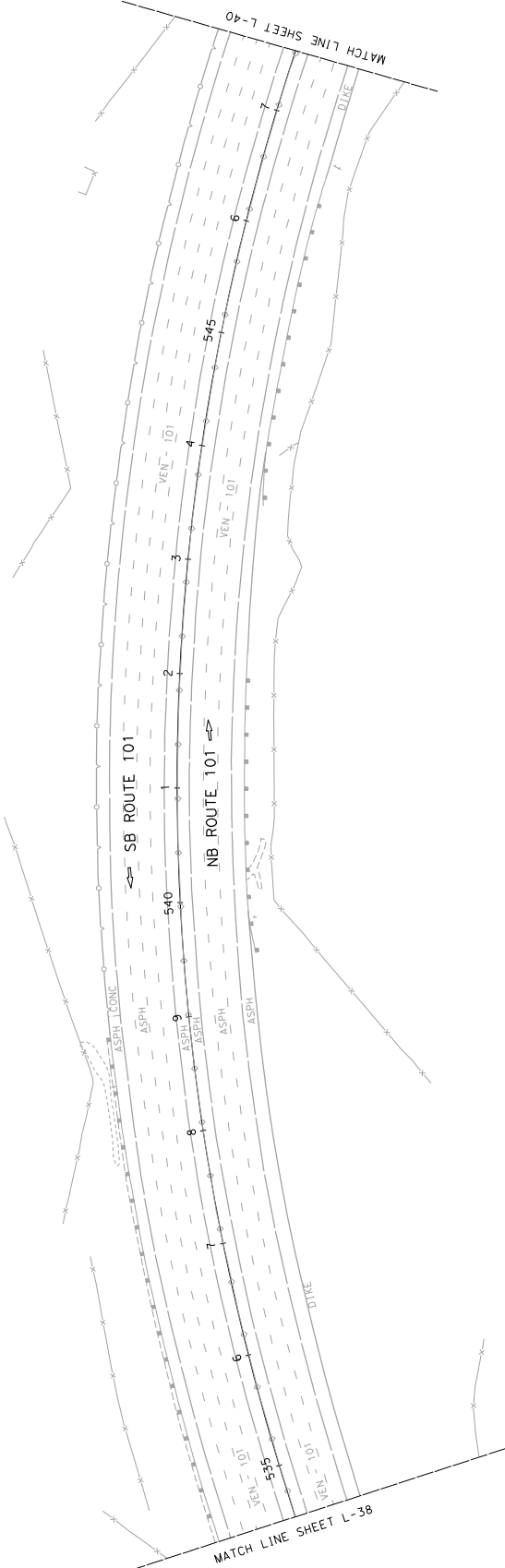
PROFESSIONAL ENGINEER

NO. _____

EXP. _____

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LAYOUT

SCALE 1" = 50'

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L-39

PROJECT NUMBER & PHASE

UNIT

3

RELATIVE BORDER SCALE
IS IN INCHES

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BORDER LAST REVISED 8/5/2020

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

2. FOR LEGEND, ABBREVIATIONS AND NOTES, SEE SHEET E-1.

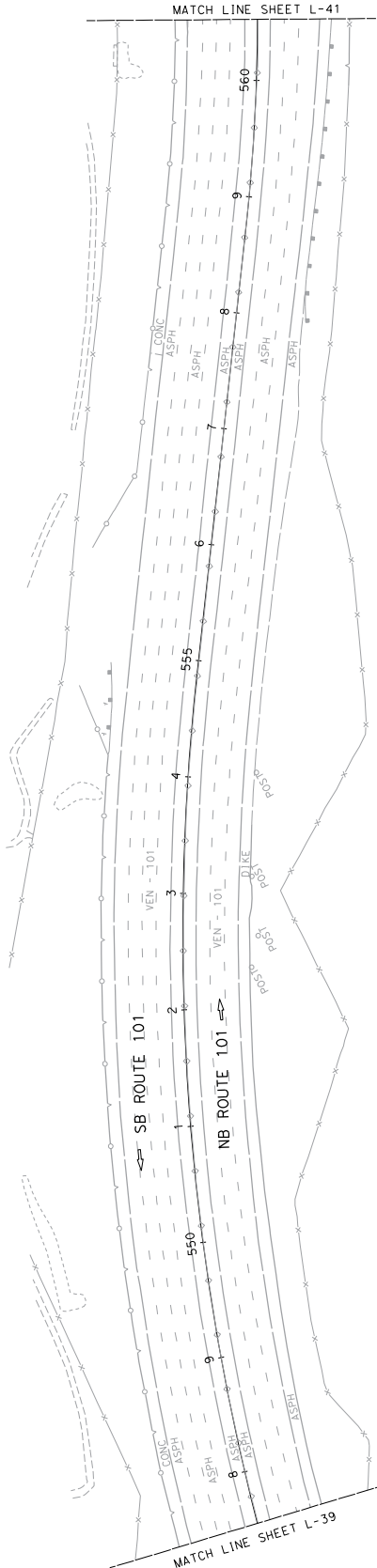
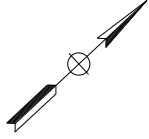
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
07	VEN			XX XXX

REGISTERED ELECTRICAL ENGINEER DATE

PLANS APPROVAL DATE

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PROFESSIONAL ENGINEER No. ELEC. STATE OF CALIFORNIA



LAYOUT

SCALE 1" = 50'

L-40

APPROVED FOR ELECTRICAL WORK ONLY

PROJECT NUMBER & PHASE	UNIT	RELATIVE BORDER SCALE IS IN INCHES
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BORDER LAST REVISED 8/5/2020

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

2. FOR LEGEND, ABBREVIATIONS AND NOTES, SEE SHEET E-1.

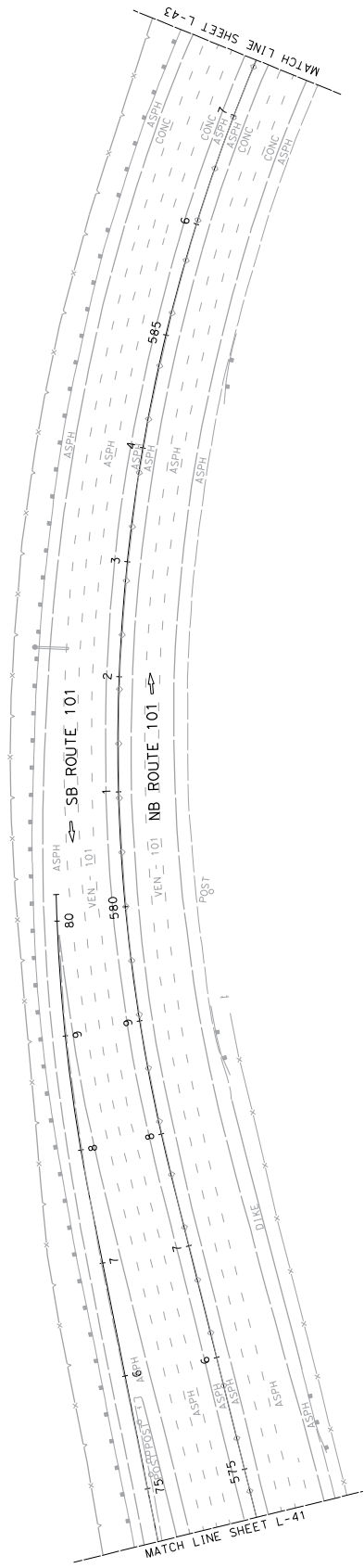
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
07	VEN		XX	XXX

REGISTERED ELECTRICAL ENGINEER DATE

PLANS APPROVAL DATE

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PROFESSIONAL ENGINEER No. ELEC. STATE OF CALIFORNIA



LAYOUT

SCALE 1" = 50'

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RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

2. FOR LEGEND, ABBREVIATIONS AND NOTES, SEE SHEET E-1.

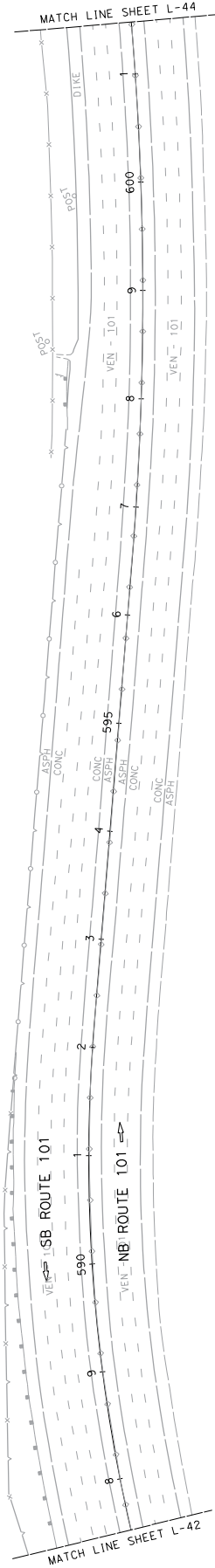
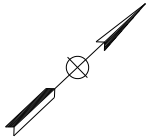
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
07	VEN			XX XXX

REGISTERED ELECTRICAL ENGINEER DATE

PLANS APPROVAL DATE

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No. _____
Exp. _____
STATE OF CALIFORNIA



LAYOUT

SCALE 1" = 50'

L-43

APPROVED FOR ELECTRICAL WORK ONLY

PROJECT NUMBER & PHASE

UNIT

RELATIVE BORDER SCALE
IS IN INCHES

USERNAME =>
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NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

2. FOR LEGEND, ABBREVIATIONS AND NOTES, SEE SHEET E-1.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
07	VEN			XX XXX

REGISTERED ELECTRICAL ENGINEER

DATE

PLANS APPROVAL DATE

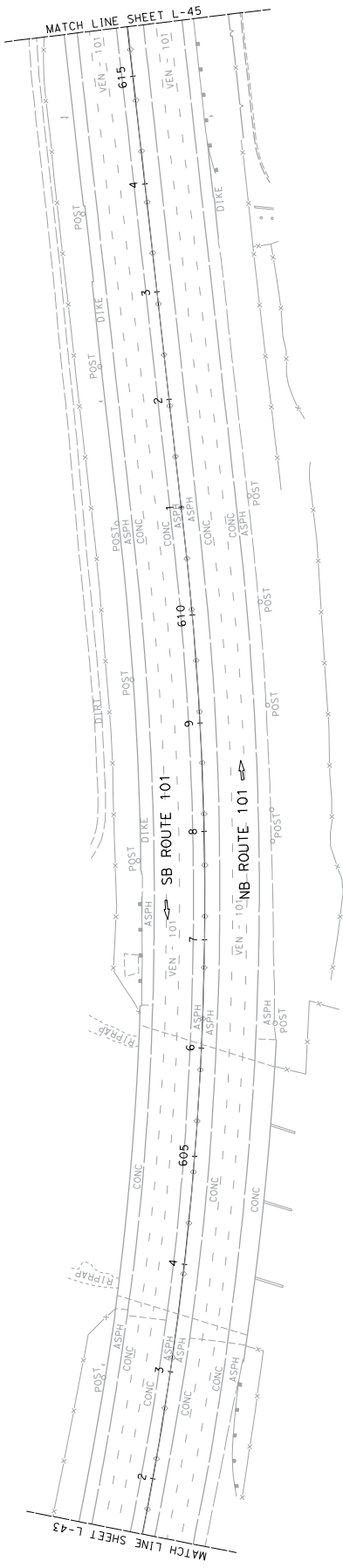
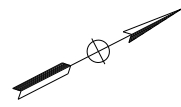
PROFESSIONAL ENGINEER

NO.

EXP.

REGISTERED IN STATE OF CALIFORNIA

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LAYOUT

SCALE 1" = 50'

APPROVED FOR ELECTRICAL WORK ONLY

PROJECT NUMBER & PHASE

UNIT

RELATIVE BORDER SCALE
IS IN INCHES

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DON FILE => ... \Layouts\36320 - 044.dgn

BORDER LAST REVISED 8/5/2020

NOTES:

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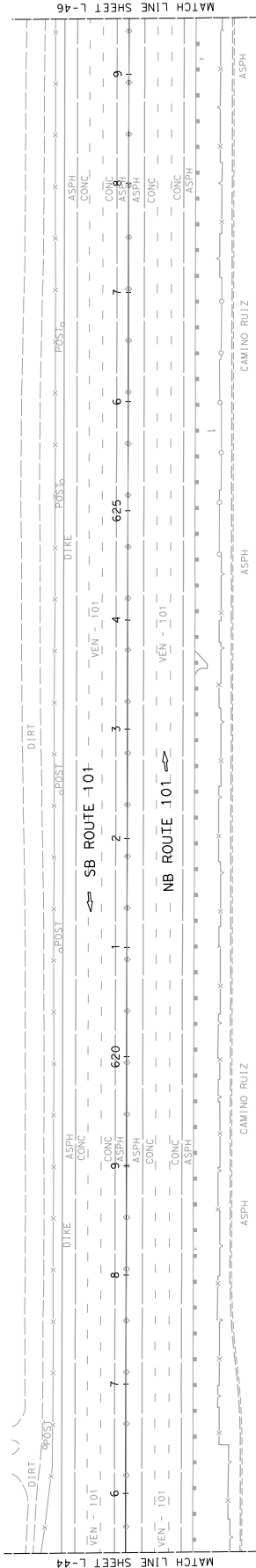
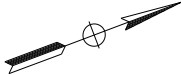
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
07	VEN			XX XXX

REGISTERED ELECTRICAL ENGINEER DATE

PLANS APPROVAL DATE

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PROFESSIONAL ENGINEER
No. _____
Exp. _____
STATE OF CALIFORNIA



LAYOUT

SCALE 1" = 50'

APPROVED FOR ELECTRICAL WORK ONLY

L-45

PROJECT NUMBER & PHASE

UNIT

RELATIVE BORDER SCALE
IS IN INCHES

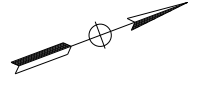
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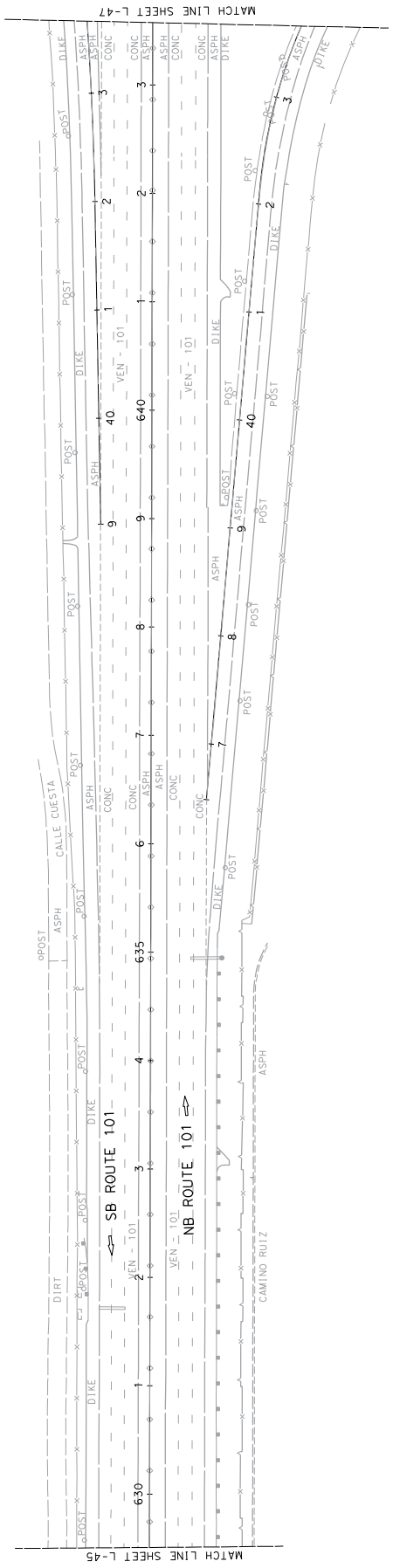
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SCALE 1" = 50'

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PROJECT NUMBER & PHASE

UNIT

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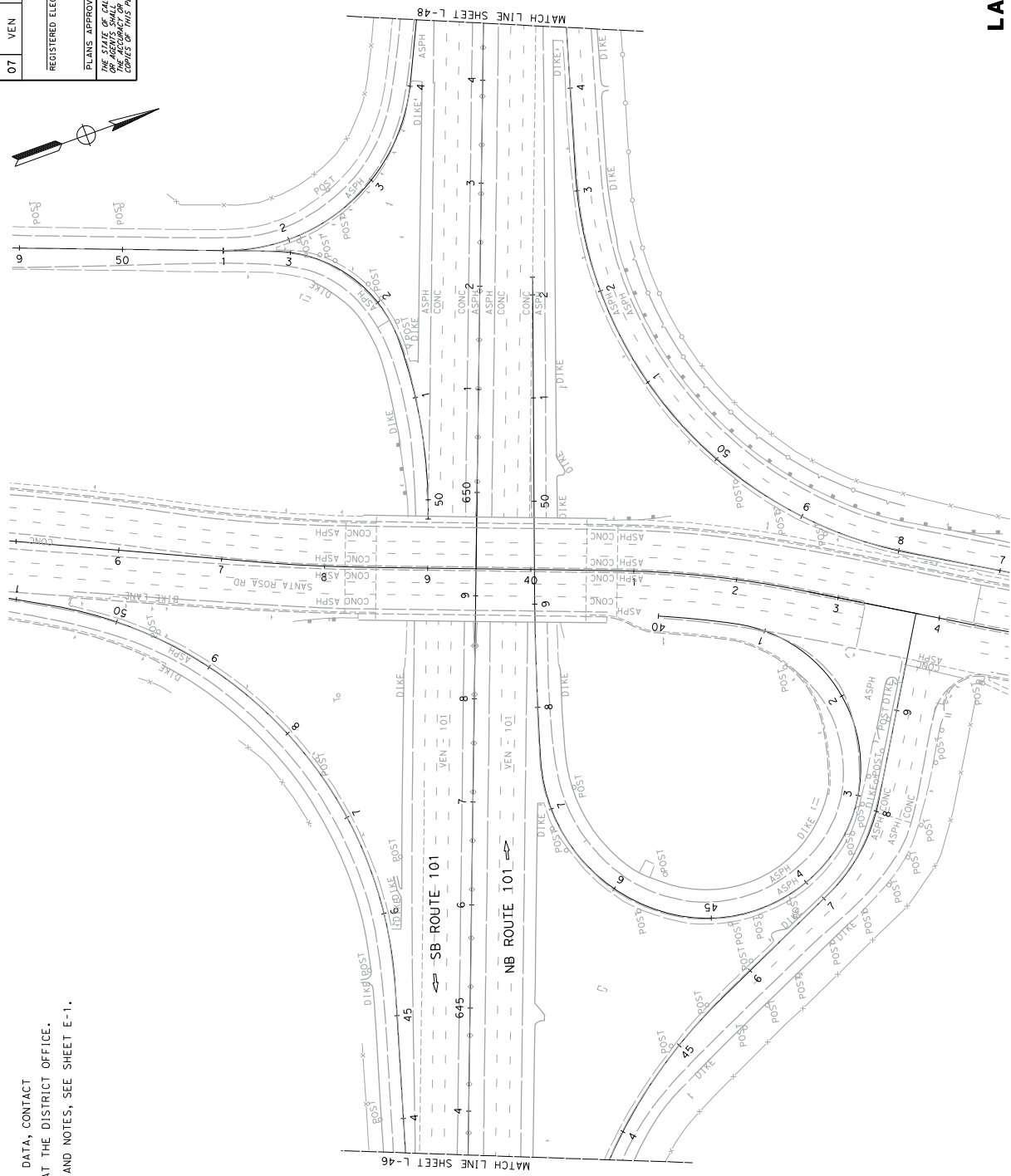
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07	VEN	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL SHEETS
					XX XXX

REGISTERED ELECTRICAL ENGINEER DATE _____

PLANS APPROVAL DATE _____



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07	VEN			XX

REGISTERED ELECTRICAL ENGINEER

DATE

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PROFESSIONAL ENGINEER

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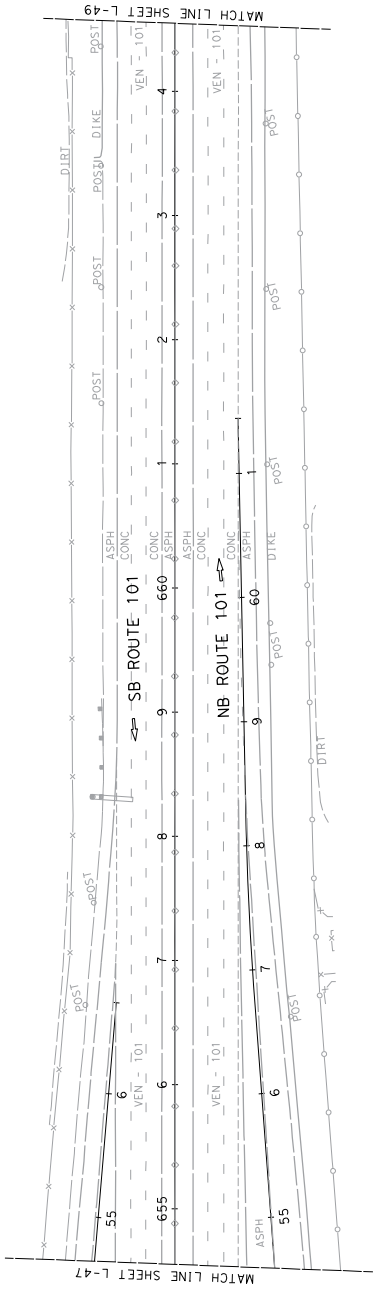
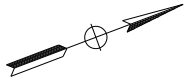
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L-48

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PROJECT NUMBER & PHASE

UNIT

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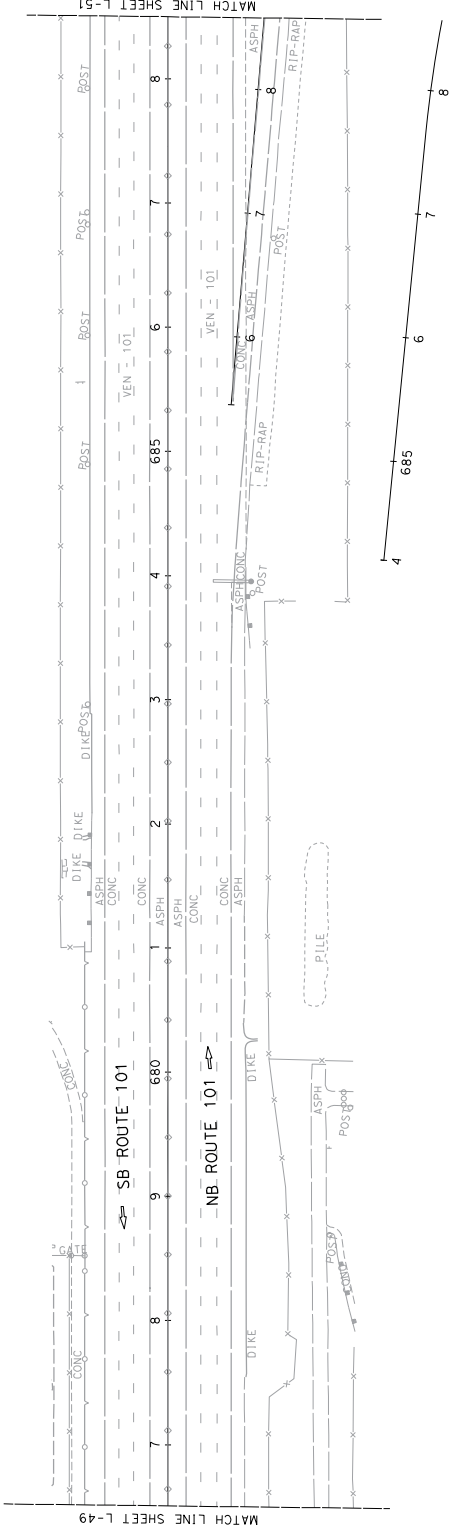
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
07	VEN			XX XXX

