

ROAD REPAIR AND ACCOUNTABILITY ACT OF 2017  
PROJECT BASELINE AGREEMENT

Marin Sonoma Narrows (MSN) Contract B7

Resolution SSCP-P-2021-05B

(will 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) for the *Marin Sonoma Narrows (MSN) Contract B7*, effective on, June 23, 2021 (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, Transportation Authority of Marin (TAM) and Metropolitan Transportation Commission (MTC)*, and the Implementing agency, *Caltrans*, sometimes collectively referred to as the "Parties".

**3. RECITAL**

- 3.2 Whereas at its *Commission Programmed Project Date* meeting the Commission approved the Solutions for Congested Corridors Program, and included in this program of projects the *Marin Sonoma Narrows (MSN) Contract B7*, 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 and the Project Report attached hereto as Exhibit B, as the baseline for project monitoring by the Commission.
- 3.3 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 *Insert Number*, "Adoption of Program of Projects for the Active Transportation Program", dated
  - ☐ Resolution *Insert Number*, "Adoption of Program of Projects for the Local Partnership Program", dated
  - ☒ Resolution G-20-80, "Adoption of Program of Projects for the Solutions for Congested Corridors Program", dated
  - ☐ Resolution *Insert Number*, "Adoption of Program of Projects for the State Highway Operation and Protection Program", dated
  - ☐ Resolution *Insert Number*, "Adoption of Program of Projects for the Trade Corridor Enhancement Program", dated

- 4.3 All signatories agree to adhere to the Commission's Solutions for Congested Corridors Program, 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 TAM in partnership with MTC agrees to secure funds for any additional costs of the project.
- 4.6 TAM agrees to report to Caltrans on a quarterly basis; after July 2019, reports will be on a semi-annual basis on the progress made toward the implementation of the project, including scope, cost, schedule, outcomes, and anticipated benefits.
- 4.7 Caltrans agrees to prepare program progress reports on a quarterly basis; after July 2019, reports will be 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 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 during the course of the project, and retain those records for four years from the date of the final closeout of the project. Financial records will be maintained in accordance with Generally Accepted Accounting Principles.
- 4.10 The Transportation 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 four 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 Other Project Specific Provisions and Conditions**

## **Attachments:**

Exhibit A: Project Programming Request Form

Exhibit B: Project Report

SIGNATURE PAGE  
TO  
PROJECT BASELINE AGREEMENT

Marin Sonoma Narrows (MSN) Contract B7

Resolution SCCP-P-2021-05B



Therese W. McMillan

April 30, 2021

Date

Executive Director, Metropolitan Transportation Commission

Project Applicant



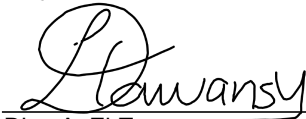
Anne Richman

April 29, 2021

Date

Executive Director, Transportation Authority of Marin

Project Applicant



Dina A. El-Tawansy

5/3/2021

Date

District Director, California Department of Transportation

Project Applicant  
Implementing Agency

*Michael D. Keever* for

Toks Omishakin

6/22/21

Date

Director

California Department of Transportation



Mitchell Weiss

08/17/21

Date

Executive Director

California Transportation Commission

Amendment (Existing Project) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO					Date	06/30/2021 16:43:26
Programs <input type="checkbox"/> LPP-C <input checked="" type="checkbox"/> LPP-F <input type="checkbox"/> SCCP <input type="checkbox"/> TCEP <input type="checkbox"/> STIP <input type="checkbox"/> Other						
District	EA	Project ID	PPNO	Nominating Agency		
04	26472	0419000068	0361M	Caltrans District 4		
County	Route	PM Back	PM Ahead	Co-Nominating Agency		
Marin	101	R 20.800	27.100	Transportation Authority of Marin, Metropolitan Transportatio		
				MPO	Element	
				MTC	Capital Outlay	
Project Manager/Contact			Phone	Email Address		
Wajahat Nyaz			510-715-6450	wajahat.nyaz@dot.ca.gov		