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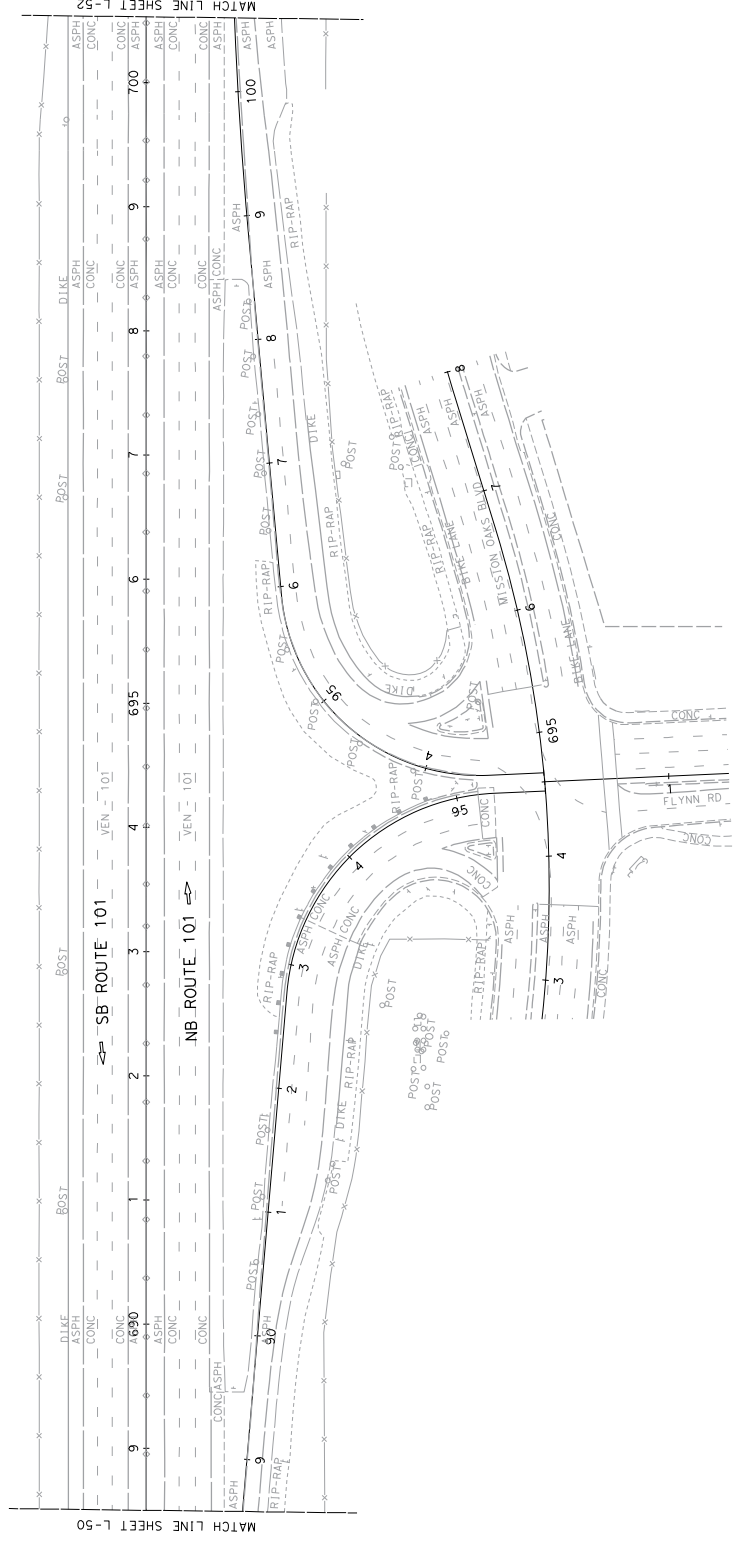
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07	VEN			XX XXX

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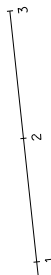
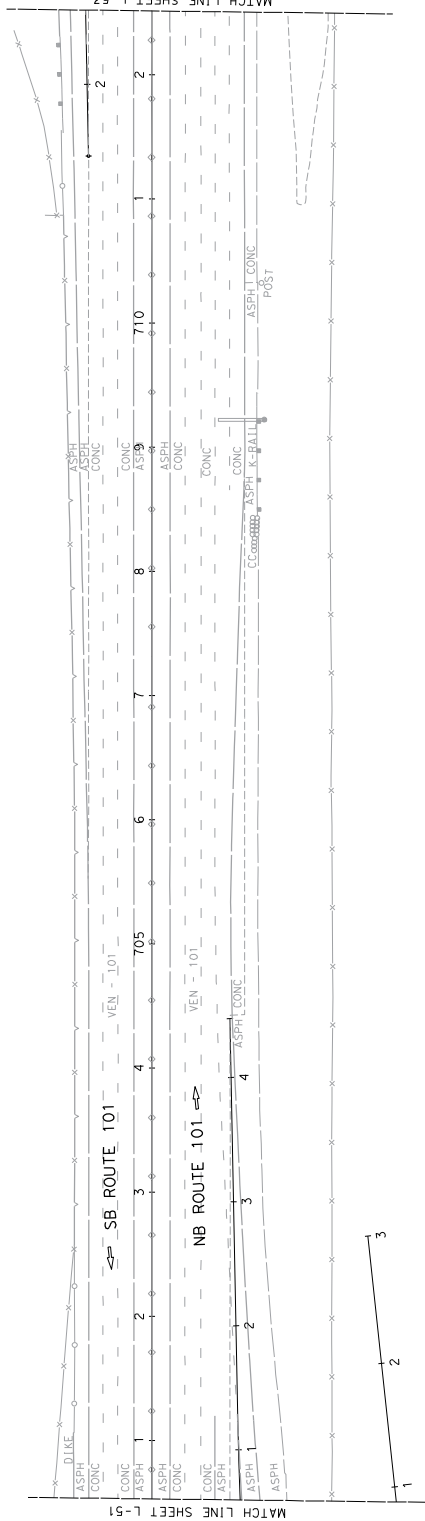
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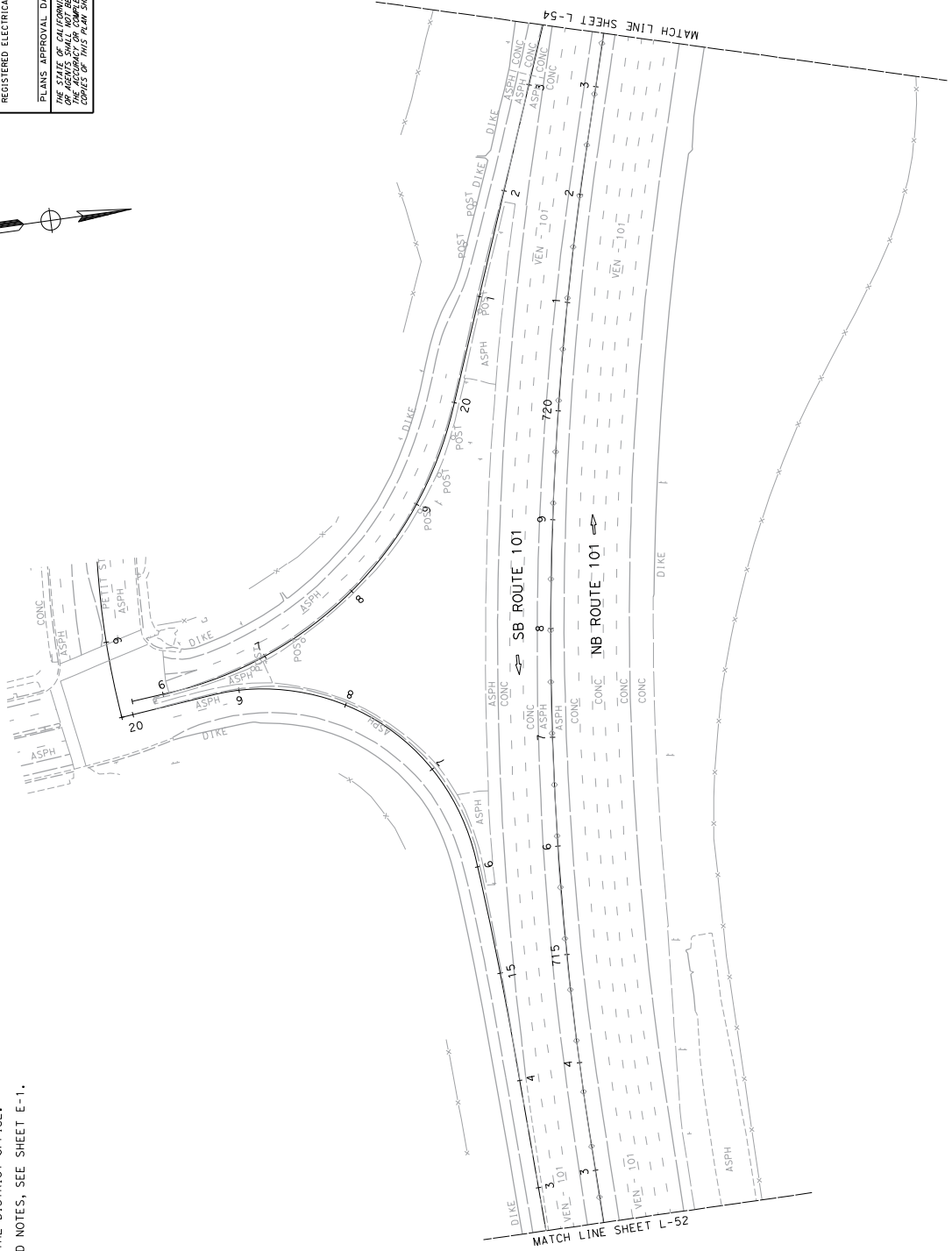
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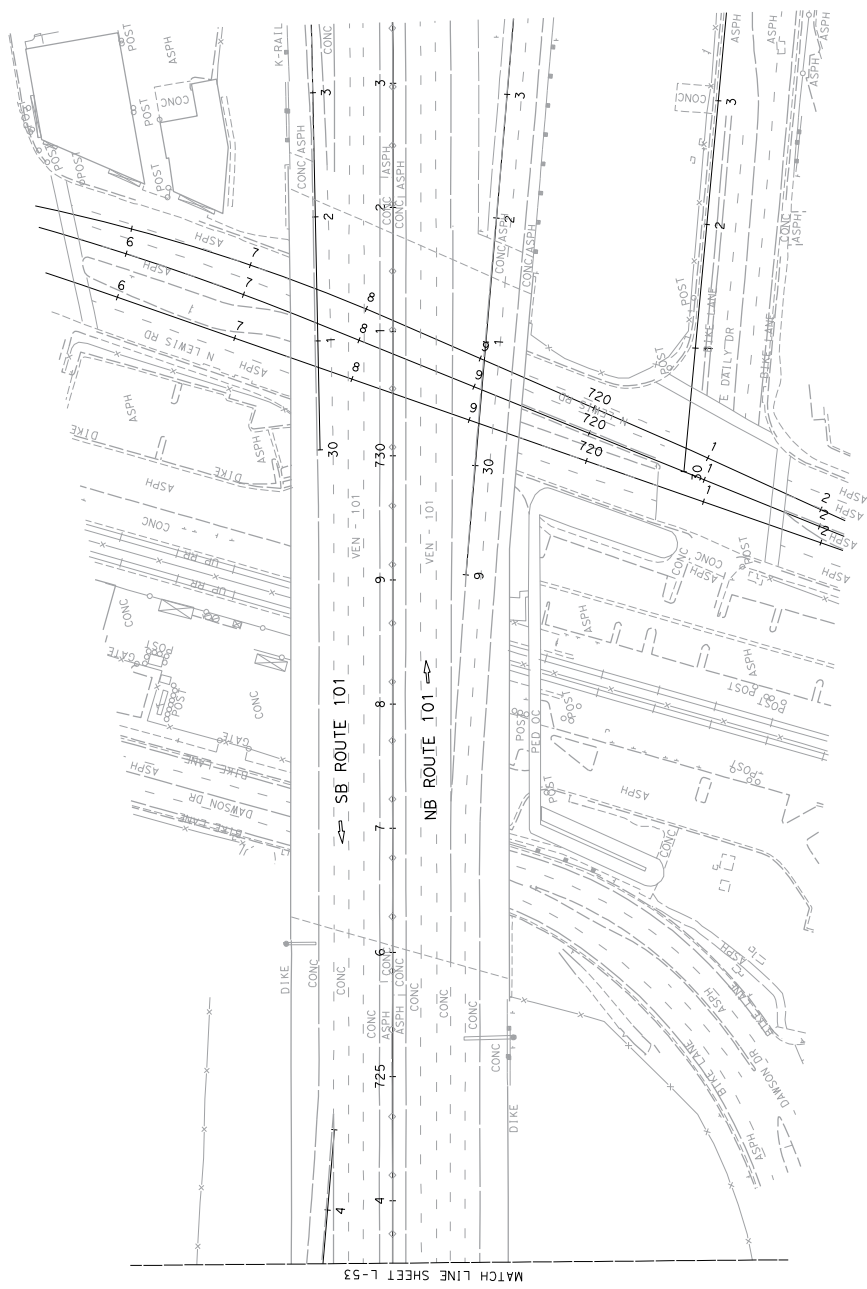
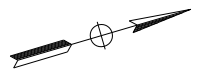
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ATTACHMENT D

Project Cost Estimates

PROJECT
PLANNING COST ESTIMATE©

EA: 07-36320

EA: 07-36320 PID: 719000312

PID: 719000312

District-County-Route: 07-Ven-101/23

PM: 3.0/13.8 & 3.34/4.2

Type of Estimate : Project Scope

Program Code : SHOPP 20.XX.201.31SHOPPMobility315Program

Project Limits : Ven 101 PM 3.0/13.8, Ven 23 PM 3.34/4.20, LARTMC at LA 2 PM R18.7, North Hollywood HUB at LA 101 PM 11.8

Project Description: TMS Upgrade at VEN 101 3.0/13.8, Ven 23 3.34/4.20, LARTMC, NHD HUB

Scope : Upgrade and install fiber communication system, CCTV, Traffic Census Station, Connector Metering, CMS, and TMS for Technology life cycle replacement

Alternative : Alternative # 1

SUMMARY OF PROJECT COST ESTIMATE

	Current Year Cost	Escalated Cost
TOTAL ROADWAY COST	\$ 36,120,500	\$ 42,253,657
TOTAL STRUCTURES COST	\$ -	\$ -
SUBTOTAL CONSTRUCTION COST	\$ 36,120,500	\$ 42,253,657
TOTAL RIGHT OF WAY COST	\$ 90,000	\$ 104,000
TOTAL CAPITAL OUTLAY COSTS	\$ 36,211,000	\$ 42,358,000
PA/ED SUPPORT	\$ 1,460,000	\$ 1,460,000
PS&E SUPPORT	\$ 4,379,000	\$ 4,379,000
RIGHT OF WAY SUPPORT	\$ 41,000	\$ 41,000
CONSTRUCTION SUPPORT	\$ 5,494,000	\$ 6,570,000
TOTAL SUPPORT COST	\$ 11,374,000	\$ 12,450,000
TOTAL PROJECT COST	\$ 47,600,000	\$ 54,900,000

Programmed Amount

Date of Estimate (Month/Year) Month / Year
1 / 2024

Estimated Construction Start (Month/Year) Month / Year
10 / 2025

Number of Working Days = 500

Estimated Mid-Point of Construction (Month/Year) Month / Year
10 / 2026

Estimated Construction End (Month/Year) Month / Year
10 / 2027

Number of Plant Establishment Days 0

Estimated Project Schedule

PID Approval	June 30 - 2020
PA/ED Approval	March, 2024
PS&E	January, 2025
RTL	February, 2025
Begin Construction	October, 2025
CCA	October, 2027

Reviewed by District O.E. or
Cost Estimate Certifier

Patrick Lui

1/12/2024

(213) 268-6132

Office Engineer / Cost Estimate Certifier

Date

Phone

Approved by Project Manager

David Miraany

1/17/2024

(213) 760-6800

Project Manager

Date

Phone

I. ROADWAY ITEMS SUMMARY

Section		Cost
i, CCTV, Traffic Census Station, Connector Metering, CMS, and TMS for Technology life cycle replacement		
1	Earthwork	\$ 25,000
2	Pavement Structural Section	\$ -
3	Drainage	\$ -
4	Specialty Items	\$ 1,323,700
5	Environmental	\$ 1,058,400
6	Traffic Items	\$ 24,277,800
7	Detours	\$ -
8	Minor Items	\$ 266,900
9	Roadway Mobilization	\$ 1,617,200
10	Supplemental Work	\$ 1,381,100
11	State Furnished	\$ 1,539,100
12	Time-Related Overhead	\$ 1,347,600
13	Total Roadway Contingency	\$ 3,283,700
TOTAL ROADWAY ITEMS		\$ 36,120,500

Estimate Prepared By : Nathan Sy/Transportation Engr 10/19/2021 213-269-1587
 Name and Title Date Phone

Estimate Reviewed By : Patrick P. Lui/ Project Engineer 10/19/2021 213-628-6132
 Name and Title Date Phone

By signing this estimate you are attesting that you have discussed your project with all functional units and have incorporated all their comments or have discussed with them why they will not be incorporated.

SECTION 1: EARTHWORK

Item code		Unit	Quantity	Unit Price (\$)		Cost
190101	Roadway Excavation	CY	x	= \$		-
19010X	Roadway Excavation (Insert Type) ADL	CY	x	= \$		-
19801X	Imported Borrow	CY/TON	x	= \$		-
194001	Ditch Excavation	CY	x	= \$		-
192037	Structure Excavation (Retaining Wall)	Station, Connector Meter	x	= \$		-
193013	Structure Backfill (Retaining Wall)	CY	x	= \$		-
193031	Pervious Backfill Material (Retaining Wall)	CY	x	= \$		-
17010X	Clearing & Grubbing	LS/ACRE	1	x 25,000.00	= \$	25,000
100100	Develop Water Supply	LS	x	= \$		-
19801X	Imported Borrow	CY/TON	x	= \$		-
21012X	Duff	ACRE/SQFT	x	= \$		-
XXXXXX	Maintenance Vehicle Pullout	EA	x	= \$		-
XXXXXX	Some Item	Unit	x	= \$		-

TOTAL EARTHWORK SECTION ITEMS	\$	25,000
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SECTION 2: PAVEMENT STRUCTURAL SECTION

Item code		Unit	Quantity	Unit Price (\$)		Cost
401050	Jointed Plain Concrete Pavement	CY	x	= \$		-
400050	Continuously Reinforced Concrete Pavement	CY	x	= \$		-
390132	Hot Mix Asphalt (Type A)	TON	x	= \$		-
26020X	Class 2 Aggregate Base	TON/CY	x	= \$		-
250401	Class 4 Aggregate Subbase	CY	x	= \$		-
414240	Isolation Joint Seal (Asphalt Rubber)	LF	x	= \$		-
414241	Isolation Joint Seal (Silicone)	LF	x	= \$		-
280010	Rapid Strength Concrete Base	CY	x	= \$		-
410096	Drill and Bond (Dowel Bar)	EA	x	= \$		-
390137	Rubberized Hot Mix Asphalt (Gap Graded)	TON	x	= \$		-
391006	Asphalt Binder (Geosynthetic Pavement Interlayer)	TON	x	= \$		-
290201	Asphalt Treated Permeable Base	CY	x	= \$		-
374002	Asphaltic Emulsion (Fog Seal Coat)	TON	x	= \$		-
397005	Tack Coat	TON	x	= \$		-
377501	Slurry Seal	TON	x	= \$		-
374493	Polymer Asphaltic Emulsion (Seal Coat)	TON	x	= \$		-
370001	Sand Cover (Seal)	TON	x	= \$		-
731530	Minor Concrete (Textured Paving)	CY	x	= \$		-
731502	Minor Concrete (Miscellaneous Construction)	CY	x	= \$		-
39407X	Place Hot Mix Asphalt Dike (Insert Type)	LF	x	= \$		-
398100	Remove Asphalt Concrete Dike	LF	x	= \$		-
420201	Grind Existing Concrete Pavement	SQYD	x	= \$		-
398300	Remove Base and Surfacing	CY	x	= \$		-
390095	Replace Asphalt Concrete Surfacing	CY	x	= \$		-
41800X	Remove Concrete Pavement	SQYD/CY	x	= \$		-
394090	Place Hot Mix Asphalt (Miscellaneous Area)	SQYD	x	= \$		-
398200	Cold Plane Asphalt Concrete Pavement	SQYD	x	= \$		-
846046	6" Rumble Strip (Asphalt Concrete Pavement)	STA	x	= \$		-
846049	6" Rumble Strip (Concrete Pavement)	STA	x	= \$		-
846051	12" Rumble Strip (Asphalt Concrete Pavement)	STA	x	= \$		-
846052	12" Rumble Strip (Concrete Pavement)	STA	x	= \$		-
420102	Groove Existing Concrete Pavement	SQYD	x	= \$		-
394095	Roadside Paving (Miscellaneous Areas)	SQYD	x	= \$		-
390136	Minor Hot Mix Asphalt	TON	x	= \$		-
XXXXXX	Some Item	Unit	x	= \$		-

TOTAL PAVEMENT STRUCTURAL SECTION ITEMS	\$	-
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SECTION 3: DRAINAGE

Item code		Unit	Quantity	Unit Price (\$)	Cost
71013X	Remove Culvert	EA/LF	x	= \$	-
710240	Modify Inlet	EA	x	= \$	-
710370	Sand Backfill	CY	x	= \$	-
71010X	Abandon Culvert	EA/LF	x	= \$	-
710196	Adjust Inlet	Station, Connector Metr	x	= \$	-
710262	Cap Inlet	EA	x	= \$	-
510501	Minor Concrete	CY	x	= \$	-
510502	Minor Concrete (Minor Structure)	CY	x	= \$	-
731627	Minor Concrete (Curb, Sidewalk, and Curb Ramp)	CY	x	= \$	-
6101XX	XX" Alternative Pipe Culvert (Insert Type)	LF	x	= \$	-
6411XX	XX" Plastic Pipe	LF	x	= \$	-
65XXXX	XX" Reinforced Concrete Pipe (Insert Type)	LF	x	= \$	-
6811XX	XX" Plastic Pipe (Edge Drain)	LF	x	= \$	-
6901XX	XX" Corrugated Steel Pipe Downdrain (0.XXX" Thic	LF	x	= \$	-
7006XX	XX" Corrugated Steel Pipe Inlet (0.XXX" Thick)	LF	x	= \$	-
7032XX	XX" Corrugated Steel Pipe Riser (0.XXX" Thick)	LF	x	= \$	-
7050XX	XX" Steel Flared End Section	EA	x	= \$	-
703233	Grated Line Drain	LF	x	= \$	-
72XXXX	Rock Slope Protection (Type and Method)	CY/TON	x	= \$	-
72901X	Rock Slope Protection Fabric (Insert Class)	SQYD	x	= \$	-
721420	Concrete (Ditch Lining)	CY	x	= \$	-
721430	Concrete (Channel Lining)	CY	x	= \$	-
750001	Miscellaneous Iron and Steel	LB	x	= \$	-
XXXXXX	Additional Drainage	LS	x	= \$	-

TOTAL DRAINAGE ITEMS	\$	-
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SECTION 4: SPECIALTY ITEMS

Item code		Unit	Quantity	Unit Price (\$)	Cost
520103	Bar Reinforced Steel (Retaining Wall)	LB	x	= \$	-
5100XX	Structural Concrete	CY	x	= \$	-
510060	Structural Concrete, Retaining Wall	CY	x	= \$	-
080050	Progress Schedule (Critical Path Method)	LS	x	= \$	-
582001	Sound Wall (Masonry Block)	SQFT	x	= \$	-
510530	Minor Concrete (Wall)	CY	x	= \$	-
731504	Minor Concrete (Curb&Gutter)	CY	30	x 2,000.00	= \$ 60,000
60005X	Remove Sound Wall	LF/LS/SQFT	x	= \$	-
070030	Lead Compliance Plan	LS	1	x 3,000.00	= \$ 3,000
141120	Treated Wood Waste	LB	x	= \$	-
150771	Remove AC Dike	LF	2,650	x 5.00	= \$ 13,250
839750	Remove Barrier	LF	x	= \$	-
731710	Remove Concrete Curb	LF	410	x 25.00	= \$ 10,250
839752	Remove Guardrail	LF	x	= \$	-
839753	Remove Metal Beam Guard Railing	LF	500	x 20.00	= \$ 10,000
710167	Remove Flared End Section	EA	x	= \$	-
8000XX	Chain Link Fence (Insert Type)	LF	x	= \$	-
80XXXX	XX" Chain Link Gate (Type CL-X)	EA	x	= \$	-
832070	Vegetation Control (Minor Concrete)	SQYD	1,500	x 100.00	= \$ 150,000
8320XX	Midwest Guardrail System (Steel Post)	LF	3,400	x 50.00	= \$ 170,000
839301	Single Thrie Beam Barrier	LF	x	= \$	-
839310	Double Thrie Beam Barrier	LF	x	= \$	-
839521	Cable Railing	LF	x	= \$	-
839566	Terminal System (Type CAT)	EA	x	= \$	-
839584	Alternative In-line Terminal System	EA	15	x 6,000.00	= \$ 90,000
839585	Alternative Flared Terminal System	EA	x	= \$	-
4906XX	XX" Cast-In-Drilled-Hole Concrete Piling	LF	x	= \$	-
8396XX	Crash Cushion (Insert Type)	EA	x	= \$	-
8331XX	Concrete Barrier (Insert Type)	LF	x	= \$	-
575005	Retaining Wall (Timber) with Wire Railing	LF	x	= \$	-
475010	Retaining Wall (Masonry Wall)	SQFT	x	= \$	-
511035	Architectural Treatment	SQFT	x	= \$	-
780460	Anti-Graffiti Coating	SQFT	x	= \$	-
780450	Rock Stain	SQFT	x	= \$	-
4730XX	Reinforced Concrete Crib Wall (Insert Type)	SQFT	x	= \$	-
83954X	Transition Railing (Insert Type)	EA	x	= \$	-
780440	Prepare and Stain Concrete	SQFT	x	= \$	-
839561	Rail Tensioning Assembly	EA	x	= \$	-
83958X	End Anchor Assembly (Type X)	EA	17	x 1,600.00	= \$ 27,200
83958X	Maintenance Vehicle Pullout	EA	20	x 39,500.00	= \$ 790,000

TOTAL SPECIALTY ITEMS	\$	1,323,700
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Effective immediately, districts must input estimated item quantities in blue text above in the PRSM database for the pay items listed in the Design Memo, dated April 9, 2018, when Project Report is approved (Milestone 200). [Link to Design Memo.](#)

SECTION 5: ENVIRONMENTAL**5A - ENVIRONMENTAL MITIGATION**

Item code	Unit	Quantity	Unit Price (\$)	Cost
Biological Mitigation (on-site)	LS	x	= \$	-
Cultural Mitigation	LS	1	x 100,000.00	= \$ 100,000
Roadway Excavation (TypeZ-2, HW-ADL)	CY	1,800	x 160.00	= \$ 288,000
Lead Compliance Plan	Station, Cc	1	x 5,000.00	= \$ 5,000
Treated Wood Waste	LB	7,700	x 2.00	= \$ 15,400
80010X Temporary Fence (Insert Type)	LF	x	= \$	-
130670 Temporary Reinforced Silt Fence	LF	x	= \$	-
Subtotal Environmental Mitigation				\$ 408,400

5B - LANDSCAPE AND IRRIGATION

Item code	Unit	Quantity	Unit Price (\$)	Cost
20XXXX Highway Planting	LS	1	x 20,000.00	= \$ 20,000
208000 Irrigation System	LS	1	x 45,000.00	= \$ 45,000
204099 Plant Establishment Work	LS	1	x 18,000.00	= \$ 18,000
20XXXX Follow-up Landscape Project	LS	x	= \$	-
206405 Remove Irrigation Facility	LS	x	= \$	-
204096 Maintain Existing Planted Areas	LS	x	= \$	-
206400 Check and Test Existing Irrigation Facilities	LS	x	= \$	-
21011X Imported Topsoil	CY/TON	x	= \$	-
200114 Rock Blanket	SQFT/SQYD	x	= \$	-
200122 Weed Germination	SQYD	x	= \$	-
995100 Water Meter Charges	LS	x	= \$	-
2087XX XX" Conduit (Use for Irrigation x-overs)	LF	x	= \$	-
20890X Extend X" Conduit (Use for Extension of Irrigation x-overs)	LF	x	= \$	-
Replace Damaged Landscape with In-kind	LS	1	x 150,000.00	= \$ 150,000
Subtotal Landscape and Irrigation				\$ 233,000

5C - EROSION CONTROL

Item code	Unit	Quantity	Unit Price (\$)	Cost
211111 Permanent Erosion Control Establishment Work	LS	x	= \$	-
210010 Move-In/Move-Out (Erosion Control)	EA	x	= \$	-
210350 Fiber Rolls	LF	x	= \$	-
210360 Compost Sock	LF	x	= \$	-
2102XX Rolled Erosion Control Product (Insert Type)	SQFT	x	= \$	-
21025X Bonded Fiber Matrix	SQFT/ACRE	x	= \$	-
210300 Hydromulch	SQFT	x	= \$	-
210420 Straw	SQFT	x	= \$	-
210430 Hydroseed	SQFT	x	= \$	-
210610 Compost	CY	x	= \$	-
210630 Incorporate Materials	SQFT	x	= \$	-
Subtotal Erosion Control				\$ -

5D - NPDES

Item code	Unit	Quantity	Unit Price (\$)	Cost
130300 Prepare SWPPP	LS	x	= \$	-
130200 Prepare WPCP	LS	1	x 5,000.00	= \$ 5,000
XXXXX Temporary Construction Site BMPs	LS	x	= \$	-
130100 Job Site Management	LS	1	x 412,000.00	= \$ 412,000
130330 Storm Water Annual Report	EA	x	= \$	-
130310 Rain Event Action Plan	EA	x	= \$	-
130320 Storm Water Sampling and Analysis Day	EA	x	= \$	-
130520 Temporary Hydraulic Mulch	SQYD	x	= \$	-
130550 Temporary Hydroseed	SQYD	x	= \$	-
130505 Move-In/Move-Out (Temporary Erosion Control)	EA	x	= \$	-
130640 Temporary Fiber Roll	LF	x	= \$	-
130900 Temporary Concrete Washout	LS	x	= \$	-
130710 Temporary Construction Entrance	EA	x	= \$	-
130610 Temporary Check Dam	LF	x	= \$	-
130620 Temporary Drainage Inlet Protection	EA	x	= \$	-
130730 Street Sweeping	LS	x	= \$	-
Subtotal NPDES				\$ 417,000

TOTAL ENVIRONMENTAL	\$ 1,058,400
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Supplemental Work for NPDES

066595 Water Pollution Control Maintenance Sharing*	LS	1	x 3,000.00	= \$ 3,000
066596 Additional Water Pollution Control**	LS	x	= \$	-
066597 Storm Water Sampling and Analysis***	LS	x	= \$	-
XXXXXX Some Item	LS	x	= \$	-
Subtotal Supplemental Work for NDPS				\$ 3,000

*Applies to all SWPPPs and those WPCPs with sediment control or soil stabilization BMPs.

**Applies to both SWPPPs and WPCP projects.

*** Applies only to project with SWPPPs.

SECTION 6: TRAFFIC ITEMS**6A - Traffic Electrical**

Item code	Unit	Quantity	Unit Price (\$)	Cost
870200 Lighting System	LS	x	= \$	-
870300 Sign Illumination System	LS	x	= \$	-
872133 Modifying Signal and Lighting Systems	LS	1 x	1,860,000.00 = \$	1,860,000
860990 Closed Circuit Television System with Foundation (New)	EA	12 x	120,000.00 = \$	1,440,000
8609XX Closed Circuit Television System (Upgrade)	EA	1 x	60,000.00 = \$	60,000
8609XX Closed Circuit Television System for Traffic Signal (Upgrade)	EA	15 x	90,000.00 = \$	1,350,000
872134 Ramp Metering System (Technology Upgrade)	LS	1 x	750,000.00 = \$	750,000
87181X Interconnection Conduit and Cable	LF/LS	x	= \$	-
5602XX Furnish Sign Structure (Type X)	LB	35,000 x	5.00 = \$	175,000
5602XX Install Sign Structure (Type X)	LB	35,000 x	2.00 = \$	70,000
4980XX 60" CIDHC Pile (Sign Foundation)	LF	50 x	1,500.00 = \$	75,000
87011X Inductive Loop Detector	EA/LS	x	= \$	-
872135 Modifying Traffic Monitoring Stations	EA	12 x	120,000.00 = \$	1,440,000
86080X Weigh-In-Motion - Replace	EA	2 x	1,000,000.00 = \$	2,000,000
XXXXX Furnish and Install New Connector Meter	EA	2 x	1,000,000.00 = \$	2,000,000
XXXXX Temporary Ramp Detection and Communication	LS	1 x	200,000.00 = \$	200,000
872150A Census Station	EA	5 x	100,000.00 = \$	500,000
XXXXX Upgrade Changeable Message Sign	EA	1 x	100,000.00 = \$	100,000
XXXXX Furnish and Install New Changeable Message Sign	EA	2 x	300,000.00 = \$	600,000
XXXXX Upgrade Communication Hub	EA	3 x	30,000.00 = \$	90,000
86XXXX Fiber Optic Conduit System	LS	1 x	10,000,000.00 = \$	10,000,000
XXXXX Utility Services including Power Line Installation and Elements During Construction	LS	1 x	300,000.00 = \$	300,000
<i>Subtotal Traffic Electrical</i>				<i>\$ 23,040,000</i>

6B - Traffic Signing and Striping

Item code	Unit	Quantity	Unit Price (\$)	Cost
820840 Roadside Sign - One Post	EA	x	= \$	-
820850 Roadside Sign - Two Post	EA	x	= \$	-
5602XX Furnish Sign Structure (Insert Type)	SQFT	x	= \$	-
820890 Install Sign Panel on Existing Frame	SQFT	x	= \$	-
846020 Remove Painted Traffic Stripe	LF	x	= \$	-
141102 Remove Yellow Painted Traffic Stripe (Hazardous \	LF	x	= \$	-
846025 Remove Painted Pavement Marking	SQFT	x	= \$	-
820250 Remove Roadside Sign	EA	x	= \$	-
820530 Reset Roadside Sign	EA	x	= \$	-
820610 Relocate Roadside Sign - One Post	EA	4 x	300.00 = \$	1,200
8101XX Relocate Roadside Sign - Two Post	EA	4 x	400.00 = \$	1,600
8101XX Delineator (Class X)	EA	300 x	50.00 = \$	15,000
840502 Thermoplastic Traffic Stripe (Enhanced Wet Night ')	LF	x	= \$	-
846012 Thermoplastic Crosswalk and Pavement Marking (Enhanced Wet Night Visibility)	SQFT	x	= \$	-
120090 Construction Area Signs	LS	1 x	50,000.00 = \$	50,000
84XXXX Permanent Pavement Delineation	LS	x	= \$	-
<i>Subtotal Traffic Signing and Striping</i>				<i>\$ 67,800</i>

6C - Traffic Management Plan

Item code	Unit	Quantity	Unit Price (\$)	Cost
12865X Portable Changeable Message Sign	EA/LS	2 x	\$ 30,000 = \$	60,000
<i>Subtotal Traffic Management Plan</i>				<i>\$ 60,000</i>

6C - Stage Construction and Traffic Handling

Item code	Unit	Quantity	Unit Price (\$)	Cost
120198 Plastic Traffic Drums	EA	x	= \$	-
12016X Channelizer (Insert Type)	EA	x	= \$	-
120116 Type II Barricade	EA	x	= \$	-
120120 Type III Barricade	EA	x	= \$	-
129100 Temporary Crash Cushion Module	EA	x	= \$	-
120100 Traffic Control System	LS	1 x	550,000.00 = \$	550,000
129110 Temporary Crash Cushion	LS	1 x	80,000.00 = \$	80,000
129000 Temporary Railing (Type K)	LF	40,000 x	12.00 = \$	480,000
120149 Temporary Pavement Marking (Paint)	SQFT	x	= \$	-
120152 Temporary Pavement Marking (Tape)	SQFT	x	= \$	-
8101XX Delineator (Insert Class)	EA	x	= \$	-
<i>Subtotal Stage Construction and Traffic Handling</i>				<i>\$ 1,110,000</i>

TOTAL TRAFFIC ITEMS	\$ 24,277,800
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SECTION 7: DETOURS

Includes constructing, maintaining, and removal

Item code		Unit	Quantity	Unit Price (\$)	Cost
190101	Roadway Excavation	CY	x	= \$	-
19801X	Imported Borrow	CY/TON	x	= \$	-
390132	Hot Mix Asphalt (Type A)	TON	x	= \$	-
26020X	Class 2 Aggregate Base	Station, Connector Metering,	x	= \$	-
250401	Class 4 Aggregate Subbase	CY	x	= \$	-
130620	Temporary Drainage Inlet Protection	EA	x	= \$	-
129000	Temporary Railing (Type K)	LF	x	= \$	-
128601	Temporary Signal System	LS	x	= \$	-
120149	Temporary Pavement Marking (Paint)	SQFT	x	= \$	-
80010X	Temporary Fence (Insert Type)	LF	x	= \$	-
XXXXXX	Some Item	LS	x	= \$	-

TOTAL DETOURS	\$	-
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SUBTOTAL SECTIONS 1 through 7	\$	26,684,900
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SECTION 8: MINOR ITEMS**8A - Americans with Disabilities Act Items**

ADA Items	0.0%	\$	-
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8B - Bike Path Items

Bike Path Items	0.0%	\$	-
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8C - Other Minor Items

Other Minor Items	1.0%	\$	266,849
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Total of Section 1-7	\$	26,684,900	x	1.0%	= \$	266,849
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TOTAL MINOR ITEMS	\$	266,900
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SECTIONS 9: ROADWAY MOBILIZATION

*

Item code						
999990	Total Section 1-8	\$	26,951,800	x	6%	= \$ 1,617,108

TOTAL ROADWAY MOBILIZATION	\$	1,617,200
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SECTION 10: SUPPLEMENTAL WORK

Item code		Unit	Quantity	Unit Price (\$)	Cost
066670	Payment Adjustments For Price Index Fluctuations	LS	1	x 2,000.00	= \$ 2,000
066094	Value Analysis	LS	1	x 10,000.00	= \$ 10,000
066070	Maintain Traffic	LS	1	x 150,000.00	= \$ 150,000
066919	Dispute Resolution Board	LS	1	x 15,000.00	= \$ 15,000
066921	Dispute Resolution Advisor	LS		x	= \$ -
090210	Hourly Off-Site Dispute Resolution Board Relat	LS	1	x 5,000.00	= \$ 5,000
066015	Federal Trainee Program	LS	1	x 14,000.00	= \$ 14,000
066610	Partnering	LS	1	x 50,000.00	= \$ 50,000
066204	Remove Rock and Debris	LS		x	= \$ -
066222	Locate Existing Crossover	LS	8	x 500.00	= \$ 4,000
20XXXX	Maintain Existing Irrigation/Planted Areas	LS	1	x 50,000.00	= \$ 50,000

Cost of NPDES Supplemental Work specified in Section 5D	= \$	3,000
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Total Section 1-8	\$	26,951,800	4%	= \$	1,078,072
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TOTAL SUPPLEMENTAL WORK	\$	1,381,100
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SECTION 11: STATE FURNISHED MATERIALS AND EXPENSES

Item code		Unit	Quantity		Unit Price (\$)		Cost
066105	Resident Engineers Office	LS	1	x	350,000.00	=	\$350,000
066063	Traffic Management Plan - Public Information	LS		x		=	\$0
066901	Water Expenses	LS		x		=	\$0
8609XX	Traffic Monitoring Station (X)	LS		x		=	\$0
066841	Traffic Controller Assembly	LS	5	x	10,000.00	=	\$50,000
066840	Traffic Signal Controller Assembly	LS		x		=	\$0
066062	COZEEP Contract	LS	1	x	600,000.00	=	\$600,000
066838	Reflective Numbers and Edge Sealer	LS		x		=	\$0
066065	Tow Truck Service Patrol	LS		x		=	\$0
066916	Annual Construction General Permit Fee	LS		x		=	\$0
XXXXXX	Some Item	Unit		x		=	\$0
Total Section 1-8		\$	26,951,800	2%	=	\$	539,036

TOTAL STATE FURNISHED	\$1,539,100
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SECTION 12: TIME-RELATED OVERHEAD

Total of Roadway and Structures Contract Items excluding Mobilization \$26,951,800 (used to calculate total TRO)

Estimated Time-Related Overhead (TRO) Percentage (0% to 10%) = **5%**

Item code		Unit	Quantity		Unit Price (\$)		Cost
090100	Time-Related Overhead	WD	500	X	\$2,382	=	\$1,347,600

TOTAL TIME-RELATED OVERHEAD	\$1,347,600
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SECTION 13: ROADWAY CONTINGENCY*

Risk Amount from Risk Register	(for Known Risks)	0%	
Additional or Residual Contingency	(for Unknown/Undefined Risks)	10%	\$3,283,680
Total Section 1-12	\$ 32,836,800	x 10%	= \$3,283,680

TOTAL CONTINGENCY*	\$3,283,700
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II. STRUCTURE ITEMS

Upgrade at	<u>Bridge 1</u>		<u>Bridge 2</u>		
DATE OF ESTIMATE	00/00/00		00/00/00		00/00/00
Bridge Name	XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Bridge Number	57-XXX		57-XXX		57-XXX
Structure Type	XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Width (Feet) [out to out]	0 LF		0 LF		0 LF
Total Bridge Length (Feet)	0 LF		0 LF		0 LF
Total Area (Square Feet)	0 SQFT		0 SQFT		0 SQFT
Structure Depth (Feet)	0 LF		0 LF		0 LF
Footing Type (pile or spread)	XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Cost Per Square Foot	\$150		\$150		\$0
COST OF EACH	\$0		\$0		\$0

	<u>Building 1</u>				
DATE OF ESTIMATE	00/00/00		00/00/00		00/00/00
Building Name	XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Bridge Number	57-XXX		57-XXX		57-XXX
Structure Type	XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Width (Feet) [out to out]	0 LF		0 LF		0 LF
Total Building Length (Feet)	0 LF		0 LF		0 LF
Total Area (Square Feet)	0 SQFT		0 SQFT		0 SQFT
Structure Depth (Feet)	0 LF		0 LF		0 LF
Footing Type (pile or spread)	XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXX
Cost Per Square Foot	\$300		\$0		\$0
COST OF EACH	\$0		\$0		\$0

TOTAL COST OF BRIDGES	\$0
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TOTAL COST OF BUILDINGS	\$0
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Time-Related Overhead	10%	\$0
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STRUCTURES MOBILIZATION	10%	\$0
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STRUCTURES CONTINGENCY*	25%	\$0
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TOTAL COST OF STRUCTURES	\$0
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Estimate Prepared By: _____
 XXXXXXXXXXXXXXXXXXXX ----- Division of Structures

 Date

EA: 07-36320 PID: 719000312

III. RIGHT OF WAY

Fill in all of the available information from the Right of Way Data Sheet.

			<i>Current Value Future Use</i>		<i>Escalated Value</i>
A)	A1)	Acquisition, including Excess Land, Fees, Damages, Goodwill	\$	50,000	\$ 50,000
	A2)	Acquisition of Offsite Mitigation	\$	0	0
	A3)	Railroad Acquisition	\$	0	0
		Upgrade and install fiber communication system, CCTV, Traffic Census Station, Connector Metering, CMS, and TMS for Technol			
B)	B1)	Utility Relocation (State Share)	\$		\$
	B2)	Potholing (Design Phase)	\$		\$
C)		Utility - Advance Engineering Estimate (Encumber with State Only Funds)	\$		\$
D)		RAP and/or Last Resort Housing	\$	0	\$ 0
E)		Clearance & Demolition	\$	0	\$ 0
F)		Relocation Assistance (RAP and/or Last Resort Housing Costs)	\$	0	\$ 0
G)		Title and Escrow	\$	0	\$ 0
H)		Environmental Review	\$	0	\$ 0
I)		Condemnation Settlements <u>0%</u>	\$	0	\$ 0
J)		Design Appreciation Factor <u>0%</u>	\$	0	\$ 0
K)		Utility Relocation (Construction Cost)	\$	40,000	\$ 53,905

L)

TOTAL RIGHT OF WAY ESTIMATE**\$90,000**

M)

TOTAL R/W ESTIMATE: Escalated**\$104,000**

N)

RIGHT OF WAY SUPPORT**\$41,000**

Support Cost Estimate Prepared By	Mario Zamorano Project Coordinator ¹	Phone
Utility Estimate Prepared By	Michele Graves Utility Coordinator ²	Phone
R/W Acquisition Estimate Prepared By	Victor Lee Right of Way Estimator ³	Phone

Note: Items G & H applied to items A + B

¹ When estimate has Support Costs only² When estimate has Utility Relocation³ When R/W Acquisition is required

ATTACHMENT E

Right of Way Data Sheet

DEPARTMENT OF TRANSPORTATION

M e m o r a n d u m

*Serious Drought!
Help Save Water!*

To: Cesar Hernandez, Design Manager
Office of Design
District 7, Los Angeles Office

Date: 1/5/2024

EA: 36320

From: Zoltan Elo, Office Chief
Right of Way Appraisals, and Planning & Management
District 7, Los Angeles Office

Data Sheet ID NO: ds6344

Project ID # 0719000312

Subject: Current Estimated Right of Way Costs for **Project Report**

We have completed an estimate of the Right of Way costs for the above referenced project based on information received from Nathan Sy, PE and the following assumptions and limiting conditions apply:

- The mapping did not provide sufficient detail to determine the limits of the right of way required.
- The transportation facilities have not been sufficiently designed, so our estimator could not determine the damages to any of the remainder parcels affected by the project.
- Additional right of way requirements are anticipated, but are not defined due to the preliminary nature of the estimate.

Right of Way Certificate (RWC) lead time will require a minimum of NA after maps to appraisal (MA). Completed Appraisal maps include HMDD, COS, HW Memo, and RE-49. An executed copy of the new freeway agreement is required for the project. When utility relocation is warranted, utility conflict maps will be required. Additionally a minimum of NA will be required after receiving the last revision to the appraisal map. Shorter lead times will require either more right of way resources or an increased number of condemnation suits to be filed and present a risk to the RWC project delivery milestone. Due to the passage of Map 21 and the Buy America provision, the Right of Way Certification process will be longer, if Utility Relocation is necessary.

Current Schedule: PRSM

PAED (M 200)	MA (M 224)	RWC (M 410)	RTL (M 460)	CCA (M 600)
3/22/2024	4/19/2024	3/7/2025	4/19/2024	10/29/2027

TO Cesar Hernandez
ATTN Nathan Sy
SENIOR R/W P&M David Miraaney
ROUTE 23, 101
PM_KM Var
EA 36320
Project ID #0719000312
ALT

R/W DATA SHEET

ID NO ds6344

Date of Data Sheet 1/5/2024

Project Description IN THE CITIES OF THOUSAND OAKS AND CAMARILLO, ON ROUTE 101 FROM NORTH OF CONEJO SCHOOL ROAD TO ROUTE 34; AND ON ROUTE 23 FROM THE 101/23 SEPARATION TO NORTH OF HILLCREST DRIVE ALSO IN THE CITY OF LOS ANGELES ON ROUTES 134, 101, AND 170 AND LARTMC.

This cost estimate is valid for the above scoping report only. This is an estimate only and not an appraisal. It may be based on worse case scenarios.

The estimate is subject to change and revision.

The mapping did not provide sufficient nor adequate detail to determine the limits of the Right of Way required and effects on the improvements.

The transportation facilities have not been sufficiently designed for our estimator to determine the damages to any of the remainder parcels affected by the project.

This cost estimate is pursuant to the following responses supplied by Cesar Hernandez to the Data Sheet Request Form.

	YES	NO	Not known at this time
Utilities are depicted on plans		x	
Railroads are depicted on plans	x		
There are Material and/or Disposal Sites Required			x
Caltrans will do the Right of Way work			x
There will be a Cooperative Agreement			x
This is a reimbursable project	x		
There is Hazardous Waste potential			x

RW COST ESTIMATE

	CURRENT VALUE	ESCALATED VALUE
R/ w acq,(incl.contingency G.w-condem.-adm.s'tl.)Permits	\$50,000	\$50,000
Clearance		
RAP (cont rate.)		
Escrow costs (cont rate.)		
Utility relocation costs	\$40,000	\$53,905
Estimate of Reimbursed Appraisal Fee		
Total estimated cost	\$90,000	\$103,905

Escalation Rate Rw .07
Escalation Rate Utilities .08
Cert.date 3/7/25

Total Escalated Cost	\$53,905
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RR INFORMATION

Are RR affected YES

Describe the RR facilities affected, and ownership: UPRR
(i.e. RR name, RR spurs, branch lines, at grade crossings?)

Will construction work be performed in RR right of way? Y/N If yes, describe:

What types of agreements are anticipated to be required from the RR?

Will Temporary Construction Easement (TCE) rights be required for the project construction? If yes, explain.

Phase 4 costs: RR Flagging related to construction activity. This cost is a phase 4 construction contract cost. Though noted on the RW datasheet, the estimated flagging cost is not a RW cost, and not a part of the RW Capital. This estimate is provided so it can be added to the engineer's estimate for construction – RR flagging estimate is based on the number of days flagging is needed for construction activity.

\$50,000

Phase 9 costs: Purchase of rights for construction, agreements, Preliminary Engineering Contracts, RR re-arrangement costs. This figure is included in the RW Capital estimate total.

\$ 50,000

	Victor Lee	<u>DATE</u>
Right of Way Estimate prepared by	_____	<u>1/5/24</u>
Estimate prepared by	Mario Zamorano _____	<u>12/6/23</u>
Utilities Estimate prepared by	Michele Graves _____	<u>12/14/23</u>

I have personally reviewed this R/W Data Sheet and all supporting information I certify that the probable highest and best use estimated values and assumptions are reasonable and proper subject to the limiting conditions set forth and I find this Data Sheet complete and current.

This Data Sheet is not to be signed by Chief unless accompanied by final scoping report(PR,PSR,PSSR) for review and/or signature.

CHIEF


04/05/2024

ATTACHMENT F

Environmental Documents



**CEQA EXEMPTION / NEPA CATEGORICAL EXCLUSION
DETERMINATION FORM (rev. 04/2022)**

Project Information

Project Name: Mobility - TMS

DIST-CO-RTE: 07-VEN-VAR

PM/PM: Various

EA: 36320

CE Number: 202304006

Project Description

Caltrans is proposing to install/upgrade the Traffic Management System (TMS) along Ven-101 from Post Mile (PM) 2.5 to PM 13.9 and Ven-23 from PM 3.34 to PM 4.2. Three existing communication hubs on LA-105 (PM R2.0) at I-405 (LAX), on LA-2 (PM R18.7) at LA-134 (LARTMC), and on LA-101 (PM 11.8) at LA-170 (North Hollywood) will be upgraded for network access. Excavation is anticipated to have a maximum depth of 48 inches. The maximum extent of the directional boring will be 11.2 miles. All proposed improvements will be performed within Ventura and Los Angeles Counties and are within the existing Caltrans right-of-way, therefore no additional right-of-way is required. The location of any needed staging areas will be determined during later phases. The detailed project description follows below on page 3.