**Project Title**

Marin Sonoma Narrows (MSN) Contract B7

**Location (Project Limits), Description (Scope of Work)**

On Route 101, in Marin County, in and near city of Novato, from just south of the Franklin Avenue Overhead to 0.3 miles south of the Marin/Sonoma County line. The Project will widen Route 101 to construct a southbound HOV lane from 0.3 miles south of the Marin/Sonoma County line to just south of the Franklin Avenue Overhead (6.0 miles), and a northbound HOV lane from 1.7 miles north of the Atherton Avenue Overcrossing to 0.3 miles south of the Marin/Sonoma County line (3.5 miles). The Project includes roadway and bridge widening for HOV lanes and standard shoulders. The Project will also upgrade the horizontal and vertical roadway alignment (for a 70 mph design speed), modify the Redwood Landfill Interchange ramps to conform with the new alignment, and restripe a frontage road (Redwood Boulevard) for Class II bike lanes in Novato.

Component	Implementing Agency
PA&ED	Caltrans District 4
PS&E	Transportation Authority of Marin
Right of Way	Caltrans District 4
Construction	Caltrans District 4

**Legislative Districts**

Assembly:	10	Senate:	2	Congressional:	2
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Project Milestone	Existing	Proposed
Project Study Report Approved		
Begin Environmental (PA&ED) Phase	01/01/2001	01/01/2001
Circulate Draft Environmental Document Document Type EIR/EIS	10/16/2007	10/16/2007
Draft Project Report	10/09/2007	10/09/2007
End Environmental Phase (PA&ED Milestone)	10/29/2009	10/29/2009
Begin Design (PS&E) Phase	02/01/2019	02/01/2019
End Design Phase (Ready to List for Advertisement Milestone)	10/30/2020	06/25/2021
Begin Right of Way Phase	05/01/2019	05/01/2019
End Right of Way Phase (Right of Way Certification Milestone)	10/16/2020	06/25/2021
Begin Construction Phase (Contract Award Milestone)	04/21/2021	12/31/2021
End Construction Phase (Construction Contract Acceptance Milestone)	11/22/2023	12/30/2025
Begin Closeout Phase	11/23/2023	12/31/2025
End Closeout Phase (Closeout Report)	12/30/2025	12/30/2027



Date 06/30/2021 16:43:26

Purpose and Need

**Purpose:** The purpose of this Project is to reduce congestion and improve mobility while providing an incentive for commuters to use buses, carpools, or vanpools for peak period travel; to improve freeway operations including providing safe access to and from the facility by addressing current deficiencies such as sight distance, substandard curves and narrow shoulders; to improve highway operations by replacing ramp metering equipment and other Traffic Operations System (TOS) elements; to improve bike connectivity by re-stripping a frontage road (Redwood Boulevard) for Class II bicycle lanes; and to integrate economic vitality in the region by improved access to adjacent economic centers.

**Need:** The peak period traffic flows within the project limits are heavily directional, southbound in the morning and northbound in the evening, and the delay experienced by motorists using US 101 during the AM and PM peak commuting periods is among the worst in the San Francisco Bay Area

NHS Improvements	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Roadway Class 2	Reversible Lane Analysis	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Inc. Sustainable Communities Strategy Goals	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Reduce Greenhouse Gas Emissions	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	

Project Outputs			
Category	Outputs	Unit	Total
TMS (Traffic Management Systems)	Traffic monitoring detection stations	EA	3
Drainage	Culverts	LF	9,130
TMS (Traffic Management Systems)	Changeable message signs	EA	2
TMS (Traffic Management Systems)	Extinguishable message signs	EA	1
Pavement (lane-miles)	Mainline Shoulders construction	Miles	16
Operational Improvement	Curve and vertical alignment corrections	EA	10
Operational Improvement	Shoulder widening	EA	4
TMS (Traffic Management Systems)	Freeway ramp meters	EA	6
TMS (Traffic Management Systems)	Closed circuit television cameras	EA	3
Active Transportation	Pedestrian/Bicycle facilities miles constructed	Miles	0.76
Operational Improvement	Ramp modifications	EA	4
Pavement (lane-miles)	HOV/HOT mainline constructed	Miles	9.5