Caltrans CEQA Determination (Check one)

- ☐ **Not Applicable** – Caltrans is not the CEQA Lead Agency
☐ **Not Applicable** – Caltrans has prepared an IS or EIR under CEQA

Based on an examination of this proposal and supporting information, the project is:

- ☐ **Exempt by Statute.** (PRC 21080[b]; 14 CCR 15260 et seq.)
☒ **Categorically Exempt. Class 1.** (PRC 21084; 14 CCR 15300 et seq.)
 ☐ No exceptions apply that would bar the use of a categorical exemption (PRC 21084 and 14 CCR 15300.2). See the [SER Chapter 34](#) for exceptions.
☐ **Covered by the Common Sense Exemption.** This project does not fall within an exempt class, but it can be seen with certainty that there is no possibility that the activity may have a significant effect on the environment (14 CCR 15061[b][3].)

Senior Environmental Planner or Environmental Branch Chief

Susan Tse Koo

Susan Tse Koo

12/27/2023

Print Name

Signature

Date

Project Manager

David Miraaney

David Miraaney

12/27/2023

Print Name

Signature

Date



CEQA EXEMPTION / NEPA CATEGORICAL EXCLUSION DETERMINATION FORM

Caltrans NEPA Determination (Check one)

☐ **Not Applicable**

Caltrans has determined that this project has no significant impacts on the environment as defined by NEPA, and that there are no unusual circumstances as described in 23 CFR 771.117(b). See [SER Chapter 30](#) for unusual circumstances. As such, the project is categorically excluded from the requirements to prepare an EA or EIS under NEPA and is included under the following:

☒ **23 USC 326:** Caltrans has been assigned, and hereby certifies that it has carried out the responsibility to make this determination pursuant to 23 USC 326 and the Memorandum of Understanding dated April 18, 2022, executed between FHWA and Caltrans. Caltrans has determined that the project is a Categorical Exclusion under:

☒ **23 CFR 771.117(c): activity (c)(Enter activity number)**

☐ **23 CFR 771.117(d): activity (d)(Enter activity number)**

☐ **Activity Enter activity number listed in Appendix A of the MOU between FHWA and Caltrans**

☐ **23 USC 327:** Based on an examination of this proposal and supporting information, Caltrans has determined that the project is a Categorical Exclusion under 23 USC 327. The environmental review, consultation, and any other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 USC 327 and the Memorandum of Understanding dated December 23, 2016 and executed by FHWA and Caltrans.

Senior Environmental Planner or Environmental Branch Chief

Susan Tse Koo

Print Name

Susan Tse Koo

Signature

12/27/2023

Date

Project Manager/ DLA Engineer

David Miraaney

Print Name

David Miraaney

Signature

12/27/2023

Date

Date of Categorical Exclusion Checklist completion (if applicable): N/A

Date of Environmental Commitment Record or equivalent: 12/27/2023

Briefly list environmental commitments on continuation sheet if needed (i.e., not necessary if included on an attached ECR). Reference additional information, as appropriate (e.g., additional studies and design conditions).



CEQA EXEMPTION / NEPA CATEGORICAL EXCLUSION DETERMINATION FORM

The project description of work will include the following:

- Installation of 11.2 miles of new communication system with all fiber optic trunklines and digital system along US-101 PM 3.0/13.8 in Ventura County via directional boring at a depth of 12 to 46 inches below grade.
- Installation of new TMS field elements including 12 new Closed-Circuit Television (CCTV) cameras including foundations, two (2) Changeable Message Signs (CMS) including foundations, two (2) new Connector Metering Systems, 15 new CCTV cameras at existing traffic signals.
- Installation of 20 maintenance Vehicle Pullouts (MVPs) along with around 3400 linear feet (LF) of Midwest Guardrail Systems (MGS) and installation of 2 Timber Retaining Walls at around 125 LF.
- Upgrade one (1) CCTV Camera, twelve (12) existing Traffic Monitoring Stations, one (1) existing CMS panel, two (2) Existing Ramp Metering System (RMS), Seven (7) existing Traffic Signals, and (3) existing Communication Hubs in Los Angeles and Ventura counties.
- Life cycle replacement of five (5) existing Traffic Census Stations (CS), and two (2) existing Weigh-In-Motion (WIM) systems with new ones.



CEQA EXEMPTION / NEPA CATEGORICAL EXCLUSION DETERMINATION FORM

Continuation sheet:

General

- The Division of Environmental Planning (DEP) will be provided the Project Specifications & Expenditures Review Package for review and comments.
- If the project scope should change for any reason, the DEP will be notified to determine whether current environmental documentation is adequate.

Cultural

- The location of any needed staging areas will be determined during later phases. If such locations are needed, they will be cleared by either Caltrans Professionally Qualified Staff (PQS) or contractor-provided cultural resource specialists who meet the Secretary of Interior's Professional Qualification Standards.

Air Quality

- This project is within the jurisdiction of the South Coast Air Quality Management District (SCAQMD) and must comply with the SCAQMD Fugitive Dust Implementation Rule 403 to minimize temporary emissions during the construction of the project as applicable and appropriate.
- This project is in the jurisdiction of the Ventura County Air Pollution Control District (VCAPCD) and must comply with the VCAPCD Fugitive Dust Implementation of Rule 55 to minimize temporary emissions during the construction of the project as applicable and appropriate.
- It is recommended that the PDT review, evaluate, and consider project measures in Tables 1 and 3 of the Toolbox (<https://env.onramp.dot.ca.gov/downloads/env/managedfiles/caltrans-ghgreduction-measures-jun-2021-a11y.pdf>) and that the project commit to include all feasible and relevant measures identified from the Tables. If any measures are proposed outside the Tables in the Toolbox, the PDT shall ensure that those measures are biddable, buildable, and can be successfully implemented.
- All identified reduction measures shall be carried forward in the ECR.
- Construction of the proposed project shall comply with all applicable AQMD/APCD Rules.
- Objectionable odors should also be minimized by conducting certain construction activities in areas at least 500 feet away from sensitive receptors if feasible. As part of a review of design plans and specifications, the AQB will also coordinate for approval of a nonstandard special provision (NSSP) 14-9.05 to mandate contractors' compliance with the applicable air district rules including measures related to dust control
- The AQB should be informed of any changes to the proposed scope, or the class of action determined for this project.

Noise

- The potential construction noise impacts would need to be addressed since there are noise-sensitive receptors in the vicinity of the project. Section 14-8.02, Sound Control Requirements, of Caltrans standard specifications, states that construction noise levels should not exceed sustained 86 dBA at 50 feet from the job site activities from 9 p.m. to 6 a.m. These requirements also state that noise levels generated during construction shall comply with applicable local, state, and federal regulations.



CEQA EXEMPTION / NEPA CATEGORICAL EXCLUSION DETERMINATION FORM

Biology

- Vegetation removal will be required and will include the removal of existing ruderal, landscape, and native plants.
- Indirect impacts from roadway runoff will be minimized through the incorporation of all appropriate Stormwater and Erosion Control Best Management Practices.
- All work will be limited to the Caltrans right-of-way, including the prism of the roadway, or the edge of the roadway for purposes of equipment maneuvering and traffic control.
- The project Biologist must be invited to the pre-construction meeting, with one week prior notice.
- This project must employ all appropriate Stormwater and Erosion Control Best Management Practices (BMPs) during construction, and these must be incorporated into the project specifications as determined by appropriate Caltrans specialists. Prior to the start of construction, all drain inlets and outlets must be protected with BMPs to prevent construction materials and debris from entering drainages.
- Temporary Construction BMPs will be required such as wind erosion control, sediment tracking control, street sweeping and vacuuming, stabilized construction roadway, spill prevention control, solid waste management, hazardous waste management, sanitary/septic waste management, material delivery and storage, material use, vehicle and equipment cleaning, vehicle and equipment fueling, and vehicle maintenance.
- All pollution and litter laws and regulations will be followed by all personnel on-site.
- There will be no known hazardous wastes or materials within the roadways, construction area, and surrounding area; however, if hazardous materials are found onsite, the contractor will consult with the Caltrans Hazardous Waste Unit and be responsible for collection, containment, and disposal of all waste produced from work done on this project, including potentially hazardous waste, in compliance with all applicable Federal, State, and local waste laws/regulations.
- If any species of concern are observed during construction activities, all work shall immediately cease, and the District Biologist shall be immediately notified. Work shall not resume until clearance is given by the District Biologist.
- The DEP recommends conducting vegetation removal outside the bird nesting season (February 1st through September 1st). If this is not possible, coordination with the District Biologist should take place in order to minimize the risk of violating the Migratory Bird Treaty Act, and the following minimization measure should be put in place: a buffer of 150 ft. for songbirds and 500 ft. for raptors which must be maintained during all phases of construction. Nesting birds may not be impacted by any construction activity including destruction of habitat or impacts from noise and dust pollution.
- No bioswales or bio strips may be planted with species found on the United States Department of Agriculture (USDA) California State Noxious Weeds List.
- The Division of Landscape and DEP will work jointly to determine the best plant palette for the area, especially in locations where native species are prevalent. It is recommended to focus on drought-tolerant species, and where applicable, native plants as part of the plant palette.

Visual

- The project will not impact the surrounding aesthetic or visual resources.
- The project will not introduce new light sources.



CEQA EXEMPTION / NEPA CATEGORICAL EXCLUSION DETERMINATION FORM

Hazardous Waste

- A site investigation (SI) for ADL will be required for this project during the PS&E phase to adequately evaluate and determine the actual concentrations of lead in soil for the health and safety of workers and so that provisions can be made for handling and disposal of the contaminated soils per the Department of Toxic Substances Control (DTSC) lead agreement with Caltrans.
- It is recommended to assume the top two (2) feet of soil as California Hazardous Waste with disposal at a permitted Class I disposal facility within the State of California.
- Please request a Site Investigation (SI) in a written memo during the early stage of the PS&E phase of the project. The project schedule needs to allow four (4) months to complete the ADL Site Investigation (SI).
- Installation of construction area sign work will be performed in unpaved areas which will involve nominal soil disturbance, and reuse of all excavated soil at the same location.
- A lead compliance plan (LCP) will be required for workers' health and safety.
- The waste generated by the removal of yellow thermoplastic and yellow paint traffic stripes by itself requires disposal at a Class I facility.
- During the PS&E phase and upon receiving a request for hazardous waste assessment, we will provide appropriate special provisions.
- The Contractor shall prepare a project specific LCP to protect workers from exposure to hazards from lead while removing and handling the yellow and white traffic stripe residue and a Work Plan for handling and testing of residue prior to transport to and disposal at an appropriate disposal facility.
- An LCP is required as per Cal-OSHA Title 8 California Code of Regulations due to residue from removing white traffic stripes.
- All electrical equipment requiring disposal shall be packaged and transported to an appropriate permitted disposal facility. Standard Specification 14-11.15 contains the requirements for the management of the electrical equipment.
- If the project requires imported borrow, the source of the import borrow, shall be tested and free of hazardous waste contamination prior to placement.



Environmental Commitments Record (ECR)

DIST-CO-ORTE: 07 - VEN - 101 **PM/PM:** 3.000/13.800 **EA/Project ID:** 07-36320_ / 0719000312

Project Description: Upgrade Transportation Management System (TMS) elements, install fiber optic lines, and upgrade communication equipment at hubs and at the LARTMC.

Date (Last modification):

Environmental Planner: Mojgan Abbassi

Phone: 213-312-7233

Construction Liaison: Joshua Miller

Phone: 213-269-1114

Resident Engineer:

Phone:

PERMITS

Permit	Agency	Application Submitted	Permit Received	Permit Expiration	Permit Requirements Completed by	Permit Requirements Completed on	Comments
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ENVIRONMENTAL COMMITMENTS

PS&E/BEFORE RTL

Category	Task and Brief Description	Source	Included in PS&E Package	Responsible Branch/Staff	Action to Comply	Due Date	Task Completed by	Task Completed on	Remarks	Mitigation for significant impacts under CEQA
Hazardous Waste	During the PS&E phase and upon receiving a request for hazardous waste assessment, we will provide appropriate special provisions.	Env Doc	Std. Spec	RE						
Hazardous Waste	Please request a Site Investigation (SI) in a written memo during the early stage of the PS&E phase of the project. The project schedule needs to allow four (4) months to complete the ADL Site Investigation (SI).	Env Doc		RE						

PRE-CONSTRUCTION

Category	Task and Brief Description	Source	Included in PS&E Package	Responsible Branch/Staff	Action to Comply	Due Date	Task Completed by	Task Completed on	Remarks	Mitigation for significant impacts under CEQA
Air Quality	It is recommended that the PDT review, evaluate, and consider project measures in Tables 1 and 3 of the Toolbox (https://env.omramp.dot.ca.gov/downloads/env/managedfiles/caltrans-ghg-reduction-measures-jun-2021-a11y.pdf) and that the project commit to include all feasible and relevant measures identified from the Tables. If any measures are proposed outside the Tables in the Toolbox, the PDT shall ensure that those measures are biddable, buildable, and can be successfully implemented.	Env Doc		RE						
Biologist	The project Biologist must be invited to the pre-construction meeting, with one week prior notice.	NES		Biologist						

Environmental Commitments Record for Mobility - TMS

Category	Task and Brief Description	Source	Included in PS&E Package	Responsible Branch/Staff	Action to Comply	Due Date	Task Completed by	Task Completed on	Remarks	Mitigation for significant impacts under CEQA
CONSTRUCTION										
Category	Task and Brief Description	Source	Included in PS&E Package	Responsible Branch/Staff	Action to Comply	Due Date	Task Completed by	Task Completed on	Remarks	Mitigation for significant impacts under CEQA
Air Quality	Construction of the proposed project shall comply with all applicable AQMD/APCD Rules.	Env Doc		RE						
Air Quality	Objectionable odors should also be minimized by conducting certain construction activities in areas at least 500 feet away from sensitive receptors if feasible. As part of a review of design plans and specifications, the AQB will also coordinate for approval of a nonstandard special provision (NSSP) 14-9.05 to mandate contractors' compliance with the applicable air district rules including measures related to dust control.	Env Doc		RE						
Air Quality	This project is in the jurisdiction of the Ventura County Air Pollution Control District (VCAPCD) and must comply with the VCAPCD Fugitive Dust Implementation of Rule 55 to minimize temporary emissions during the construction of the project as applicable and appropriate.	Env Doc		RE						
Air Quality	This project is within the jurisdiction of the South Coast Air Quality Management District (SCAQMD) and must comply with the SCAQMD Fugitive Dust Implementation Rule 403 to minimize temporary emissions during the construction of the project as applicable and appropriate.	Env Doc		RE						
Biology	All pollution and litter laws and regulations will be followed by all personnel on-site.	NES		RE						
Biology	All work will be limited to the Caltrans right-of-way, including the prism of the roadway, or the edge of the roadway for purposes of equipment maneuvering and traffic control.	NES		RE						
Biology	If any species of concern are observed during construction activities, all work shall immediately cease, and the District Biologist shall be immediately notified. Work shall not resume until clearance is given by the District Biologist.	NES		RE						
Biology	Indirect impacts from roadway runoff will be minimized through the incorporation of all appropriate Stormwater and Erosion Control Best Management Practices.	NES		RE						
Biology	No bioswales or bio strips may be planted with species found on the United States Department of Agriculture	NES		RE						

Environmental Commitments Record for Mobility - TMS

Category	Task and Brief Description	Source	Included in PS&E Package	Responsible Branch/Staff	Action to Comply	Due Date	Task Completed by	Task Completed on	Remarks	Mitigation for significant impacts under CEQA
(USDA) California State Noxious Weeds List.										
Biology	Temporary Construction BMPs will be required such as wind erosion control, sediment tracking control, street sweeping and vacuuming, stabilized construction roadway, spill prevention control, solid waste management, hazardous waste management, sanitary/septic waste management, material delivery and storage, material use, vehicle and equipment cleaning, vehicle and equipment fueling, and vehicle maintenance.	NES		RE						
Biology	The DEP recommends conducting vegetation removal outside the bird nesting season (February 1st through September 1st). If this is not possible, coordination with the District Biologist should take place in order to minimize the risk of violating the Migratory Bird Treaty Act, and the following minimization measure should be put in place: a buffer of 150 ft. for songbirds and 500 ft. for raptors which must be maintained during all phases of construction. Nesting birds may not be impacted by any construction activity including destruction of habitat or impacts from noise and dust pollution.	NES		RE						
Biology	The Division of Landscape and DEP will work jointly to determine the best plant palette for the area, especially in locations where native species are prevalent. It is recommended to focus on drought-tolerant species, and where applicable, native plants as part of the plant palette.	NES		RE						
Biology	There will be no known hazardous wastes or materials within the roadways, construction area, and surrounding area; however, if hazardous materials are found onsite, the contractor will consult with the Caltrans Hazardous Waste Unit and be responsible for collection, containment, and disposal of all waste produced from work done on this project, including potentially hazardous waste, in compliance with all applicable Federal, State, and local waste laws/regulations.	NES		RE						
Biology	This project must employ all appropriate Stormwater and Erosion Control Best Management Practices (BMPs) during construction, and these must be incorporated into the project specifications as determined by appropriate Caltrans specialists. Prior to the start of construction, all drain inlets and outlets must be protected with BMPs to prevent construction materials and debris from entering drainages.	NES		RE						

Environmental Commitments Record for Mobility - TMS

Category	Task and Brief Description	Source	Included in PS&E Package	Responsible Branch/Staff	Action to Comply	Due Date	Task Completed by	Task Completed on	Remarks	Mitigation for significant impacts under CEQA
Biology	Vegetation removal will be required and will include the removal of existing ruderal, landscape, and native plants.	NES		RE						
Cultural Resources	The location of any needed staging areas will be determined during later phases. If such locations are needed, they will be cleared by either Caltrans Professionally Qualified Staff (PQS) or contractor-provided cultural resource specialists who meet the Secretary of Interior's Professional Qualification Standards.	Section 106		RE						
Hazardous Waste	A lead compliance plan (LCP) will be required for workers' health and safety.	Env Doc		RE						
Hazardous Waste	A site investigation (SI) for ADL will be required for this project during the PS&E phase to adequately evaluate and determine the actual concentrations of lead in soil for the health and safety of workers and so that provisions can be made for handling and disposal of the contaminated soils per the Department of Toxic Substances Control (DTSC) lead agreement with Caltrans.	Env Doc		RE						
Hazardous Waste	All electrical equipment requiring disposal shall be packaged and transported to an appropriate permitted disposal facility. Standard Specification 14-11.15 contains the requirements for the management of the electrical equipment.	SSP		RE						
Hazardous Waste	An LCP is required as per Cal-OSHA Title 8 California Code of Regulations due to residue from removing white traffic stripes.	Env Doc		RE						
Hazardous Waste	If the project requires imported borrow, the source of the import borrow, shall be tested and free of hazardous waste contamination prior to placement.	Env Doc		RE						
Hazardous Waste	Installation of construction area sign work will be performed in unpaved areas which will involve nominal soil disturbance, and reuse of all excavated soil at the same location.	Env Doc		RE						
Hazardous Waste	It is recommended to assume the top two (2) feet of soil as California Hazardous Waste with disposal at a permitted Class I disposal facility within the State of California.	Env Doc		RE						
Hazardous Waste	The Contractor shall prepare a project specific LCP to protect workers from exposure to hazards from lead while removing and handling the yellow and white traffic stripe residue and a Work Plan for handling and testing of residue prior to transport to and disposal at an appropriate disposal facility.	Env Doc		RE						
Hazardous Waste	The waste generated by the removal of yellow	Env Doc		RE						

Environmental Commitments Record for Mobility - TMS

Category	Task and Brief Description	Source	Included in PS&E Package	Responsible Branch/Staff	Action to Comply	Due Date	Task Completed by	Task Completed on	Remarks	Mitigation for significant impacts under CEQA
Noise	thermoplastic and yellow paint traffic stripes by itself requires disposal at a Class I facility.									
	The potential construction noise impacts would need to be addressed since there are noise-sensitive receptors in the vicinity of the project, Section 14-8.02, Sound Control Requirements, of Caltrans standard specifications, states that construction noise levels should not exceed sustained 86 dBA at 50 feet from the job site activities from 9 p.m. to 6 a.m. These requirements also state that noise levels generated during construction shall comply with applicable local, state, and federal regulations.	Env Doc	SSP	RE						
Visual	The project will not impact the surrounding aesthetic or visual resources. The project will not introduce new light sources.	Env Doc		RE						
General	If the project scope should change for any reason, the DEP will be notified to determine whether current environmental documentation is adequate.	Env Doc		ECL						
	The Department of Environmental Planning (DEP) will be provided the Project Specifications & Expenditures Review Package for review and comments.	Env Doc		ES						

Environmental Branch Chief

Susan Tse

Print Name _____ Signature _____ Date _____

Project Engineer
Patrick P Lui

Print Name _____ Signature _____ Date _____

Resident Engineer (for Commitments During Construction)

Print Name _____ Signature _____ Date _____

Project Manager
MIRAANEY, DAVID H

Print Name _____ Signature _____ Date _____

ATTACHMENT G

Hazardous Waste Assessment

Memorandum

To: CESAR A. HERNANDEZ
Senior Transportation Electrical Engineer
Traffic Operations/District 7

Date: December 27, 2023
File: 07-Ven 23, 101
07- LA-2, 101, 105
PM Various
EA: 07-334-363200
EFIS: 1847-0719000312

Attn: Patrick P. Lui

From: HENRY JONES, P.G. 
Senior Engineering Geologist
Hazardous Waste Branch – North Region
Office of Environmental Engineering (OEE)

Subject: **UPDATED HAZARDOUS WASTE ASSESSMENT FOR PR**

This is in response to your request dated December 11, 2023, for an Updated Hazardous Waste Assessment (UHWA). The Office of ITS is currently preparing a Project Report (PR) for a Transportation Management System (TMS) project on the Ventura Route 101 starting from east of VEN-23 to west of North Lewis Road (VEN-34) in Ventura County. In addition, Ventura Route 23 (VEN-23) will be added, from north of Rancho Road to north of Hillcrest Drive.

This project proposes to upgrade the following items for technology life cycle replacement:

- Two (2) existing Ramp Metering Systems (RMS).
 - Detection Technology, Cabling, Wiring, Communication, Power System
- Seven (7) existing Traffic Signals.
 - Signal Lights, Detection, Loops, Cabling, Wiring, Communication
- Twelve (12) existing Traffic Monitoring Stations (TMS).
 - Detection Technology, Controller/CPU, Cabling, Wiring, Communication, Power System
- One (1) existing Closed-Circuit Television (CCTV) camera.
 - Camera, Cabling, Wiring, Communication, Power System
- One (1) existing Changeable Message Signs (CMS).
 - CMS Panel, Controller/CPU, Cabling, Wiring, Communication, Power System
- Five (5) existing Traffic Census Stations (CS).
 - Detection Technology, Controller/CPU, Cabling, Wiring, Communication, Power System
 - Foundations, Pull Boxes, Conduits

This project also proposes to install:

- 11.2 miles of new fiber optic trunk lines.
- Twelve (12) new CCTV cameras including foundations.
- Two (2) new CMS including foundations.
- Two (2) new Connector Metering Systems.
- Fifteen (15) new CCTV cameras for existing Traffic Signals.

Additionally, this project proposes to:

- Upgrade three (3) existing Communication Hubs on LA-105 (PM R2.0) at I-405 (LAX), on LA-2 (PM R18.7) at LA-134 (LARTMC), and on LA-101 (PM 11.8) at LA-170 (North Hollywood).
- Construct 20 Maintenance Vehicle Pullouts (MVP) with around 3400 linear feet (LF) of Midwest Guardrail Systems (MGS) and construct 2 Timber Retaining Walls at around 125 LF.
- Install communication breakout to two (2) existing TMS.
 - Cabling, Wiring, Communication, Conduit
- Replace the life cycle of two existing Weigh-In-Motion (WIM) systems.

The project limits have also been updated:

07-VEN-101-PM 2.5/13.9

07-VEN-23-PM 3.34/4.20

Based on the information received from your office and available information, our HWA is as follows:

Paved Surfaces

Installing some new fiber optic trunk lines and traffic Monitoring Stations (TMS), Fifteen (15) new Closed-circuit Television (CCTV) cameras for existing Traffic Signals, communication breakout to two (2) existing TMS works; Upgrade one (1) existing CCTV camera, two (2) existing Ramp Metering Systems (RMS), seven (7) existing Traffic Signals, twelve (12) existing TMS, one (1) existing CMS, and three (3) existing Communication Hubs in Los Angeles County. These works will not pose an aerially deposited lead concern, since they are all done in paved surfaces.

ADL concern in unpaved surfaces

Major excavation

To setup a new Transportation Management System; installing some new fiber optic trunklines and Traffic Monitoring Stations; Twelve (12) new Closed-Circuit Television (CCTV) cameras, two (2) Changeable Message Signs (CMS), two (2) new Connector Metering Systems, and construct 20 MVPs with around 3400 linear feet (LF) of Midwest Guardrail Systems (MGS) and construct 2 Timber Retaining Walls at around 125 LF works are done in unpaved surface and will generate excess soil. The potential of hazardous waste from Aerially Deposited Lead (ADL) exists within the project limits. A site investigation (SI) for ADL will be required for this project during the PS&E phase to adequately evaluate and determine the actual concentrations of lead in soil for health and safety of workers and so that provisions can be made for handling and disposal of the contaminated soils per the Department of Toxic Substances Control (DTSC) lead agreement with Caltrans. For the Engineer's estimate, it is recommended to assume the top two (2) feet of soil as California Hazardous Waste with disposal at a permitted Class I disposal facility within the State of California. Please request a Site Investigation (SI) in a written memo during the early stage of the PS&E phase of the project. The project schedule needs to allow four (4) months to complete the ADL Site Investigation (SI).

Minor excavation

Replacement of five (5) existing Traffic Census Stations (CS) and the life cycle of two existing Weigh-In-Motion (WIM) systems; Installation of construction area signs work will be performed in unpaved areas which will involve nominal soil disturbance, and reuse of all excavated soil at the same location. A lead compliance plan (LCP) will be required for workers' health and safety. During PS&E phase and upon receiving a request for hazardous waste assessment, we will provide appropriate special provisions. Please refer to the latest Contract Cost Database (<http://sv08web/contractcost/>) for the funds that need to be allocated for the lump sum cost of the Contractor's LCP.

Traffic Stripes Removal

Yellow traffic stripes contain lead and chromium at concentrations that exceed hazardous waste threshold levels established by the California Health and Safety Code and Title 22 of the California Code of regulations. The waste generated by the removal of yellow thermoplastic and yellow paint traffic stripes by-itself require disposal at a Class I facility. During PS&E phase and upon receiving a request for hazardous waste assessment, we will provide appropriate special provisions. The Contractor shall prepare a project specific LCP to protect workers from exposure to hazards from lead while removing and handling the yellow traffic stripe residue and a Work Plan for handling and testing of residue prior to transport to and disposal at an appropriate disposal facility. Please refer to the latest Contract Cost Database (<http://sv08web/contractcost/>) for the funds that need to be allocated for the lump sum cost of the Contractor's LCP.

Residue from removing white traffic stripes by-itself will not contain hazardous levels of lead. However, an LCP is required as per Cal-OSHA Title 8 California Code of Regulations. During PS&E phase and upon receiving a request for hazardous waste assessment, we will provide appropriate special provisions. The Contractor shall prepare a project specific LCP to prevent or minimize worker exposure to lead while removing and handling white traffic stripe residue.

Electrical Items

Removal of existing electrical equipment or components may generate hazardous waste. Electrical equipment includes mercury containing switches, sensors, timers, ballasts with polychlorinated biphenyl (PCB), and other electrical components. All electrical equipment requiring disposal shall be packaged and transported to an appropriate permitted disposal facility. The Standard Specification 14-11.15 contains the requirements for management of the electrical equipment.

Import Borrow

If the project requires imported borrow, the source of the import borrow, shall be tested and free of hazardous waste contamination prior to placement.

OEE RESOURCE ESTIMATE FOR PROJECT (CC 1847):

WBS 235.10 = 600 hours (PS&E Phase, Site Investigation, HWA memo and SSP/NSSPs, etc.)

WBS 255.05 = 80 hours (PS&E support)

WBS 270.66 = 100 hours (Construction support)

WBS 280.10 = 40 hours (Project closeout)

EA: 07-363200 (PN: 1847-0719000312)

December 27, 2023

Page 2 of 3

This Hazardous Waste Assessment is applicable to the scope of work described above. Any change in the scope of work will require a Hazardous Waste Re-Assessment. If you have any questions or need additional information, please contact me at (213) 269-1118, Henry.Jones@dot.ca.gov or contact Saba Tesfayohannes of my staff at (213) 266-6917, Saba.Tesfayohannes@dot.ca.gov.

ATTACHMENT H

Air Quality Analysis

Memorandum

To: SUSAN TSE KOO
SENIOR ENVIRONMENTAL SCIENTIST

Date: DECEMBER 1, 2023

Attn: MOJGAN ABBASSI
ENVIRONMENTAL SCIENTIST

File: 07-VEN-101-2.5/13.9
07-VEN-23-3.34/4.20
TMS ELEMENTS
EA 07-36320
EFIS 0719000312

From: ANDREW YOON
Senior Transportation Engineer
Air Quality Branch
Office of Environmental Engineering

Subject: **AIR QUALITY AND GREENHOUSE GAS ASSESSMENT FOR SHOPP MOBILITY
TRANSPORTATION MANAGEMENT SYSTEM (TMS) PROJECT ON UNITED STATES ROUTE
101, STATE ROUTE 2, AND INTERSTATE 105 IN VENTURA AND LOS ANGELES
COUNTIES**

This memorandum is prepared in response to your request dated October 18, 2023, for an update to the air quality/greenhouse gas (AQ/GHG) assessment previously provided on May 9, 2023, for the subject project. The proposed scope of work and the limits for the project have since been revised; and this update to the AQ/GHG assessment is requested to reflect the revised scope and limits accordingly. According to a request memorandum submitted by the Project Engineer on October 17, 2023, the project has now revised the limits to 07-VEN-101-2.5/13.9 and 07-VEN-23-3.34/4.20; and proposes the following scope of work:

- 11.2 miles of new fiber optic trunk lines;
- Twelve (12) new Closed-Circuit Television (CCTV) cameras including foundations;
- Two (2) new Changeable Message Signs (CMS) including foundations;
- Ten (10) new Traffic Monitoring Stations (TMS);
- Replace five (5) existing Traffic Census Stations (CS);
- Upgrade one (1) existing CCTV camera;
- Upgrade one (1) existing CMS panel;

- Upgrade three (3) existing Communication Hubs on LA-105 (PM R2.0) at I-405 (LAX), on LA-2 (PM R18.7) at LA-134 (LARTMC), and on LA-101 (PM 11.8) at LA-170(North Hollywood);
- Construct 22 Maintenance Vehicle Pullouts (MVP) along with around 3400 linear feet (LF) Midwest Guardrail Systems (MGS);
- Replace the (Satellite Asset) life cycle of two existing Weigh-In-Motion (WIM) systems;
- Two (2) new Connector Metering Systems;
- Fifteen (15) new Closed-circuit Television (CCTV) cameras for existing Traffic Signals;
- Upgrade two(2) existing Ramp Metering Systems (RMS);
- Upgrade fifteen (15) existing Traffic Signals; and
- Upgrade fourteen (14) existing Traffic Monitoring Stations(TMS).

Per 40 CFR 93.126 published in the Federal Register (volume 73, page 4441) on January 24, 2008, Table 2 allows certain projects to be exempt from all emissions analyses. Based on the above-described scope of work provided in your memorandum, the proposed project is deemed listed in Table 2 under the subtitle "Safety" and classification "Traffic control devices and operating assistance other than signalization projects." Therefore, pursuant to 40 CFR 93.126, this project is deemed classified and is exempt from the requirement to determine conformity.

The *Transportation Project-Level Carbon Monoxide Protocol* (published by Institute of Transportation Studies, University of California, Davis, Revised December 1997) indicates that a project-level air quality analysis is not required for projects exempt pursuant to 40 CFR 93.126; and it is unlikely that the proposed project will result in an adverse impact to ambient CO.

The proposed project is located in Los Angeles County within the South Coast Air Basin (SCAB) which is in a federal nonattainment area for PM_{2.5} and maintenance area for PM₁₀. Locations along US 101 and SR-23 are located in Ventura County within the South Central Coast Air Basin (SCCAB) which is in a federal attainment area for PM_{2.5} and PM₁₀. The proposed project is exempt from the conformity requirements per 40 CFR 93.126, and it is a type of project that is not anticipated to involve a significant number of or result in an increase in the number of diesel vehicles or increase in vehicle idling. The proposed project is expected to have a neutral influence on PM₁₀ and PM_{2.5} emissions; and thus, is not anticipated to be of air quality concern for PM₁₀ and PM_{2.5}. The

proposed project is unlikely to result in adverse impacts to ambient PM₁₀ and PM_{2.5}.

The proposed project is not anticipated to result in any meaningful changes to traffic volumes, vehicle mix, location of the existing facility, or any other factors that would cause an increase in mobile source air toxic (MSAT) emissions impacts relative to the no-build alternative. It is understood that the project qualifies for a Categorical Exclusion (CE) according to 23 USC 326. Pursuant to the FHWA's *Interim Guidance Update on Mobile Source Air Toxic Analysis in NEPA Documents* dated January 18, 2023, projects that are CE under 23 CFR 771.117 (c) or are exempt under the Clean Air Act pursuant to 40 CFR 93.126, do not require an analysis or discussion of MSAT.

The proposed project is not anticipated to result in increase in operational GHG emissions as no additional roadway capacity will be added. However, per Governor's Executive Order B-30-15, Caltrans requires that construction GHG emissions be quantified. The AQB completed an estimate of construction emissions below based on construction activities data in the Project Initiation Report approved on June 30, 2020.

The emissions from temporary construction activities have been estimated using the Caltrans Construction Emissions Tool (CAL-CET2021) v1.0.2. A summary output of the construction emissions calculations is attached to the memorandum.

Construction Emissions Estimates by Activity (in tons, MT for CO₂e)

Construction Phases	ROG	CO	NOx	PM ₁₀	PM _{2.5}	CO ₂ e
Land Clearing/Grubbing	0.000	0.000	0.000	0.000	0.000	0
Roadway Excavation & Removal	0.096	0.623	0.643	0.703	0.114	147
Structural Excavation & Removal	0.000	0.000	0.000	0.000	0.000	0
Base/Subbase/Imported Borrow	0.039	0.278	0.266	0.675	0.086	58
Structure Concrete	0.000	0.000	0.000	0.000	0.000	0
Paving	0.043	0.134	0.311	0.023	0.023	61
Drainage/Environment/Landscaping	0.001	0.003	0.006	0.000	0.000	1
Traffic Signalization/Signage/Striping/Painting	0.111	0.537	0.825	0.050	0.049	342
Other Operation	0.000	0.000	0.000	0.000	0.000	0
Total	0.291	1.575	2.051	1.451	0.272	609

Note: CO₂e=CO₂ equivalents consisting of CO₂, CH₄, N₂O, BC, and HFC, in Metric Tons

The proposed project is located in the lower desert portion of Los Angeles County. It is within the boundary of the SCAB and within the jurisdiction of the South Coast Air Quality Management District (SCAQMD); and therefore, this project must comply with the SCAQMD Fugitive Dust Implementation Rule 403 to minimize temporary emissions during construction of the project as applicable and appropriate.

The proposed project is also located in Ventura County for the improvement along US 101 which is within the boundary of the SCCAB and within the jurisdiction of the Ventura County Air Pollution Control District (VCAPCD). This project, therefore, also must comply with the VCAPCD Fugitive Dust Implementation Rule 55 to minimize temporary emissions during construction of the project as applicable and appropriate.

Senate Bill 1 Section 2030(e) directs Caltrans "To the extent deemed cost effective, and where feasible, in the context of both the project scope and the risk level for the asset due to global climate change to better adapt the asset to withstand the negative effects of climate change and make the asset more resilient to impacts such as fires, floods, and sea level rise." In response, Caltrans Division of Environmental Analysis, Office of Environmental Management, developed a GHG Reduction Measures Toolbox (<https://env.onramp.dot.ca.gov/downloads/env/managedfiles/caltrans-ghg-reduction-measures-jun-2021-a11y.pdf>) for use in project development. It is recommended that the PDT review, evaluate, and consider project measures in Tables 1 and 3 of the Toolbox and that the project commit to include all feasible and relevant measures identified from the Tables. If any measures are proposed outside the Tables in the Toolbox, the PDT shall ensure that those measures are biddable, buildable, and can be successfully implemented. All identified reduction measures shall be carried forward in the ECR.

Objectionable odors would be mainly related to operation of diesel-powered equipment and off-gas emissions during road-building activities, such as paving and asphaltting. SCAQMD Rule 1113 (Architectural Coating) and VCAPCD Rule 74.2 limit the amount of VOC emissions from paving, asphalt, concrete curing, and cement coatings operations. Construction of the proposed project shall comply with all applicable AQMD/APCD Rules. While construction equipment on site would generate some objectionable odors primarily arising from diesel exhaust, these emissions would generally be limited to the project site and would be temporary in nature. Objectionable odors should also be minimized by conducting certain construction activities in areas at least 500 feet away

from sensitive receptors if feasible. As part of review of design plans and specifications in the PS&E phase, The AQB will coordinate for review and approval of a nonstandard special provision (NSSP) 14-9.05 to mandate contractors' compliance with all applicable air district rules including measures related to dust control.

The AQB should be informed of any changes to the proposed scope or the class of action determined for this project. Such changes may require an update or reassessment of air quality issues for the proposed project.

PROJECT: 101.36320 SHOPP Mobily TMS elements on Various Routes

DATE: 03/16/23

	Summary of Project Emissions and Consumption											
	TOG	ROG	CO	NOx	PM10	PM2.5	CO2	CH4	N2O	BC	HFC	CO ₂ e
Daily Average (lbs/day; metric tons CO ₂ /day; gal fuel/day; kWh electricity/day)	1,249	1,162	6,300	8,206	5,304	1,089	2473	0,048	0,147	0,091	0,087	1,22
Maximum Daily Average (lbs/day; metric tons CO ₂ /day; gal fuel/day; kWh electricity/day)	2,197	2,062	9,433	14,811	22,866	2,919	3,376	0,065	0,233	0,201	0,148	1,68
Annual Average (tons/year; metric tons CO ₂ /year; gal fuel/year; kWh electricity/year)	0.104	0.097	0.525	0.684	0.484	0.091	206	0.004	0.012	0.008	0.007	203

Source	Project Total Emissions and Consumption (tons; metric tons CO ₂ ; gal fuel; kWh electricity)											
	TOG	ROG	CO	NOx	PM10	PM2.5	CO2	CH4	N2O	BC	HFC	CO ₂ e
On-Road	0.029	0.024	0.391	0.364	0.005	0.004	373	0.002	0.035	0.001	0.022	377
Off-Road	0.283	0.267	1.184	1.688	0.140	0.137	245	0.010	0.002	0.022	-	232
Area-Wide Fugitive Dist	-	-	-	-	1.307	0.131	-	-	-	-	-	-
Painting and Asphalt Application	0.000	0.000	-	-	-	-	-	-	-	-	-	-
Project Total	0.312	0.291	1.575	2.051	1.451	0.272	618	0.012	0.037	0.023	0.022	609
												17,638
												5,015.192

Project Phases	Total Emissions and Consumption by Operation (tons; metric tons CO ₂ ; gal fuel; kWh electricity)											
	TOG	ROG	CO	NOx	PM10	PM2.5	CO2	CH4	N2O	BC	HFC	CO ₂ e
Land Clearing/Grubbing	0.000	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0
Roadway Excavation & Removal	0.103	0.096	0.623	0.643	0.703	0.114	151	0.004	0.007	0.008	0.003	147
Structural Excavation & Removal	0.000	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0
Base/Subbase/Imported Borrow	0.042	0.039	0.278	0.266	0.675	0.096	60	0.002	0.003	0.002	0.001	58
Structure Concrete	0.000	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0
Paving	0.046	0.043	0.134	0.311	0.023	0.023	62	0.001	0.003	0.004	0.002	61
Drainage/Environment/Landscaping	0.001	0.001	0.003	0.006	0.000	0.000	1	0.000	0.000	0.000	0.000	1
Traffic Signalization/Signage/Striping/Painting	0.120	0.111	0.537	0.825	0.049	0.049	344	0.005	0.024	0.009	0.015	342
Other Operation	0.000	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0
Total	0.312	0.291	1.575	2.051	1.451	0.272	618	0.012	0.037	0.023	0.022	609
												17,638
												5,015.192

Year	Total Emissions and Consumption by Year (tons; metric tons CO ₂ ; gal fuel; kWh electricity)											
	TOG	ROG	CO	NOx	PM10	PM2.5	CO2	CH4	N2O	BC	HFC	CO ₂ e
2015	0.000	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0
2016	0.000	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0
2017	0.000	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0
2018	0.000	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0
2019	0.000	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0
2020	0.000	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0
2021	0.000	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0
2022	0.000	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0
2023	0.000	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0
2024	0.000	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0
2025	0.038	0.036	0.231	0.239	0.260	0.042	56	0.001	0.003	0.003	0.001	55
2026	0.173	0.162	0.893	1.119	1.149	0.189	273	0.006	0.014	0.012	0.008	267
2027	0.101	0.093	0.450	0.683	0.042	0.041	290	0.004	0.020	0.007	0.013	288
2028	0.000	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0
2029	0.000	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0
2030	0.000	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0
2031	0.000	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0
2032	0.000	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0
2033	0.000	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0
2034	0.000	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0
2035	0.000	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0
2036	0.000	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0
2037	0.000	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0
2038	0.000	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0
2039	0.000	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0
2040	0.000	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0
2041	0.000	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0
2042	0.000	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0
2043	0.000	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0
2044	0.000	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0
2045	0.000	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0
2046	0.000	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0
2047	0.000	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0
2048	0.000	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0
2049	0.000	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0
2050	0.000	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0
Total	0.312	0.291	1.575	2.051	1.451	0.272	618	0.012	0.037	0.023	0.022	609
												39,563
												5,015.192

Total	0.312	0.291	1.575	2.051	1.451	0.272	618	0.012	0.037	0.023	0.022	609
Summary	0.104	0.097	0.525	0.684	0.484	0.091	206	0.004	0.012	0.008	0.007	203

Project Average Daily Emissions and Consumption (lbs/day; metric tons CO ₂ /day; gal fuel/day; kWh electricity/day)												
	TOG	ROG	CO	NOx	PM10	PM2.5	CO ₂	CH ₄	N ₂ O	BC	HFC	CO ₂ e
	1,249	1,162	6,300	8,208	5,804	1,089	2,473	0.087	1,218	0.087	1,218	79
	2,917	2,062	9,433	14,811	22,866	2,919	3,376	0.065	0.233	0.201	0.148	1,677
Project Maximum*	2,917	2,062	9,433	14,811	22,866	2,919	3,376	0.065	0.233	0.201	0.148	1,677

[illegible][illegible]

ATTACHMENT I

Noise Analysis

Memorandum

*Making Conservation
a California Way of Life.*

To: Cesar A. Hernandez
Senior Transportation Electrical Engineer
Traffic Operations/ District 7

Date: April 19, 2023

File: 07-VEN-101
07-LA-2,101,105
PM: VARIOUS
EA: 07- 363200
EFIS: 0719000312

From: Jin S Lee
Branch Chief/Noise & Vibration Branch
Office of Environmental Engineering
Division of Environmental Planning

Subject: NOISE REVIEW FOR ENVIRONMENTAL CLEARANCE

The following provides a noise analysis for the above-referenced project:

Project limits: 07-Ven-101 and 07-LA-2,101,105 (Various Post Miles) in Ventura and Los Angeles Counties.

The Office of ITS is currently preparing a Project Report (PR) for a Transportation Management System (TMS) project on the Ventura Route 101 in Thousand Oaks and Camarillo, from Rancho Road (PM 3.0) to Route 34 (13.8).

The project proposes to set up a new Transportation Management System (TMS), installing

- 11.2 miles of new fiber optic trunk lines.
- Twelve (12) new Closed Circuit Television (CCTV) cameras including foundations.
- Two (2) Changeable Message Signs (CMS) including foundations.
- Ten (10) traffic Monitoring Stations (TMS).
- Two (2) new Connector Metering Systems.

In addition, this project proposes to

- Replace five (5) existing Traffic Census Stations (CS).
- Upgrade one (1) existing CCTV camera.
- Upgrade sixteen (16) existing Ramp Metering Systems (RMS).
- Upgrade one (1) existing CMS panel.
- Relocate Controller Cabinets at ten (10) different locations on new foundations.
- Relocate eight (8) Roadside Signs at different locations.
- Upgrade three (3) existing Communication Hubs in Los Angeles and Ventura counties.

- Construct 22 Maintenance Vehicle Pullouts (MVP) along with around 3400 linear feet (LF) Midwest Guardrail Systems (MGS).
- The (Satellite Asset) life cycle replacement of two existing Weigh In Motion (WIM) systems with new systems is also proposed.

All work will be completed within Caltrans Right of Way.

Based on the scope of this project as listed above, this is not a Type I project as defined in the 2020 Traffic Noise Analysis Protocol and it is not expected to raise traffic noise levels or cause a substantial noise increase. Therefore, a detailed noise study is not required for this project. However, potential construction noise impacts would need to be addressed since there are noise sensitive receptors in the vicinity of the project. Section 14-8.02, Sound Control Requirements, of Caltrans standard specifications states that construction noise levels should not exceed sustained 86 dBA at 50 feet from the job site activities from 9 p.m. to 6 a.m. These requirements also state that noise levels generated during construction shall comply with applicable local, state, and federal regulations.

If you have any questions, please contact me at (213) 269-1667 or contact Aye Htoon of my staff at (213) 335-0058.



Jin S. Lee, P.E.
Senior Transportation Engineer
Noise and Vibration Branch

ATTACHMENT J

Storm Water Data Report



Dist-County-Route: 07-LA/Ven, Various

Post Mile Limits: Various

Project Type: TMS Upgrade

Project ID (EA): 0719000312 (363200)

Phase: ☐ PID

☒ PA/ED

☐ PS&E

Regional Water Quality Control Board(s): Central Costal Region and Los Angeles Region

- | | | |
|--|------------------------------|--|
| 1. Does the project disturb 5 or more acres of soil? | Yes ☐ | No ☒ |
| 2. Does the project disturb 1 or more acres of soil and not qualify for the Rainfall Erosivity Waiver? | Yes ☐ | No ☒ |
| 3. Is the project required to implement Treatment BMPs? | Yes ☐ | No ☒ |
| 4. Does the project impact existing Treatment BMPs? | Yes ☐ | No ☒ |

If the answer to any of the preceding questions is "Yes", prepare a Long Form – Stormwater Data Report.
Unless otherwise agreed upon by the District/Regional Design Stormwater Coordinator.

Applicable Caltrans Permit Post Construction Treatment Requirement: 2012 ☐ 2022 ☒

Total Disturbed Soil Area: 0.66 acres New Impervious Surface: 0.03 acre

Estimated Const. Start Date: 10/1/2025 Estimated Const. Completion Date: 10/1/2027

Risk Level: RL 1 ☐ RL 2 ☐ RL 3 ☐ Not Applicable ☒

Is (M)WELQ applicable? Yes ☐ No ☒

This Short Form – Stormwater Data Report has been prepared under the direction of the following Licensed Person. The Licensed Person attests to the technical information contained herein and the data upon which recommendations, conclusions, and decisions are based. Professional Engineer or Landscape Architect stamp required at PS&E only.

4-2-24

Heather Liang, Registered Project Engineer/Landscape Architect Date

I have reviewed the stormwater quality design issues and find this report to be complete, current, and accurate:

04/03/2024

[Stamp Required at PS&E only]

For Shao-Chiang Liu, District/Regional Design SW Coordinator Date
or Designee

1. Project Description

- This project proposes to install and upgrade transportation management system (TMS) elements along the route 101 from route 23 (PM 2.5) to Lewis Road (PM 13.9) and the route 23 from Rancho Road (PM 3.34) to Hillcrest Drive (PM 4.2) in Ventura County. This project propose to install new fiber optic conduits, Closed Circuit Television (CCTV) Camera Systems, Changeable Message Signs (CMS), Vehicle Detection Systems (VDS), maintenance vehicle pullouts (MVPs – paved with pervious pavement) and Midwest guardrail system (MGS). This project also propose to upgrade existing TMS elements consisting of Traffic Census Stations (CS), CCTV Camera System, Traffic Monitoring Stations, CMS System and Traffic Signals. This project proposes to upgrade communication equipment at North Hollywood (NHD) Hub on route 101 at PM 11.8R, Los Angeles Airport (LAX) Hub on route 105 at PM R2.0 and Los Angeles Regional Traffic Management Center (LARTMC) on route 2 at PM R18.7.
- There are 8,000' breakout fiber optic conduits, 27 new CCTV cameras, 2 new CMS, 2 new VDS, 20 MVPs, and 3400' of MGS.
 - Camera pole foundation: $(2'-6") \times (2'-6") = 6.25 \text{ SF}$
 - Cabinet foundation: $(9'-9") \times (4'-2") = 41 \text{ SF}$
 - CMS CIDH pile: 5' diameter: $(2'-6") \times (2'-6") \times 3.14 = 19.63 \text{ SF}$
 - MVP: $85' \times 12' = 1020 \text{ SF}$
 - MSG: 6" (width)
 - Fiber optic conduits on soil: 8" (width)
 - Total Disturbed Soil Area (DSA): $27 \text{ poles} \times 6.25 \text{ SF} + 31 \text{ cabinets} \times 41 \text{ SF} + 2 \text{ CIDH pile} \times 19.63 \text{ SF} + 20 \text{ MVPs} \times 1020 \text{ SF} + 3400' \text{ MGS} \times 6" + 8000' \text{ conduits} \times 8" = 28,930 \text{ SF} = 0.66 \text{ acres}$
 - New Impervious Surface (NIS) = 0.03 acres
 - Net New Impervious (NNI) = 0.03 acres
 - Replaced impervious surface (RIS) = 0
- The total project cost of this project is \$42,359,000.