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#### Additional Information

This Project will reduce congestion and improve mobility, while providing an incentive for commuters to use buses, carpools and vanpools for peak period travel, by providing new HOV lanes. The Project is parallel to multimodal facilities including the Sonoma Marin Area Rail Transit (SMART) train and a multi-use bicycle/pedestrian pathway adjacent to US 101, which connects communities in Marin and Sonoma Counties. When the Project is completed, it will not only complete the 16 miles HOV lane MSN Corridor project, but it will also contribute to the larger multimodal network by providing continuous HOV lanes on US 101 from Richardson Bay in southern Marin County to Windsor in northern Sonoma County, a distance of over 50 miles. US 101 through Marin and Sonoma Counties has experienced increases in traffic as a result of growth from residential, business, and recreational expansion in the area. It is estimated that, without improvements, this segment of US 101, within the project limits, will operate at a Level of Service (LOS) F during the AM and PM peak in the future.

The Build and No Build numbers for Performance Indicators and Measures "Person Hours" and "Per Capita" are 20 year projections and the change shows the actual travel time savings.

\$500K of SB1-LPP-F funding was already allocated to TAM for parent projects prior to the split/combining of this project under PPNO 0361G (\$250K) & PPNO 0360W (\$250K). For this reason, this \$500K in LPP-F funds has been removed from the PPR for this Baseline Agreement, which has also reduced the total project cost amount by \$500K. \$1,122K of RTIP STIP COVID relief funds were noticed at the May 2021 CTC meeting and programmed in the June 2021 CTC meeting. The 3,500K of LPP-F funding was programmed and allocated at May 2021 CTC meeting, and a 12-month time extension was approved at the June 2021 CTC meeting.

The project's schedule change is because RM 3 funds initially programmed for this project are held in litigation. The project was originally RTL in December '21, but soon after, it was discovered that RM 3 funds are no longer available, and new fund sources must be identified to advance the project. This process has set back the total design time, but the project will be re-RTL'ed on 28th June 2021.

The project Post Mile (PM) Limits have been updated. The "Ahead PM" is revised to 27.1 (instead of 27.3), and Prefix "R" has been added to the "Back PM."

Performance Indicators and Measures						
Measure	Required For	Indicator/Measure	Unit	Build	Future No Build	Change
Congestion Reduction	LPPF, LPPC, SCCP	Project Area, Corridor, County, or Regionwide VMT per Capita and Total VMT	Total Miles	14,803,800	14,654,500	149,300
			VMT per Capita	16.9	16.8	0.1
	LPPF, LPPC, SCCP	Person Hours of Travel Time Saved	Person Hours	152,006,382	175,667,636	-23,661,254
			Hours per Capita	173.9	201	-27.1
	LPPF, LPPC, SCCP	Daily Vehicle Hours of Delay	Hours	34,581	37,818	-3,237
System Reliability	LPPF, LPPC, SCCP	Peak Period Travel Time Reliability Index	Index	5.35	10.95	-5.6
	LPPF, LPPC, SCCP	Transit Service On-Time Performance	% "On-time"	87.67	86.15	1.52
Air Quality & GHG	LPPF, LPPC, SCCP, TCEP	Particulate Matter	PM 2.5 Tons	10	10	0
			PM 10 Tons	10	10	0
	LPPF, LPPC, SCCP, TCEP	Carbon Dioxide (CO2)	Tons	1,519,563	1,579,956	-60,393
	LPPF, LPPC, SCCP, TCEP	Volatile Organic Compounds (VOC)	Tons	115	131	-16
	LPPF, LPPC, SCCP, TCEP	Sulphur Dioxides (SOx)	Tons	15	16	-1
	LPPF, LPPC, SCCP, TCEP	Carbon Monoxide (CO)	Tons	4,068	4,333	-265
	LPPF, LPPC, SCCP, TCEP	Nitrogen Oxides (NOx)	Tons	662	701	-39
Safety	LPPF, LPPC, SCCP, TCEP	Number of Non-Motorized Fatalities and Non-Motorized Serious Injuries	Number	0	0	0
	LPPF, LPPC, SCCP, TCEP	Number of Fatalities	Number	12	14	-2
	LPPF, LPPC, SCCP, TCEP	Fatalities per 100 Million VMT	Number	0.0016	0.0018	-0.0002
	LPPF, LPPC, SCCP, TCEP	Number of Serious Injuries	Number	1,293	1,509	-216
	LPPF, LPPC, SCCP, TCEP	Number of Serious Injuries per 100 Million VMT	Number	0.127	0.15	-0.023
Accessibility	LPPF, LPPC, SCCP	Number of Jobs Accessible by Mode	Number	626,310	606,320	19,990
	LPPF, LPPC, SCCP	Number of Destinations Accessible by Mode	Number	62,960	61,700	1,260
	LPPF, LPPC, SCCP	Percent of Population Defined as Low Income or Disadvantaged Within 1/2 Mile of Rail Station, Ferry Terminal, or High-Frequency Bus Stop	%	0	0	0
Economic Development	LPPF, LPPC, SCCP, TCEP	Jobs Created (Direct and Indirect)	Number	1,031.42	0	1,031.42
Cost Effectiveness	LPPF, LPPC, SCCP, TCEP	Cost Benefit Ratio	Ratio	2.18	0	2.18
System Preservation Pavement	LPPC, LPPF	Pavement Condition Index	Index	100	80	20
			Rating	Good	Fair	