2. Site Data and Stormwater Quality Design Issues

- The project limit is Calleguas Hydrologic unit, Calleguas-Conejo Hydrologic area, Conejo Valley Hydrologic sub-area #408.24
- The project limit is within the Calleguas, Revolon Slough, Calleguas Creek, Los Angeles River and Dominguez Channel Total Maximum Daily Load (TMDL) Watershed Boundary. The TMDLS are as follows:

Calleguas Creek

Pollutant(s)	Effective Date	LA RWQB Resolution No.	Categorical Implementation Requirements ^{1 2}
Title: Calleguas Creek Watershed OC Pesticides and PCBs TMDL			

Toxics (organochlorine (OC) pesticides, total polychlorinated biphenyls (PCBs) and siltation)	03/14/2019	2005-010	Caltrans shall implement control measures and/or treatment BMPs to prevent the discharge of sediments which may contain toxic pollutants as listed in the TMDL. Possible treatment options include the interception and infiltration of runoff which will allow water to percolate into soil.
Title: Calleguas Creek Watershed Metals and Selenium TMDL			
Metals (Cu, Hg, Ni, Zn) and Se	03/26/2007, revised 06/23/2017	R16-007	Caltrans shall implement control measures and/or treatment BMPs to prevent the discharge of sediments which may contain metals and Se. Possible treatment options include the interception and infiltration of runoff which will allow water to percolate into soil. Compliance of the TMDL will be achieved through implementation of BMPs.
Title: Revolon Slough/Beardsley Wash Trash TMDL			
Trash	03/06/2008	2007-007	Discharge of trash to receiving waters from Caltrans R/W is prohibited. Caltrans is assigned a WLA and compliance schedule in the RS/BW Trash TMDL. Installation/retrofit of Gross Solid Removal Devices (GSRDs) and/or full capture systems at existing drainage outfalls within Caltrans R/W are required for TMDL compliance. Existing projects with GSRDs do not require additional implementation.

1 Refer to §4 of the PPDG to determine the specific impervious threshold for stormwater Treatment BMP requirements.

2 General TMDL Requirements can be found in Attachment IV of the NPDES Statewide Storm Water Permit.

Dominguez Channel

Pollutant(s)	Effective Date	LA RWQB Resolution No.	Categorical Implementation Requirements ^{1 2}
Title: Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL			
Toxic pollutants (dichlorodiphenyl-trichloroethane (DDT), polycyclic aromatic hydrocarbons (PAHs), total polychlorinated biphenyls (PCBs), metals (Cu, Pb, Zn))	03/23/2012	R11-008	Targeted pollutants are to be monitored in the water column in the channel and harbors as well as the sediment in the harbors. The TMDL requires the dischargers of the Los Angeles River and the San Gabriel River to monitor water quality at the mouth of each river. Caltrans shall implement control measures and/or treatment BMPs to prevent the discharge of sediments which may contain toxic pollutants as listed in the TMDL. Possible treatment options include the interception and infiltration of runoff which will allow water to percolate into soil.

1 Refer to §4 of the PPDG to determine the specific impervious threshold for stormwater Treatment BMP requirements.

2 General TMDL Requirements can be found in Attachment IV of the NPDES Statewide Storm Water Permit.

Los Angeles River

Pollutant(s)	Effective Date	LA RWQB Resolution No.	Categorical Implementation Requirements ^{1 2}
Title: Los Angeles River Trash TMDL			
Trash	12/24/2008, revised 06/30/2016	R15-006	Discharge of trash to receiving waters from Caltrans R/W is prohibited. Caltrans is assigned a WLA and compliance schedule in the Los Angeles River Trash TMDL. Installation/retrofit of Gross Solid Removal Devices (GSRDs) and/or full capture systems at existing drainage outfalls within Caltrans R/W are required for TMDL compliance. Existing projects with GSRDs do not require additional implementation.
Title: TMDL for Metals for the Los Angeles River and its Tributaries			
Metals (Cu, Pb)	12/22/2005, revised 12/12/2016	R15-004	Caltrans shall implement control measures and/or treatment BMPs to prevent the discharge of sediments which may contain metals. Possible treatment options include the interception and infiltration of runoff which will allow water to percolate into soil. Compliance of the TMDL will be achieved through implementation of BMPs.
Title: TMDL for Indicator Bacteria for the Los Angeles River Watershed			
Indicator bacteria	03/23/2012	R10-007	Dry-weather non-storm water and wet-weather storm water discharges may significantly increase bacteria loading to receiving waters. Caltrans shall implement control measures and/or BMPs to prevent the discharge of bacteria from its R/W. Source control measures include street sweeping, illegal dumping clean-up, public education on littering. BMPs include devices which treat storm water through retention/detention, infiltration and/or diversion.
Title: Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL			
Toxic pollutants (dichlorodiphenyl-trichloroethane (DDT), polycyclic aromatic hydrocarbons (PAHs), total polychlorinated biphenyls (PCBs),	03/23/2012	R11-008	Targeted pollutants are to be monitored in the water column in the channel and harbors as well as the sediment in the harbors. The TMDL requires the dischargers of the Los Angeles River and the San Gabriel River to monitor water quality at the mouth of each river. Caltrans shall implement control measures and/or treatment BMPs to prevent the discharge of sediments which may contain toxic pollutants as listed in the TMDL. Possible treatment options include the interception and infiltration of runoff which will allow water to percolate into soil.

metals (Cu, Pb, Zn))			
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1 Refer to §4 of the PPDG to determine the specific impervious threshold for stormwater Treatment BMP requirements.

2 General TMDL Requirements can be found in Attachment IV of the NPDES Statewide Storm Water Permit.

- There is no drinking water reservoirs and/or Recharge Facilities within the project limit.
- The nearest 303(d) list receiving water body within the project limit are Calleguas Creek Reach 13 (Arroyo Conejo above North Fork Arroyo Conejo), Calleguas Creek Reach 9B (Conejo Creek: Camrosa Diversion to Arroyo Santa Rosa), and Calleguas Creek Reach 6 (Conejo Creek to Hitch Rd).
- Pollutants of concerns are Ammonia, ChemA (tissue), Chlordane, Chloride, Chlorpyrifos, DDT (sediment), DDT (tissue), Diazinon, Dieldrin, Endosulfan (tissue), Indicator Bacteria, Nitrate and Nitrite, Nitrate as Nitrate (NO3), PCBs (Polychlorinated biphenyls), Sedimentation/Siltation, Sulfates, Total Dissolved Solids, Toxaphene (tissue & sediment), Toxicity, and Trash.
- This project does not require 401 certifications.
- There is no ASBS within the project limits.

3. Construction Site BMPs

- The project will require a Water Pollution Control Program (WPCP) since the total DSA will be less than 1 acre.
- The following BMPs are included in the lump sum of Job Site Management:
 - Spill Prevention and Control
 - Material Management
 - Waste Management
 - Solid Waste Management
 - Sweeping
 - Material Delivery and Storage
 - Material use
 - Stockpile Management
 - Sanitary and Septic Waste Management
 - Vehicle and Equipment cleaning
 - Vehicle and Equipment Fueling and Maintenance
 - Contamination Soil Management
 - Hazardous Waste Management
 - Water Control and Conservation
 - Spill Prevention Control

- Illicit Connection/Illegal Discharge Detection and Reporting
- The following is a list of contract bid items for the project:
 - Job Site Management
 - WPCP
- Supplemental Work Items are:
 - Additional Water Pollution Control
- Additional information will be provided in the PS&E phase.
- Temporary Construction BMPs are estimated at \$420,000 in accordance with the guidelines of Appendix F.
- On February 8, 2024, Arthur Hedayati, District 7 Construction Stormwater Coordinator, concurs with the temporary construction site BMP strategy used (at PA/ED phase) for the scope of work of this project.

Required Attachments¹

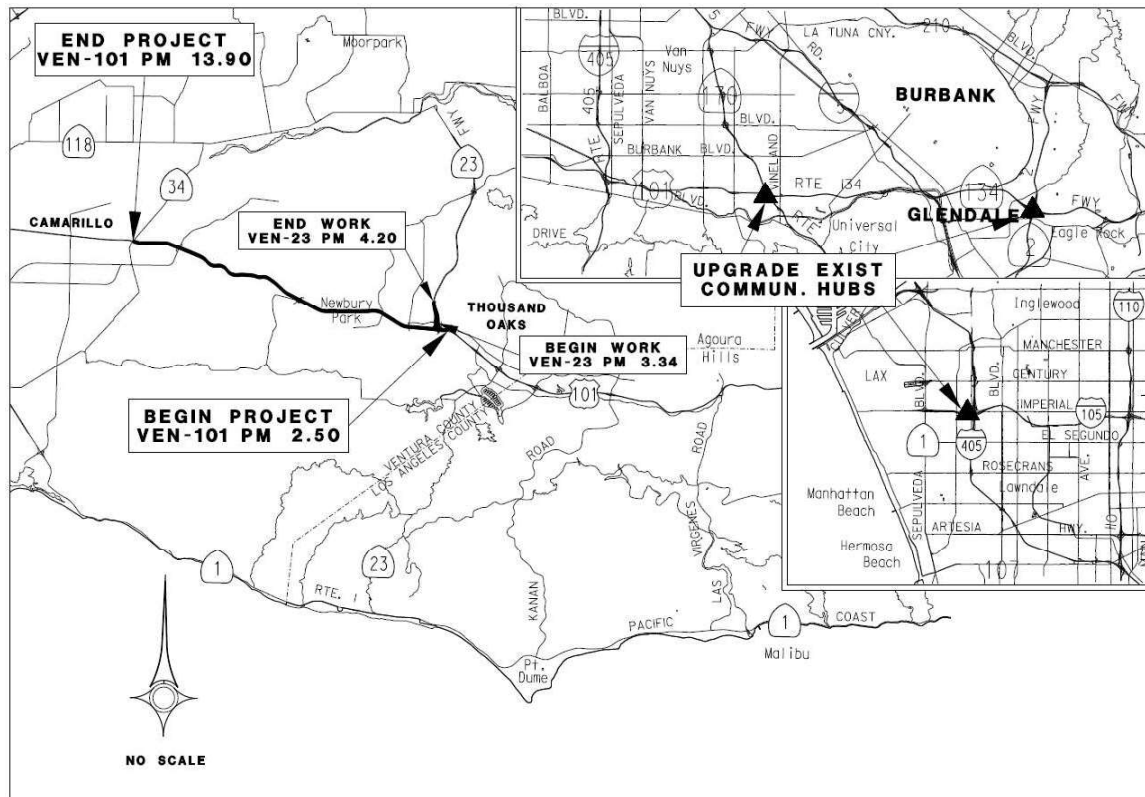
- Vicinity Map
- Evaluation Documentation Form
- SWDR Summary Spreadsheet

¹ Additional attachments may be required as applicable or directed by the District/Regional Design Stormwater Coordinator. (e.g., BMP line item estimate, SW, DPP, and CS Checklists).

Evaluation Documentation Form

No.	Criteria	Yes ✓	No ✓	Supplemental Information for Evaluation
1.	Begin Project evaluation regarding requirement for implementation of Treatment BMPs	✓		Continue to 2.
2.	Is the scope of the Project to install Treatment BMPs (e.g., Alternative Compliance or TMDL requirement)?		✓	If Yes , go to 8. If No , continue to 3.
3.	Is there a direct or indirect discharge to surface waters?	✓		If Yes , continue to 4. If No , go to 9.
4.	As defined in the WQAR or ED, does the project: a. discharge to Areas of Special Biological Significance (ASBS), or b. discharge to a TMDL watershed where Caltrans is named stakeholder, or c. have other pollution control requirements for surface waters within the project limits (e.g. STGA)?		✓	If Yes to any , contact the District/Regional Design Stormwater Coordinator or District/Regional NPDES Coordinator to discuss the Department's obligations, go to 8 or 5. <u>AL</u> (Dist./Reg. Coordinator initials) If No to all, continue to 5.
		✓		
			✓	
5.	Are any existing Treatment BMPs partially or completely removed? (ATA Condition 1, Section 4.3.1)		✓	If Yes , go to 8 AND continue to 6. If No , continue to 6.
6.	Is this a Routine Maintenance Project?		✓	If Yes , go to 9. If No , continue to 7.
7.	Does the project result in an increase of <u>10,000 ft² or more</u> (or <u>5,000 ft²</u> for "non-highway facilities projects") of new impervious surface (NIS)?		✓	If Yes , go to 8. If No , go to 9.
8.	Project is required to implement Treatment BMPs.	Complete Checklist T-1, Part 1.		
9.	Project is not required to implement Treatment BMPs. <u>AL</u> (Dist./Reg. Design SW Coord. Initials) <u>AL</u> (Project Engineer Initials) <u>4-2-24</u> (Date)	Document for Project Files by completing this form and attaching it to the SWDR.		

Vicinity Map



In Ventura and Los Angeles Counties, on Various Routes at Various Locations.

07-VEN-101-PM 2.5/13.9
07-VEN-23-PM 3.34/4.20
LA-2-PM R18.70 (LARTMC)
LA-101-PM R11.80 (NHD HUB)
LA-105-PM R2.0 (LAX)

ATTACHMENT K

TMP Data Sheet

TRANSPORTATION MANAGEMENT PLAN DATA SHEET (Revised Preliminary TMP Elements and Costs)

Co/Rte/PM	Ven - 23, 101, La - 2,101,105 PM Var	EA	07-363200 0719000312	Alternative No.	PR
Project Limit	On Rte 101 from east of Ven 23 to east of North Lewis Rd (Ven 34) On Rte 23 from north of Rancho Rd to north of Hillcrest Dr				
Project Description	Construct New Communication System, Install New TMS Elements Including CCTV, CMS, TMS, HAR System and Antennas, Ramp Metering System and Vehicle Detection Stations and Upgrade Hub Facilities				

1) Public Information

☐	a. Brochures and Mailers	\$
☒	b. Press Release	
☐	c. Paid Advertising	\$
☐	d. Public Information Center/Kiosk	\$
☐	e. Public Meeting/Speakers Bureau	
☐	f. Telephone Hotline	
☒	g. Internet	
☐	h. Others _____	\$

2) Motorists Information Strategies

☒	a. Changeable Message Signs (Fixed)	\$
☐	b. Changeable Message Signs (Portable)	\$
☐	c. Ground Mounted Signs	\$
☐	d. Highway Advisory Radio	\$
☐	e. Caltrans Highway Information Network (CHIN)	
☐	f. Others _____	\$

3) Incident Management

☒	a. Construction Zone Enhanced Enforcement Program (COZEEP)	\$600,000.00
☐	b. Freeway Service Patrol	\$
☐	c. Traffic Management Team	
☐	d. Helicopter Surveillance	\$
☐	e. Traffic Surveillance Stations (Loop Detector and CCTV)	\$
☐	f. Others _____	\$

4) Construction Strategies

☒	a. Lane Closure Chart	
☐	b. Reversible Lanes	
☐	c. Total Freeway Mainline Closure	
☐	d. Extended Weekend Closure	
☐	e. Contra Flow	
☐	f. Truck Traffic Restrictions	\$
☒	g. Reduced Speed Zone	\$
☐	h. Connector and Ramp Closures	
☐	i. Incentive and Disincentive	\$
☐	j. Moveable Barrier	\$
☐	k. Others _____	\$

5) Demand Management

☐	a. HOV Lanes/Ramps (New or Convert)	\$
☐	b. Park and Ride Lots	\$
☐	c. Rideshare Incentives	\$
☐	d. Variable Work Hours	
☐	e. Telecommute	
☐	f. Ramp Metering (Temporary Installation)	\$
☐	g. Ramp Metering (Modify Existing)	\$
☐	h. Others _____	\$

6) Alternative Route Strategies

☐	a. Add Capacity to Freeway Connector/Ramps	\$
☐	b. Street Improvement (widening, traffic signal... etc)	\$
☐	c. Traffic Control Officers	\$
☐	d. Parking Restrictions	
☐	e. Others _____	\$

7) Other Strategies

☐	a. Application of New Technology	\$
☐	e. Others _____	\$

TOTAL ESTIMATED COST OF TMP ELEMENTS =

\$600,000.00

Project Notes:

12/15/2023

1. The TMP was developed based on information provided by the Office of ITS on 12/13/2023.
2. A Public Awareness Campaign (PAC) strategy was prepared by Media Affairs on 12/14/2023. PAC includes press release only and there is no associated cost.
3. Construction shall notify Caltrans' Office of Media Relations/Public Affairs at least one month prior to the start of construction in order to begin the PAC.
4. COZEEP cost estimate was provided by Construction Traffic Advisor on 12/14/2023. COZEEP cost amount of \$600,000 shall be included in the BEES list item 066062.
5. All work shall be done within Caltrans Right-of-Way.
6. Work shall conform to the lane closure charts included in the Maintaining Traffic Specification.
7. Any change to the scope of the work of project will require a re-evaluation of the TMP Data Sheet.

PREPARED BY

Duc Tran

Duc Tran, T. E.

DATE 12/15/2023

APPROVAL RECOMMENDED BY

Dyari Ahmed

Dyari Ahmed, S. T. E

DATE 12/17/2023

APPROVED BY

Kenneth Young

Kenneth Young,
District Traffic Manager

DATE 12/18/2023

Ven,La101-363200 TMPdatasheet

Final Audit Report

2023-12-18

Created:	2023-12-15
By:	Duc Tran (S120454@dot.ca.gov)
Status:	Signed
Transaction ID:	CBJCHBCAABAAugi2r8DUHpPg1X_dnoyXe69Uzt4PdYII

"Ven,La101-363200 TMPdatasheet" History

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ATTACHMENT L

Risk Register

RISK REGISTER CERTIFICATION (ACCOUNTABILITY CHECKPOINTS) FORM

PPM-D07-0001 (REV 05/2022)

The risk register is to be approved and signed-off by the District Deputies listed below for all scalability levels. By signing this form, you are certifying that you have reviewed the risks documented in the register and agree that they have been managed to the extent possible by the PDT.

Project Information	☒ Capital Project ☐ Major Maintenance Project (Check One)	Total Capital Cost: \$36,211,000
Project ID/District-EA:	Project ID: 0719000312/ EA-07-363200	
Project Description/ Route/ Post-Mile:	Upgrade TMS elements at Various Locations	
Project Manager:	David H Miraaney	
Project Risk Manager:	Cardiel Bugarin	

☐ No Risk Register Certification Required -- Check box if project is less than \$1 million in total cost and risk register not prepared. Sign below and submit this form with PID, PA&ED, PS&E submittal, and RE Handoff File (as applicable).

Project Manager Signature _____ Date: _____

PID (Required for Capital Projects)

Project Manager	Date: _____
Deputy District Director, Planning	Date: _____
Deputy District Director, Design	Date: _____
Deputy District Director, Right of Way	Date: _____
Deputy District Director, Environmental	Date: _____
Deputy District Director, Traffic Operations	Date: _____
Deputy District Director, Maintenance	Date: _____
Deputy District Director, Project Management	Date: _____

PA&ED (Required for Capital Projects)

Project Manager	<i>David Miraaney</i>	Date: 03/21/2024
Deputy District Director, Design	<i>Gregory Favi</i>	Date: 03/21/2024
Deputy District Director, Construction	<i>Issam Abumukher</i>	Date: 03/21/2024
Deputy District Director, Right of Way	<i>Juli El</i>	Date: 03/21/2024
Deputy District Director, Environmental	<i>Don Matner</i>	Date: 03/21/2024
Deputy District Director, Traffic Operations	<i>Don Matner</i>	Date: 03/21/2024
Deputy District Director, Maintenance	<i>Hamid Saadatnajiadi</i>	Date: 03/21/2024
Deputy District Director, Project Management	<i>Amber</i>	Date: 03/21/2024

Prior to PS&E (Required for Capital Projects)

Project Manager	Date: _____
Deputy District Director, Design	Date: _____
Deputy District Director, Construction	Date: _____
Deputy District Director, Right of Way	Date: _____
Deputy District Director, Environmental	Date: _____
Deputy District Director, Traffic Operations	Date: _____
Deputy District Director, Maintenance	Date: _____
Deputy District Director, Project Management	Date: _____

ADA Notice

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[illegible]

CA 363200 Risk Reviewer March 25, 2024 Job RR LEW13

*Risk impact on construction schedule is estimated using Monte Carlo simulation without consideration of over-determined concurrent activities.

Page 1 of 2

EA 363200 Risk Register Certification

Final Audit Report

2024-03-21

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By:	Ryan Nai (s148568@dot.ca.gov)
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ATTACHMENT M

SHOPP Project Performance Output

District: 07

Tool ID: 19118

Project ID: 0719000312

EA: 36320

Co-Rte-PM: All Locations

View/Print PIR (Performance) Report

Multi-Objective Worksheet

Bridge

Pavement

Drainage

Facilities

Signs and Lighting

Mobility

TMS

Roadside

Bicycle and Pedestrian Infrastructure

Sustainability /Climate Change

Advance Mitigation

Mitigation

Major Damage & Bottomments

Green-House Gases

Rail/Inquistment

SHOPP Project - Accomplishment - Performance Measures - Benefits

Performance & Accomplishments (PPC)

ActID	Activity Detail	Performance Objective	Unit of Measurement	Quantity	Pre-Good	Pre-Fair	Pre-Poor	New	Post-Good	Post-Fair	Post-Poor	HQ Comment	Review Date	Performance Change Date After Review	Comment
1	E07 Guard Rail (201.010, .015)	No Performance Objective in the SHSMP	Linear Feet	3400,000			3400,000		3400,000						MBGR to MGS upgrade
2	E23 Collisions Reduced (201.015)	Collision Severity Reduction	Fatal/Serious Injury Collisions	6,000			8,000		8,000				06/18/23		Based upon the new methodology-8/10/23
3	E55 Proactive Safety Vehicles	Proactive Safety	Annual Fatal & Serious Injury Collisions	0,500			0,500		0,500				08/18/23		Based upon the new methodology-8/10/23
4	E56 Proactive Safety Pedestrians	Proactive Safety	Annual Fatal & Serious Injury Collisions	0,290			0,290		0,290				08/18/23		Modified Proactive Safety Estimation Tool
5	F01 Census Station (201.315)	No Performance Objective in the SHSMP	Each	5,000			3,000	2,000	3,000						
6	F02 Changeable Message Sign (201.315)	No Performance Objective in the SHSMP	Each	3,000			1,000	2,000	1,000						
7	F03 CCTV (201.315)	No Performance Objective in the SHSMP	Each	29,000			2,000	27,000	1,000	1,000					
8	F04 Communications (Fiber Optics -201.315)	No Performance Objective in the SHSMP	Linear Miles	11,200				11,200							
9	F05 Vehicle Detection (201.315)	No Performance Objective in the SHSMP	Each	16,000	2,000		12,000	2,000	14,000						Install 11.2 miles of fiber optic communication
10	F06 Ramp Meter (201.315)	No Performance Objective in the SHSMP	Each	2,000	2,000				2,000						
11	F14 Weigh in Motion System (201.321)	Weight-in-Motion Scales	Stations	2,000			2,000		2,000						Upgrade 2 existing WIM stations
12	F38 Central Systems (Hub- 201.315)	No Performance Objective in the SHSMP	Each	1,000	1,000				1,000						Upgrade and install IP equipment in HUB building
13	F38 Central Systems (Hub- 201.315)	No Performance Objective in the SHSMP	Each	1,000			1,000		1,000						Upgrade and install IP equipment in LARTMC building
14	F38 Central Systems (Hub- 201.315)	No Performance Objective in the SHSMP	Each	1,000			1,000		1,000						Upgrade and install IP equipment inside North Hollywood HUB
15	F39 Traffic Signals (201.315)	No Performance Objective in the SHSMP	Each	15,000	8,000		7,000		15,000						
16	F45 TMS Structure Component	Transportation Management System Structures	Each	33,000				33,000							
17	F46 TMS Technology Component	Transportation Management Systems	Each	70,000	12,000		25,000	33,000	36,000		1,000				20 MVPs
18	G07 Worker Safety - Safe Access	Roadside Safety Improvements	Locations	20,000			20,000		20,000						Negative Management Control is measured per 600 LF of MGS as one location; 3400 LF = 6.8 locations
19	G10 Worker Safety - Vegetation Control	Roadside Safety Improvements	Locations	6,800			6,800		6,800						No
20	H02 Is any Location Within the Project Limits Ped/Bike Accessible?	No Performance Objective in the SHSMP	Yes/No	No											Proposed TMS on freeway
21	H65 Justification for Bicycle and Pedestrian Infrastructure Not Applicable	Bike/Ped Prohib	1,2,3												Proposed TMS on freeway
22	N01 Qualitative	No Performance Objective in the SHSMP	-												

(Last Saved - 01/30/24 @ 1:18 PM by Kathleen Hamer)

Programming Performance Summary (All Locations) aaa

Program Code	Activity Category	Asset Class	Asset	Performance Value	Performance Measure	Unit	Pre-Good	Pre-Fair	Pre-Poor	Pre-Total	Post-Good	New	Post-Fair	Post-Poor	Post-Total
201.315	Mobility - TMS	Primary	TMS	70.0	Field element(s)	Field element(s)	32.4%	0.0%	67.6%	37.0	51.4%	47.1%	98.6%	1.4%	70.0

Notes:

- The crosswalk for reporting performance in the "Programming Performance Summary" was developed to assist the districts on performance reporting requirements for CTC and PCR. For discrepancies or errors, please notify AM Tool admins via e-mail at CT-TAM@dot.ca.gov.
- The data summarized in the table represents the performance reported or to be reported in CIP'S.
- Programming only requires the breakdown of Good, Fair and Poor for Primary and Supplementary Asset Classes.
- Reporting of bridge pre and post conditions may contain errors if the project RTL is before 2024/25.
- Reporting drainage pre-total and post good may differ whenever projects contain abandoned/removed culverts as the culvert no longer exists at post construction, is deleted from the pre-total value for posting of the post good value, and gets deleted from the statewide CIP inventory database.
- Reactive Safety projects will temporarily use the same performance outputs of Safety Improvement projects. When the reporting requirements for CTC changes, the logic in the AM Tool will change.
- During the transition to the new Proactive Safety objective, the performance output for projects with a primary activity category of Proactive Safety (under program codes 015, 112, or 235) will continue to be presented here in the units of measure corresponding to the activities historically reported to date. A change in units to "Annual Fatal and Serious Injury Collisions" for future programming requests is being planned.

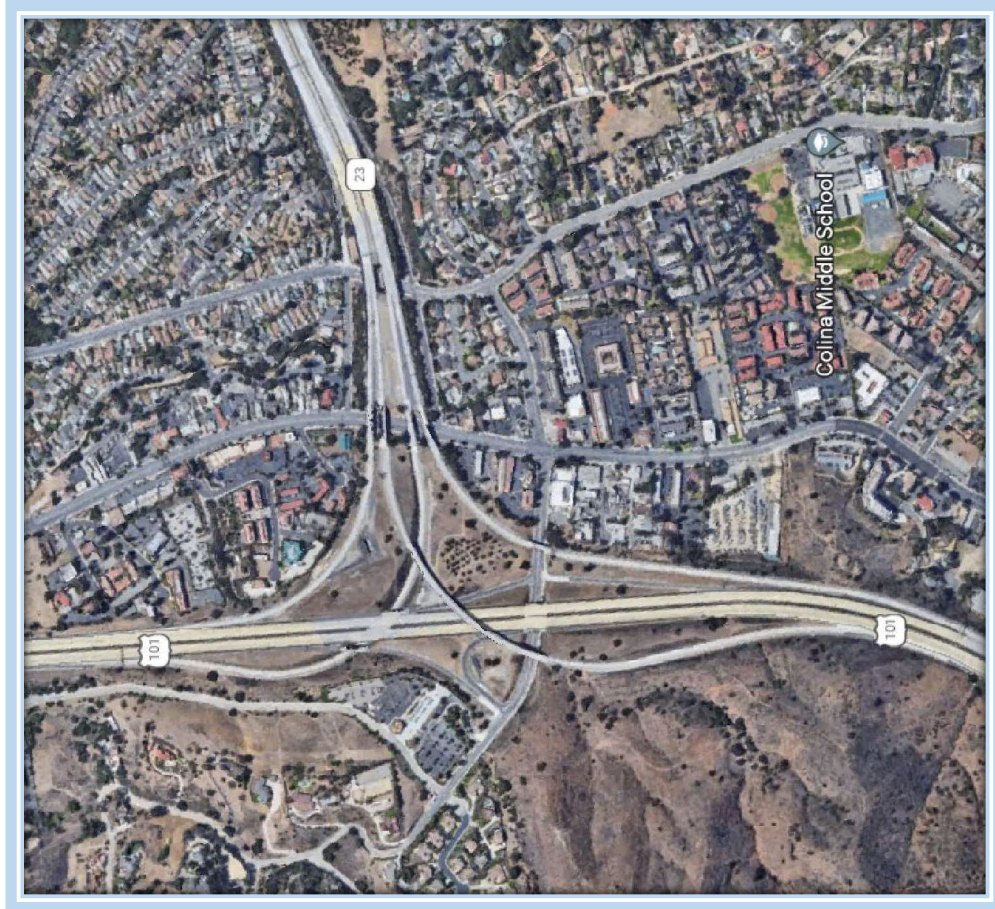
Project Summary Technology							
Project Location***	No of TMS assets	Pre-Good	Pre-Poor	Pre-New	Post-Good	Post-Poor	Post-New
VEN-101-5,0/13,8 (Primary Location)	70	12	25	33	36	1	33

Project Summary Structures							
Project Location***	No of TMS assets	Pre-Good	Pre-Poor	Pre-New	Post-Good	Post-Poor	Post-New
VEN-101-5,0/13,8 (Primary Location)	33	0	0	33	0	0	33

ATTACHMENT N

Connector Metering Proposal Study

CONNECTOR METERING PROPOSAL STUDY



VEN 23 SB CONNECTORS TO NB AND SB 101 (PM R 3.75)

CALTRANS

District 07

Freeway Operations

Ramp Metering and Traffic Signal Unit

April 2022

Prepared By: Fady Al-Awar, P.E.
Transportation Engineer (Range D)

Reviewed By: Wahib Jreij, P.E.
Senior Transportation Engineer

TABLE OF CONTENTS

INTRODUCTION AND PURPOSE

DESCRIPTION & EXISTING CONDITION

DATA COLLECTION

OBSERVATIONS, FINDINGS AND ANALYSIS

RECOMMENDATION AND CONCLUSION

ATTACHEMENTS

SB ROUTE 23 TO NB ROUTE 101 CONNECTOR

- 1. AM VOLUME & OCCUPANCY COUNTS (WEEKDAYS) (3/(23,24) & 4/12/2022)**
- 2. AM VOLUME & OCCUPANCY COUNTS (WEEKENDS) (3/26 & 4/10/2022)**
- 3. PM VOLUME & OCCUPANCY COUNTS (WEEKDAYS) (3/(23,24) & 4/12/2022)**
- 4. PM VOLUME & OCCUPANCY COUNTS (WEEKENDS) (3/26 & 4/10/2022)**
- 5. COUNT SUMMARY**

SB ROUTE 23 TO SB ROUTE 101 CONNECTOR

- 6. AM VOLUME & OCCUPANCY COUNTS (WEEKDAYS) (3/(29,30) & 4/14/2022)**
- 7. AM VOLUME & OCCUPANCY COUNTS (WEEKENDS) (4/2 & 4/17/2022)**
- 8. PM VOLUME & OCCUPANCY COUNTS (WEEKDAYS) (3/(29,30) & 4/14/2022)**
- 9. PM VOLUME & OCCUPANCY COUNTS (WEEKENDS) (4/2 & 4/17/2022)**
- 10. COUNT SUMMARY**

Introduction and Purpose:

This traffic study is aimed to justify connector metering from Southbound Moorpark Freeway (Route 23) to Northbound/Southbound Ventura Freeway (Route 101) in the City of Thousand Oaks, in Ventura County California.

The Office of Project Management, has requested a traffic operation analysis and improvement recommendation, including volume counts and occupancy percentage study at the 2 connectors, as a requirement for the connector metering to be included in the PS&E under EA 34620.

This traffic study was conducted to determine the average hourly volume in the AM and PM peak periods in addition to the high occupancy vehicle (HOV) users with respect to the total connector demand volume.

Description and Existing Condition:

Southbound Route 23 to Northbound Route 101 is a two-lane connector with an approximate 1/2-mile length and about 175 vehicles storage capacity. This connector is heavily traveled in the AM period, motorists using this connector are travelling through the 118/405 area, with some diverting to avoid the congestion along Routes 101 and 405. Some connector metering elements were installed, as a part of a previous capital project, but completion of missing hardware is required for the operation of connector metering at this location.

Southbound Route 23 to Southbound Route 101 is a two-lane connector with an approximate 1-mile length and about 350 vehicles storage capacity. This connector is also heavily traveled in the AM period, motorists using this connector are coming from the 118/405 area and/or by-passing the congestion along Routes 101 and 405. Vehicles are often travelling at high-speed when using this connector.

Data Collection:

This study details several traffic characteristics: Traffic Volume Counts and HOV Occupancy percentages at Southbound Route 23 to Northbound/Southbound Route 101 connectors. Traffic data for SB 23 to NB 101 connector was collected on March 23rd, 24th and April 12th, 2022 for weekday samples and March 26th and April 10th, 2022, for weekend ones. Similarly, data for SB 23 to SB 101 connector was collected on March 29th, 30th and April 14th, 2022, for weekdays and April 10th and 17th 2022, for weekends. The study was conducted during the AM and PM peak congestion periods, from 6:00 AM to 9:00 AM and 3:00 PM to 6:00 PM on weekdays and from 9:00 AM to 12:00 PM and 3:00 PM to 6:00 PM on weekends respectively, (Attachments 1 thru 10).

Observations, Findings and Analysis:

Summaries of the main findings based on field observations and volume counts are as follows:

SB Route 23 to NB Route 101 Connector

- During the AM peak period, SB Route 23 to NB Route 101 traffic was moderate to heavy, while in the PM period, the traffic flow was free to moderate with no observed congestion or delay.
- Between 7:30 AM and 8:30 AM, the traffic merging onto NB 101 from SB 23 was backed up along the connector due to the heavy freeway congestion along NB 101.
- SB Route 23 traffic volume onto NB Route 101 was higher during the AM than the PM peak period on weekdays as well as weekends. Below are the average volumes and HOV percentages. For more details, see Attachment 5.
 - ✓ Average peak hourly volume in the AM period on weekdays is 1841 vph.
 - ✓ Average peak hourly volume in the AM period on weekends is 1156 vph.
 - ✓ Average peak hourly volume in the PM period on weekdays is 1386 vph.
 - ✓ Average peak hourly volume in the PM period on weekends is 1192 vph.
 - ✓ Average percentage of HOV users in the AM period on weekdays is 11%
 - ✓ Average percentage of HOV users in the AM period on weekends is 18%
 - ✓ Average percentage of HOV users in the PM period on weekdays is 10%
 - ✓ Average percentage of HOV users in the PM period on weekends is 15%
 - ✓ Numbers of trucks, motorcycles, and buses along this connector are insignificant.

SB Route 23 to SB Route 101 Connector

- During the AM peak period, SB Route 23 to SB Route 101 traffic was heavy, while in the PM period, the traffic flow was free to moderate with no observed congestion or delay.
- Between 7:30 AM and 8:30 AM, the traffic merging onto SB 101 from SB 23 was backed up along the connector due to the heavy freeway congestion along SB 101.
- SB Route 23 traffic volume onto NB Route 101 was higher during the AM than the PM peak period on weekdays as well as weekends. Below are the average volumes and HOV percentages. For more details, see Attachment 10.
 - ✓ Average peak hourly volume in the AM period on weekdays is 3557 vph.
 - ✓ Average peak hourly volume in the AM period on weekends is 1327 vph.
 - ✓ Average peak hourly volume in the PM period on weekdays is 1609 vph.
 - ✓ Average peak hourly volume in the PM period on weekends is 1179 vph.
 - ✓ Average percentage of HOV users in the AM period on weekdays is 9%

- ✓ Average percentage of HOV users in the AM period on weekends is 24%
- ✓ Average percentage of HOV users in the PM period on weekdays is 15%
- ✓ Average percentage of HOV users in the PM period on weekends is 11%
- ✓ Numbers of trucks, motorcycles, and buses at this connector are insignificant.

Recommendation and Conclusion

It is recommended to implement metering at both connectors from SB Route 23 to NB and SB Route 101, as part of project EA 34620, based on the following:

- NB and SB 101 traffic flow is heavily congested on weekdays during the AM and PM peak periods in the vicinity of Route 23; 7:30 to 8:30 AM for SB 101 and 5:30 to 7:00 PM for NB 101.
- High traffic volume along the connector backs up onto Route 23 as it merges onto Route 101, during the AM and PM peak periods
- HOV by-pass lanes are not recommended due to low HOV volume along both connectors on weekdays and low to moderate on weekends, during both AM and PM peak periods.
- Both connector locations are included in the 10-year Ramp Metering Development plan (RMDP).

In conclusion, SB Route 23 to NB and SB Route 101 connectors should be metered, to mitigate the existing traffic congestion and improve the overall traffic flow in the vicinity of those freeway interchanges.

AM VOLUME COUNT (Connector)

COUNTY - ROUTE - DIR:	VEN - 23 - SB	PEAK 1 HOUR SOV VOL.	1927
CONNECTOR NAME:	SB 23 to NB 101	PEAK 1 HOUR HOV VOL.	170
DAY OF THE WEEK / DATE:	WEDNESDAY / 3 - 23 - 22	% OF HOV TO TOTAL DEMAND	8%
NO. OF CONNECTOR LANES	2	TOTAL DEMAND PER 3 HOURS SOV + HOV (VEHS)	16491
OBSERVER(S)	FADY AL-AWAR		

TIME PERIOD	AUTOS	TRUCKS	BUSES	MC	15 MIN. SOV VOL.	1 HOUR SOV VOL.	15 MIN. HOV VOL.	1 HOUR HOV VOL.
600 - 615	238	3		1	242		33	
615 - 630	243	3		2	248		38	
630 - 645	285	7		1	293		41	
645 - 700	460	6		2	468	1251	44	156
700 - 715	328	7		2	337	1346	47	170
715 - 730	444	5		1	450	1548	33	165
730 - 745	428	4		2	434	1689	42	166
745 - 800	484	8		2	494	1715	39	161
800 - 815	472	6		2	480	1858	48	162
815 - 830	511	7		1	519	1927	21	150
830 - 845	418	6	1	2	427	1920	27	135
845 - 900	421	5		3	429	1855	21	117

3 HOURS GRAND TOTAL (VEHS)

15109

1382

SOV (Single Occupancy Vehicle)

HOV (High Occupancy Vehicle)

ATTACHMENT 1

AM VOLUME COUNT (Connector)

COUNTY - ROUTE - DIR:	VEN - 23 - SB	PEAK 1 HOUR SOV VOL.	2047
CONNECTOR NAME:	SB 23 to NB 101	PEAK 1 HOUR HOV VOL.	177
DAY OF THE WEEK / DATE:	THURSDAY / 3 - 24 - 22	% OF HOV TO TOTAL DEMAND	7%
NO. OF CONNECTOR LANES	2	TOTAL DEMAND PER 3 HOURS SOV + HOV (VEHS)	17275
OBSERVER(S)	FADY AL-AWAR		

TIME PERIOD	AUTOS	TRUCKS	BUSES	MC	15 MIN. SOV VOL.	1 HOUR SOV VOL.	15 MIN. HOV VOL.	1 HOUR HOV VOL.
600 - 615	358	3		2	363		53	
615 - 630	466	3			469		42	
630 - 645	290	7		1	298		38	
645 - 700	434	6		1	441	1571	44	177
700 - 715	358	3			361	1569	41	165
715 - 730	389	3		1	393	1493	40	163
730 - 745	508	5	2	3	518	1713	30	155
745 - 800	503	3	1	4	511	1783	35	146
800 - 815	468	9		2	479	1901	19	124
815 - 830	516	7	1	1	525	2033	18	102
830 - 845	524	6		2	532	2047	22	94
845 - 900	416	5		4	425	1961	19	78

3 HOURS GRAND TOTAL (VEHS)

16071

1204

SOV (Single Occupancy Vehicle)

HOV (High Occupancy Vehicle)

ATTACHMENT 1

AM VOLUME COUNT (Connector)

COUNTY - ROUTE - DIR:	VEN - 23 - SB	PEAK 1 HOUR SOV VOL.	1548
CONNECTOR NAME:	SB 23 to NB 101	PEAK 1 HOUR HOV VOL.	378
DAY OF THE WEEK / DATE:	TUESDAY / 4 - 12 - 2022	% OF HOV TO TOTAL DEMAND	18%
NO. OF CONNECTOR LANES	2	TOTAL DEMAND PER 3 HOURS SOV + HOV (VEHS)	16005
OBSERVER(S)	FADY AL-AWAR		

TIME PERIOD	AUTOS	TRUCKS	BUSES	MC	15 MIN. SOV VOL.	1 HOUR SOV VOL.	15 MIN. HOV VOL.	1 HOUR HOV VOL.
600 - 615	214	2		3	219		22	
615 - 630	254	3		2	259		16	
630 - 645	304	7		1	312		28	
645 - 700	432	11		4	447	1237	21	87
700 - 715	383	4	1	6	394	1458	35	313
715 - 730	447	6		3	456	1443	27	355
730 - 745	481	7		3	491	1469	28	378
745 - 800	521	2		3	526	1501	16	369
800 - 815	499	5		2	506	1502	13	363
815 - 830	522	5	1	1	529	1533	17	341
830 - 845	552	3		2	557	1548	18	305
845 - 900	578	4		1	583	1510	20	293

3 HOURS GRAND TOTAL (VEHS)

13201

2804

SOV (Single Occupancy Vehicle)

HOV (High Occupancy Vehicle)

ATTACHMENT 1

AM VOLUME COUNT (Connector)

COUNTY - ROUTE - DIR:	VEN - 23 - SB	PEAK 1 HOUR SOV VOL.	1204
CONNECTOR NAME:	SB 23 to NB 101	PEAK 1 HOUR HOV VOL.	215
DAY OF THE WEEK / DATE:	SATURDAY / 3 - 26 - 22	% OF HOV TO TOTAL DEMAND	13%
NO. OF CONNECTOR LANES	2	TOTAL DEMAND PER 3 HOURS SOV + HOV (VEHS)	11931
OBSERVER(S)	FADY AL-AWAR		

TIME PERIOD	AUTOS	TRUCKS	BUSES	MC	15 MIN. SOV VOL.	1 HOUR SOV VOL.	15 MIN. HOV VOL.	1 HOUR HOV VOL.
900 - 915	292	2		2	296		22	
915 - 930	281	2		1	284		26	
930 - 945	309	5			314		25	
945 - 1000	282	3		3	288	1182	41	114
1000 - 1015	306	2		2	310	1196	28	120
1015 - 1030	289	1		2	292	1204	60	154
1030 - 1045	247	2			249	1139	53	182
1045 - 1100	295	1		1	297	1148	64	205
1100 - 1115	281	2		2	285	1123	38	215
1115 - 1130	279	3		1	283	1114	42	197
1130 - 1145	291	2		2	295	1160	32	176
1145 - 1200	285	2			287	1150	40	152

3 HOURS GRAND TOTAL (VEHS)

10416

1515

SOV (Single Occupancy Vehicle)

HOV (High Occupancy Vehicle)

ATTACHMENT 2

AM VOLUME COUNT (Connector)

COUNTY - ROUTE - DIR:	VEN - 23 - SB	PEAK 1 HOUR SOV VOL.	1107
CONNECTOR NAME:	SB 23 to NB 101	PEAK 1 HOUR HOV VOL.	293
DAY OF THE WEEK / DATE:	SUNDAY / 4 - 10 - 22	% OF HOV TO TOTAL DEMAND	22%
NO. OF CONNECTOR LANES	2	TOTAL DEMAND PER 3 HOURS SOV + HOV (VEHS)	9679
OBSERVER(S)	FADY AL-AWAR		

TIME PERIOD	AUTOS	TRUCKS	BUSES	MC	15 MIN. SOV VOL.	1 HOUR SOV VOL.	15 MIN. HOV VOL.	1 HOUR HOV VOL.
900 - 915	132	2		1	135		54	
915 - 930	138	1		1	140		49	
930 - 945	149		1	1	151		51	
945 - 1000	168	2		1	171	597	53	207
1000 - 1015	176	1		1	178	640	43	196
1015 - 1030	192	1		2	195	695	51	198
1030 - 1045	218			2	220	764	62	209
1045 - 1100	224	2		2	228	821	58	214
1100 - 1115	262			3	265	908	80	251
1115 - 1130	271	2		1	274	987	78	278
1130 - 1145	265	1		1	267	1034	64	280
1145 - 1200	298	1		2	301	1107	71	293

3 HOURS GRAND TOTAL (VEHS)

7553

2126

SOV (Single Occupancy Vehicle)

HOV (High Occupancy Vehicle)

ATTACHMENT 2

PM VOLUME COUNT (Connector)

COUNTY - ROUTE - DIR:	VEN - 23 - SB	PEAK 1 HOUR SOV VOL.	1349
CONNECTOR NAME:	SB 23 to NB 101	PEAK 1 HOUR HOV VOL.	161
DAY OF THE WEEK / DATE:	WEDNESDAY / 3 - 23 - 22	% OF HOV TO TOTAL DEMAND	10%
NO. OF CONNECTOR LANES	2	TOTAL DEMAND PER 3 HOURS SOV + HOV (VEHS)	12673
OBSERVER(S)	FADY AL-AWAR		

TIME PERIOD	AUTOS	TRUCKS	BUSES	MC	15 MIN. SOV VOL.	1 HOUR SOV VOL.	15 MIN. HOV VOL.	1 HOUR HOV VOL.
1500 - 1515	320	1		3	324		34	
1515 - 1530	343	2		3	348		37	
1530 - 1545	340		1		341		39	
1545 - 1600	322	2			324	1337	33	143
1600 - 1615	333	3			336	1349	40	149
1615 - 1630	231	2			233	1234	35	147
1630 - 1645	316	3		1	320	1213	35	143
1645 - 1700	323	1		2	326	1215	51	161
1700 - 1715	301	4		5	310	1189	40	161
1715 - 1730	338	1		1	340	1296	33	159
1730 - 1745	283	2		1	286	1262	22	146
1745 - 1800	310	3		1	314	1250	24	119

3 HOURS GRAND TOTAL (VEHS)

11345

1328

SOV (Single Occupancy Vehicle)

HOV (High Occupancy Vehicle)

ATTACHMENT 3

PM VOLUME COUNT (Connector)

COUNTY - ROUTE - DIR:	VEN - 23 - SB	PEAK 1 HOUR SOV VOL.	1346
CONNECTOR NAME:	SB 23 to NB 101	PEAK 1 HOUR HOV VOL.	159
DAY OF THE WEEK / DATE:	THURSDAY / 3 - 24 - 22	% OF HOV TO TOTAL DEMAND	9%
NO. OF CONNECTOR LANES	2	TOTAL DEMAND PER 3 HOURS SOV + HOV (VEHS)	12953
OBSERVER(S)	FADY AL-AWAR		

TIME PERIOD	AUTOS	TRUCKS	BUSES	MC	15 MIN. SOV VOL.	1 HOUR SOV VOL.	15 MIN. HOV VOL.	1 HOUR HOV VOL.
1500 - 1515	291	1	1	1	294		29	
1515 - 1530	329	3	1		333		25	
1530 - 1545	316	5		2	323		28	
1545 - 1600	323	2		2	327	1277	25	107
1600 - 1615	327	2		1	330	1313	33	111
1615 - 1630	364	1		1	366	1346	42	128
1630 - 1645	303	1		2	306	1329	36	136
1645 - 1700	329	3		1	333	1335	48	159
1700 - 1715	327	2		1	330	1335	30	156
1715 - 1730	324	2		2	328	1297	23	137
1730 - 1745	301	3		1	305	1296	26	127
1745 - 1800	302			2	304	1267	18	97

3 HOURS GRAND TOTAL (VEHS)

11795

1158

SOV (Single Occupancy Vehicle)

HOV (High Occupancy Vehicle)

ATTACHMENT 3

PM VOLUME COUNT (Connector)

COUNTY - ROUTE - DIR:	VEN - 23 - SB	PEAK 1 HOUR SOV VOL.	1462
CONNECTOR NAME:	SB 23 to NB 101	PEAK 1 HOUR HOV VOL.	200
DAY OF THE WEEK / DATE:	TUESDAY / 4 - 12 - 2022	% OF HOV TO TOTAL DEMAND	10%
NO. OF CONNECTOR LANES	2	TOTAL DEMAND PER 3 HOURS SOV + HOV (VEHS)	14163
OBSERVER(S)	FADY AL-AWAR		

TIME PERIOD	AUTOS	TRUCKS	BUSES	MC	15 MIN. SOV VOL.	1 HOUR SOV VOL.	15 MIN. HOV VOL.	1 HOUR HOV VOL.
1500 - 1515	321	2	1		324		26	
1515 - 1530	358	2		1	361		28	
1530 - 1545	362	1		2	365		21	
1545 - 1600	329	2		3	334	1384	25	100
1600 - 1615	331	3		2	336	1396	38	112
1615 - 1630	348	2		3	353	1388	45	129
1630 - 1645	358	3	1	3	365	1388	38	146
1645 - 1700	344	6		2	352	1406	43	164
1700 - 1715	361	2		1	364	1434	48	174
1715 - 1730	370	1		3	374	1455	57	186
1730 - 1745	342	6		3	351	1441	52	200
1745 - 1800	369	2		2	373	1462	41	198

3 HOURS GRAND TOTAL (VEHS)

12754

1409

SOV (Single Occupancy Vehicle)

HOV (High Occupancy Vehicle)

ATTACHMENT 3

PM VOLUME COUNT (Connector)

COUNTY - ROUTE - DIR:	VEN - 23 - SB	PEAK 1 HOUR SOV VOL.	1170
CONNECTOR NAME:	SB 23 to NB 101	PEAK 1 HOUR HOV VOL.	238
DAY OF THE WEEK / DATE:	SATURDAY / 3 - 26 - 22	% OF HOV TO TOTAL DEMAND	16%
NO. OF CONNECTOR LANES	2	TOTAL DEMAND PER 3 HOURS SOV + HOV (VEHS)	11240
OBSERVER(S)	FADY AL-AWAR		

TIME PERIOD	AUTOS	TRUCKS	BUSES	MC	15 MIN. SOV VOL.	1 HOUR SOV VOL.	15 MIN. HOV VOL.	1 HOUR HOV VOL.
1500 - 1515	291	2		1	294		43	
1515 - 1530	285	3		2	290		48	
1530 - 1545	281	1	1	1	284		59	
1545 - 1600	299	2		1	302	1170	42	192
1600 - 1615	279	2		2	283	1159	40	189
1615 - 1630	271	1		3	275	1144	52	193
1630 - 1645	270	3		2	275	1135	64	198
1645 - 1700	248	2		2	252	1085	58	214
1700 - 1715	226	3		1	230	1032	62	236
1715 - 1730	196	1	1	3	201	958	54	238
1730 - 1745	201	2		2	205	888	35	209
1745 - 1800	186	1		1	188	824	25	176

3 HOURS GRAND TOTAL (VEHS)

9395

1845

SOV (Single Occupancy Vehicle)

HOV (High Occupancy Vehicle)

ATTACHMENT 4

PM VOLUME COUNT (Connector)

COUNTY - ROUTE - DIR:	VEN - 23 - SB	PEAK 1 HOUR SOV VOL.	1214
CONNECTOR NAME:	SB 23 to NB 101	PEAK 1 HOUR HOV VOL.	219
DAY OF THE WEEK / DATE:	SUNDAY / 4 - 10 - 2022	% OF HOV TO TOTAL DEMAND	13%
NO. OF CONNECTOR LANES	2	TOTAL DEMAND PER 3 HOURS SOV + HOV (VEHS)	11252
OBSERVER(S)	FADY AL-AWAR		

TIME PERIOD	AUTOS	TRUCKS	BUSES	MC	15 MIN. SOV VOL.	1 HOUR SOV VOL.	15 MIN. HOV VOL.	1 HOUR HOV VOL.
1500 - 1515	279	2			281		75	
1515 - 1530	247	2			249		55	
1530 - 1545	232			2	232		51	
1545 - 1600	218	1			219	994	38	219
1600 - 1615	274	1		2	275	990	24	168
1615 - 1630	281	1		4	282	1023	38	151
1630 - 1645	272	1		1	273	1063	35	135
1645 - 1700	286	2		1	288	1132	28	125
1700 - 1715	248	2		2	250	1107	51	152
1715 - 1730	301	1		2	302	1127	41	155
1730 - 1745	328			1	328	1183	30	150
1745 - 1800	314	2		2	316	1214	42	164

3 HOURS GRAND TOTAL (VEHS)

9833

1419

SOV (Single Occupancy Vehicle)

HOV (High Occupancy Vehicle)

ATTACHMENT 4

CONNECTOR COUNT SUMMARY

(SB 23 to NB 101)

Field Data	Date					Average	
	Mar – 23 Wednesday	Mar – 24 Thursday	Apr – 12 Tuesday	Mar – 26 Saturday	Apr – 10 Sunday	Weekdays	Weekends
Peak hourly volume in the AM peak period, 6:00 AM to 9:00 AM (vph) on Weekdays, 9:00 AM to 12:00 PM (vph) on Weekends, per 2 lanes	1927	2047	1548	1204	1107	1841	1156
Peak hourly volume in the PM peak period, 3:00 PM to 6:00 PM (vph) on Weekdays, 3:00 PM to 6:00 PM (vph) on Weekends, per 2 lanes	1349	1346	1462	1170	1214	1386	1192
Average HOV Percentage users in the AM , 6:00 AM to 9:00 AM on Weekdays, 9:00 AM to 12:00 PM on Weekends, per 2 lanes	8%	7%	18%	13%	22%	11%	18%
Average HOV Percentage users in the PM , 3:00 PM to 6:00 PM on Weekdays, 3:00 PM to 6:00 PM on Weekends, per 2 lanes	10%	9%	10%	16%	13%	10%	15%

AM VOLUME COUNT (Connector)

COUNTY - ROUTE - DIR:	VEN - 23 - SB	PEAK 1 HOUR SOV VOL.	3442
CONNECTOR NAME:	SB 23 to SB 101	PEAK 1 HOUR HOV VOL.	326
DAY OF THE WEEK / DATE:	TUESDAY / 3 - 29 - 22	% OF HOV TO TOTAL DEMAND	11%
NO. OF CONNECTOR LANES	2	TOTAL DEMAND PER 3 HOURS SOV + HOV (VEHS)	27268
OBSERVER(S)	FADY AL-AWAR		

TIME PERIOD	AUTOS	TRUCKS	BUSES	MC	15 MIN. SOV VOL.	1 HOUR SOV VOL.	15 MIN. HOV VOL.	1 HOUR HOV VOL.
600 - 615	322	2		1	325		43	
615 - 630	334	3		2	339		54	
630 - 645	406			1	407		66	
645 - 700	604	14		1	619	1690	75	238
700 - 715	610	5		2	617	1982	80	275
715 - 730	693	7		2	702	2345	61	282
730 - 745	654	3	2	2	661	2599	72	288
745 - 800	917	8	3	2	930	2910	107	320
800 - 815	843	3		3	849	3142	86	326
815 - 830	928	4		1	933	3373	49	314
830 - 845	721	6		3	730	3442	45	287
845 - 900	701	2	2	3	708	3220	55	235

3 HOURS GRAND TOTAL (VEHS)

24703

2565

SOV (Single Occupancy Vehicle)

HOV (High Occupancy Vehicle)

ATTACHMENT 6

AM VOLUME COUNT (Connector)

COUNTY - ROUTE - DIR:	VEN - 23 - SB	PEAK 1 HOUR SOV VOL.	3461
CONNECTOR NAME:	SB 23 to SB 101	PEAK 1 HOUR HOV VOL.	305
DAY OF THE WEEK / DATE:	WEDNESDAY / 3 - 30 - 2022	% OF HOV TO TOTAL DEMAND	9%
NO. OF CONNECTOR LANES	2	TOTAL DEMAND PER 3 HOURS SOV + HOV (VEHS)	28568
OBSERVER(S)	FADY AL-AWAR		

TIME PERIOD	AUTOS	TRUCKS	BUSES	MC	15 MIN. SOV VOL.	1 HOUR SOV VOL.	15 MIN. HOV VOL.	1 HOUR HOV VOL.
600 - 615	487	3		3	493		74	
615 - 630	543	3		4	550		71	
630 - 645	457	5		1	463		64	
645 - 700	626	18		5	649	2155	78	287
700 - 715	615	9		8	632	2294	83	296
715 - 730	649	6	1	2	658	2402	68	293
730 - 745	781	8	2	3	794	2733	74	303
745 - 800	891	10	2	6	909	2993	80	305
800 - 815	838	42			880	3241	81	303
815 - 830	817	5		3	825	3408	57	292
830 - 845	840	5		2	847	3461	53	271
845 - 900	725	3		2	730	3282	58	249

3 HOURS GRAND TOTAL (VEHS)

25969

2599

SOV (Single Occupancy Vehicle)

HOV (High Occupancy Vehicle)

ATTACHMENT 6

AM VOLUME COUNT (Connector)

COUNTY - ROUTE - DIR:	VEN - 23 - SB	PEAK 1 HOUR SOV VOL.	3767
CONNECTOR NAME:	SB 23 to SB 101	PEAK 1 HOUR HOV VOL.	214
DAY OF THE WEEK / DATE:	THURSDAY / 4 - 14 - 2022	% OF HOV TO TOTAL DEMAND	5.5%
NO. OF CONNECTOR LANES	2	TOTAL DEMAND PER 3 HOURS SOV + HOV (VEHS)	29044
OBSERVER(S)	FADY AL-AWAR		

TIME PERIOD	AUTOS	TRUCKS	BUSES	MC	15 MIN. SOV VOL.	1 HOUR SOV VOL.	15 MIN. HOV VOL.	1 HOUR HOV VOL.
600 - 615	261	2	1	3	267		25	
615 - 630	382	5		3	390		28	
630 - 645	479	7		1	487		35	
645 - 700	714	13		2	729	1873	48	136
700 - 715	548	3	2	3	556	2162	56	167
715 - 730	755	15	1	5	776	2548	53	192
730 - 745	898	2		5	905	2966	57	214
745 - 800	914	4		1	919	3156	41	207
800 - 815	1012	2		5	1019	3619	42	193
815 - 830	919	3	1	1	924	3767	39	179
830 - 845	822	2		2	826	3688	41	163
845 - 900	868	5		1	874	3643	49	171

3 HOURS GRAND TOTAL (VEHS)

27422

1622

SOV (Single Occupancy Vehicle)

HOV (High Occupancy Vehicle)

ATTACHMENT 6

AM VOLUME COUNT (Connector)

COUNTY - ROUTE - DIR:	VEN - 23 - SB	PEAK 1 HOUR SOV VOL.	1548
CONNECTOR NAME:	SB 23 to SB 101	PEAK 1 HOUR HOV VOL.	378
DAY OF THE WEEK / DATE:	SATURDAY / 4 - 2 - 2022	% OF HOV TO TOTAL DEMAND	18%
NO. OF CONNECTOR LANES	2	TOTAL DEMAND PER 3 HOURS SOV + HOV (VEHS)	16389
OBSERVER(S)	FADY AL-AWAR		

TIME PERIOD	AUTOS	TRUCKS	BUSES	MC	15 MIN. SOV VOL.	1 HOUR SOV VOL.	15 MIN. HOV VOL.	1 HOUR HOV VOL.
600 - 615	326	3		2	331		71	
615 - 630	336	3		5	344		62	
630 - 645	343	1		2	346		84	
645 - 700	376	2		3	381	1402	89	306
700 - 715	382	3		2	387	1458	78	313
715 - 730	322	2		5	329	1443	104	355
730 - 745	366	3		3	372	1469	107	378
745 - 800	407	2		4	413	1501	80	369
800 - 815	386	1		1	388	1502	72	363
815 - 830	354	3		3	360	1533	82	341
830 - 845	382	3		2	387	1548	71	305
845 - 900	371	1		3	375	1510	68	293

3 HOURS GRAND TOTAL (VEHS)

13366

3023

SOV (Single Occupancy Vehicle)

HOV (High Occupancy Vehicle)

ATTACHMENT 7

AM VOLUME COUNT (Connector)

COUNTY - ROUTE - DIR:	VEN - 23 - SB	PEAK 1 HOUR SOV VOL.	1105
CONNECTOR NAME:	SB 23 to SB 101	PEAK 1 HOUR HOV VOL.	552
DAY OF THE WEEK / DATE:	SUNDAY / 4 - 17 - 2022	% OF HOV TO TOTAL DEMAND	30%
NO. OF CONNECTOR LANES	2	TOTAL DEMAND PER 3 HOURS SOV + HOV (VEHS)	12073
OBSERVER(S)	FADY AL-AWAR		

TIME PERIOD	AUTOS	TRUCKS	BUSES	MC	15 MIN. SOV VOL.	1 HOUR SOV VOL.	15 MIN. HOV VOL.	1 HOUR HOV VOL.
900 - 915	191	2		1	194		62	
915 - 930	175	1		1	177		72	
930 - 945	173			2	175		80	
945 - 1000	196	2		3	201	747	78	292
1000 - 1015	193	1		1	195	748	68	298
1015 - 1030	236			2	238	809	82	308
1030 - 1045	260	1	1	3	265	899	101	329
1045 - 1100	255			2	257	955	132	383
1100 - 1115	264	1		2	267	1027	128	443
1115 - 1130	282	1		2	285	1074	131	492
1130 - 1145	261				261	1070	151	542
1145 - 1200	290	1		1	292	1105	142	552

3 HOURS GRAND TOTAL (VEHS)

8434

3639

SOV (Single Occupancy Vehicle)

HOV (High Occupancy Vehicle)

ATTACHMENT 7

PM VOLUME COUNT (Connector)

COUNTY - ROUTE - DIR:	VEN - 23 - SB	PEAK 1 HOUR SOV VOL.	1559
CONNECTOR NAME:	SB 23 to SB 101	PEAK 1 HOUR HOV VOL.	305
DAY OF THE WEEK / DATE:	TUESDAY / 3 - 29 - 2022	% OF HOV TO TOTAL DEMAND	15%
NO. OF CONNECTOR LANES	2	TOTAL DEMAND PER 3 HOURS SOV + HOV (VEHS)	15056
OBSERVER(S)	FADY AL-AWAR		

TIME PERIOD	AUTOS	TRUCKS	BUSES	MC	15 MIN. SOV VOL.	1 HOUR SOV VOL.	15 MIN. HOV VOL.	1 HOUR HOV VOL.
1500 - 1515	380	2		2	384		51	
1515 - 1530	408	3		1	412		47	
1530 - 1545	392	1		3	396		60	
1545 - 1600	365	1		1	367	1559	52	210
1600 - 1615	367	6	1	2	376	1551	57	216
1615 - 1630	363	1	1	1	366	1505	54	223
1630 - 1645	327	2	1	2	332	1441	61	224
1645 - 1700	353	1		1	355	1429	73	245
1700 - 1715	283	1	1	1	286	1339	58	246
1715 - 1730	376	2			378	1351	97	289
1730 - 1745	302	1		1	304	1323	77	305
1745 - 1800	332	4		2	338	1306	62	294

3 HOURS GRAND TOTAL (VEHS)

12804

2252

SOV (Single Occupancy Vehicle)

HOV (High Occupancy Vehicle)

ATTACHMENT 8

PM VOLUME COUNT (Connector)

COUNTY - ROUTE - DIR:	VEN - 23 - SB	PEAK 1 HOUR SOV VOL.	1610
CONNECTOR NAME:	SB 23 to SB 101	PEAK 1 HOUR HOV VOL.	303
DAY OF THE WEEK / DATE:	WEDNESDAY / 3 - 30 - 2022	% OF HOV TO TOTAL DEMAND	15%
NO. OF CONNECTOR LANES	2	TOTAL DEMAND PER 3 HOURS SOV + HOV (VEHS)	15279
OBSERVER(S)	FADY AL-AWAR		

TIME PERIOD	AUTOS	TRUCKS	BUSES	MC	15 MIN. SOV VOL.	1 HOUR SOV VOL.	15 MIN. HOV VOL.	1 HOUR HOV VOL.
1500 - 1515	397	1		2	400		45	
1515 - 1530	434	2		2	438		37	
1530 - 1545	399	3		1	403		64	
1545 - 1600	367	1		1	369	1610	62	208
1600 - 1615	326	2		1	329	1539	57	220
1615 - 1630	396	4		3	403	1504	53	236
1630 - 1645	326	3		4	333	1434	75	247
1645 - 1700	364	2		1	367	1432	68	253
1700 - 1715	302	1		1	304	1407	80	276
1715 - 1730	362	2		2	366	1370	80	303
1730 - 1745	312	3		2	317	1354	68	296
1745 - 1800	313	2		2	317	1304	58	286

3 HOURS GRAND TOTAL (VEHS)

12954

2325

SOV (Single Occupancy Vehicle)

HOV (High Occupancy Vehicle)

ATTACHMENT 8

PM VOLUME COUNT (Connector)

COUNTY - ROUTE - DIR:	VEN - 23 - SB	PEAK 1 HOUR SOV VOL.	1659
CONNECTOR NAME:	SB 23 to SB 101	PEAK 1 HOUR HOV VOL.	308
DAY OF THE WEEK / DATE:	THURSDAY / 4 - 14 - 2022	% OF HOV TO TOTAL DEMAND	15%
NO. OF CONNECTOR LANES	2	TOTAL DEMAND PER 3 HOURS SOV + HOV (VEHS)	15940
OBSERVER(S)	FADY AL-AWAR		

TIME PERIOD	AUTOS	TRUCKS	BUSES	MC	15 MIN. SOV VOL.	1 HOUR SOV VOL.	15 MIN. HOV VOL.	1 HOUR HOV VOL.
1500 - 1515	398	2		2	402		41	
1515 - 1530	431	3		3	437		53	
1530 - 1545	418	1	1	2	422		63	
1545 - 1600	394	2		2	398	1659	75	232
1600 - 1615	382	3		2	387	1644	61	252
1615 - 1630	334	4		3	341	1548	53	252
1630 - 1645	372	5		4	381	1507	62	251
1645 - 1700	368	2		3	373	1482	67	243
1700 - 1715	370	1		2	373	1468	72	254
1715 - 1730	315	3	1	2	321	1448	86	287
1730 - 1745	336	2		1	339	1406	83	308
1745 - 1800	372	4		1	377	1410	48	289

3 HOURS GRAND TOTAL (VEHS)

13572

2368

SOV (Single Occupancy Vehicle)

HOV (High Occupancy Vehicle)

ATTACHMENT 8

PM VOLUME COUNT (Connector)

COUNTY - ROUTE - DIR:	VEN - 23 - SB	PEAK 1 HOUR SOV VOL.	1130
CONNECTOR NAME:	SB 23 to SB 101	PEAK 1 HOUR HOV VOL.	388
DAY OF THE WEEK / DATE:	SATURDAY / 4 - 2 - 2022	% OF HOV TO TOTAL DEMAND	4%
NO. OF CONNECTOR LANES	2	TOTAL DEMAND PER 3 HOURS SOV + HOV (VEHS)	12344
OBSERVER(S)	FADY AL-AWAR		

TIME PERIOD	AUTOS	TRUCKS	BUSES	MC	15 MIN. SOV VOL.	1 HOUR SOV VOL.	15 MIN. HOV VOL.	1 HOUR HOV VOL.
1500 - 1515	283	1		2	286		83	
1515 - 1530	272	2		5	279		85	
1530 - 1545	255	3		2	260		88	
1545 - 1600	293	2		2	297	1122	68	324
1600 - 1615	289	3		2	294	1130	72	313
1615 - 1630	268	2		1	271	1122	81	309
1630 - 1645	254	3		2	259	1121	84	305
1645 - 1700	221	2		1	224	1048	92	329
1700 - 1715	243	3		2	248	1002	101	358
1715 - 1730	203	2		3	208	939	111	388
1730 - 1745	221	1		3	225	905	82	386
1745 - 1800	198	3		3	204	885	64	358

3 HOURS GRAND TOTAL (VEHS)

9274

3070

SOV (Single Occupancy Vehicle)

HOV (High Occupancy Vehicle)

ATTACHMENT 9

PM VOLUME COUNT (Connector)

COUNTY - ROUTE - DIR:	VEN - 23 - SB	PEAK 1 HOUR SOV VOL.	1227
CONNECTOR NAME:	SB 23 to SB 101	PEAK 1 HOUR HOV VOL.	296
DAY OF THE WEEK / DATE:	SUNDAY / 4 - 17 - 2022	% OF HOV TO TOTAL DEMAND	18%
NO. OF CONNECTOR LANES	2	TOTAL DEMAND PER 3 HOURS SOV + HOV (VEHS)	12303
OBSERVER(S)	FADY AL-AWAR		

TIME PERIOD	AUTOS	TRUCKS	BUSES	MC	15 MIN. SOV VOL.	1 HOUR SOV VOL.	15 MIN. HOV VOL.	1 HOUR HOV VOL.
1500 - 1515	272			2	274		102	
1515 - 1530	254			3	257		75	
1530 - 1545	268	2		1	271		62	
1545 - 1600	251			2	253	1055	57	296
1600 - 1615	283	1		1	285	1066	65	259
1615 - 1630	279	1		2	282	1091	68	252
1630 - 1645	262			1	263	1083	61	251
1645 - 1700	283	1		1	285	1115	58	252
1700 - 1715	256			3	259	1089	68	255
1715 - 1730	318			2	320	1127	51	238
1730 - 1745	306	2		4	312	1176	62	239
1745 - 1800	332	2		2	336	1227	51	232

3 HOURS GRAND TOTAL (VEHS)

10029

2274

SOV (Single Occupancy Vehicle)

HOV (High Occupancy Vehicle)

ATTACHMENT 9

CONNECTOR COUNT SUMMARY

(SB 23 to SB 101)

Field Data	Date					Average	
	Mar – 29 Tuesday	Mar – 30 Wednesday	Apr – 14 Thursday	Apr – 02 Saturday	Apr – 17 Sunday	Weekdays	Weekends
Peak hourly volume in the AM peak period, 6:00 AM to 9:00 AM (vph) on Weekdays, 9:00 AM to 12:00 PM (vph) on Weekends, per 2 lanes	3442	3461	3767	1548	1105	3557	1327
Peak hourly volume in the PM peak period, 3:00 PM to 6:00 PM (vph) on Weekdays, 3:00 PM to 6:00 PM (vph) on Weekends, per 2 lanes	1559	1610	1659	1130	1227	1609	1179
Average HOV Percentage users in the AM , 6:00 AM to 9:00 AM on Weekdays, 9:00 AM to 12:00 PM on Weekends, per 2 lanes	11%	9%	6%	18%	30%	9%	24%
Average HOV Percentage users in the PM , 3:00 PM to 6:00 PM on Weekdays, 3:00 PM to 6:00 PM on Weekends, per 2 lanes	15%	15%	15%	4%	18%	15%	11%

EA 36320 Project Report 2nd Level Approvals

Final Audit Report

2024-04-08

Created:	2024-04-05
By:	Everett Lee (s150940@dot.ca.gov)
Status:	Canceled / Declined
Transaction ID:	CBJCHBCAABAAY_TPPr6B8HAIX-4k3ImETqL3BbbLq3Cw

"EA 36320 Project Report 2nd Level Approvals" History

-  Document created by Everett Lee (s150940@dot.ca.gov)
2024-04-05 - 0:06:49 AM GMT
-  Document emailed to Derek Higa (derek.higa@dot.ca.gov) for approval
2024-04-05 - 0:08:06 AM GMT
-  Document emailed to Rafael Molina (rafael.molina@dot.ca.gov) for approval
2024-04-05 - 0:08:06 AM GMT
-  Document emailed to Dan Murdoch (dan.murdoch@dot.ca.gov) for signature
2024-04-05 - 0:08:06 AM GMT
-  Document emailed to Kelly Ewing-Toledo (kelly.ewing-toledo@dot.ca.gov) for approval
2024-04-05 - 0:08:06 AM GMT
-  Document emailed to Kelly Lamare (kelly.m.lamare@dot.ca.gov) for approval
2024-04-05 - 0:08:06 AM GMT
-  Document emailed to Karen Fong (karen.fong@dot.ca.gov) for approval
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-  Email viewed by Dan Murdoch (dan.murdoch@dot.ca.gov)
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-  Email viewed by Derek Higa (derek.higa@dot.ca.gov)
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-  Email viewed by Kelly Lamare (kelly.m.lamare@dot.ca.gov)
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-  Document approved by Derek Higa (derek.higa@dot.ca.gov)
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 Email viewed by Kelly Ewing-Toledo (kelly.ewing-toledo@dot.ca.gov)

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Signature Date: 2024-04-05 - 9:41:21 PM GMT - Time Source: server

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 Document approved by Karen Fong (karen.fong@dot.ca.gov)

Approval Date: 2024-04-08 - 6:03:36 AM GMT - Time Source: server

 Document declined by Rafael Molina (rafael.molina@dot.ca.gov)

Decline reason: Revisions are needed, thank you.

2024-04-08 - 9:23:16 PM GMT



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07-363200 PR with attachments - Ven_101 - 4.12.2024

Final Audit Report

2024-04-12

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Status:	Signed
Transaction ID:	CBJCHBCAABAAA1XJtdPXDxXgX-TRktuzqTvzqqc2Dp4Z

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-  Document created by Everett Lee (s150940@dot.ca.gov)
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-  Document emailed to Rafael Molina (rafael.molina@dot.ca.gov) for signature
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-  Agreement completed.
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EA 07-363200 Project Report

Final Audit Report

2024-05-10

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-  Document created by Everett Lee (s150940@dot.ca.gov)
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-  Document emailed to Monica Benavides (monica.benavides@dot.ca.gov) for approval
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-  Document emailed to Gloria Roberts (gloria.roberts@dot.ca.gov) for signature
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-  Email viewed by Gloria Roberts (gloria.roberts@dot.ca.gov)
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-  Agreement completed.
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