Performance Indicators and Measures						
Measure	Required For	Indicator/Measure	Unit	Build	Future No Build	Change
System Preservation Bridges	LPPF, LPPC	Bridge Deck Rating	Rating	NA	NA	
	LPPF, LPPC	Bridge Superstructure Rating	Rating	NA	NA	
	LPPF, LPPC	Bridge Substructure Rating	Rating	NA	NA	
Noise Level (Soundwalls Only)	LPPC, LPPF	Number of Receptors	Number	0	0	0
	LPPC, LPPF	Properties Directly Benefited	Number	0	0	0
	LPPC, LPPF	Number of Decibels	Number	0	0	0

District	County	Route	EA	Project ID	PPNO
04	Marin	101	26472	0419000068	0361M
Project Title					
Marin Sonoma Narrows (MSN) Contract B7					

Existing Total Project Cost (\$1,000s)									Implementing Agency
Component	Prior	20-21	21-22	22-23	23-24	24-25	25-26+	Total	
E&P (PA&ED)									Caltrans District 4
PS&E	6,800							6,800	Transportation Authority of Marin
R/W SUP (CT)	50							50	Caltrans District 4
CON SUP (CT)		2,500	14,850					17,350	Caltrans District 4
R/W	50	7,245						7,295	Caltrans District 4
CON		78,378	25,268					103,646	Caltrans District 4
TOTAL	6,900	88,123	40,118					135,141	
Proposed Total Project Cost (\$1,000s)									Notes
E&P (PA&ED)									
PS&E	6,800							6,800	
R/W SUP (CT)	50							50	
CON SUP (CT)			17,350					17,350	
R/W	50	3,750	3,495					7,295	
CON			103,646					103,646	
TOTAL	6,900	3,750	124,491					135,141	

Fund #1:	Local Funds - MRN Co Sales Tax (Committed)								Program Code
	Existing Funding (\$1,000s)								20.10.400.100
Component	Prior	20-21	21-22	22-23	23-24	24-25	25-26+	Total	Funding Agency
E&P (PA&ED)									Transportation Authority of Marin
PS&E	4,800							4,800	
R/W SUP (CT)	50							50	
CON SUP (CT)									
R/W	50	250						300	
CON									
TOTAL	4,900	250						5,150	
Proposed Funding (\$1,000s)									Notes
E&P (PA&ED)									
PS&E	4,800							4,800	
R/W SUP (CT)	50							50	
CON SUP (CT)									
R/W	50	250	3,495					3,795	
CON			4,105					4,105	
TOTAL	4,900	250	7,600					12,750	

Fund #2:	Local Funds - Local Transportation Funds (Committed)								Program Code
Existing Funding (\$1,000s)									20.10.400.100
Component	Prior	20-21	21-22	22-23	23-24	24-25	25-26+	Total	Funding Agency
E&P (PA&ED)									Metropolitan Transportation Commis The RM3 funds are committed to MSN by legislation
PS&E									
R/W SUP (CT)									
CON SUP (CT)		2,500						2,500	
R/W		6,995						6,995	
CON		78,378						78,378	
TOTAL		87,873						87,873	
Proposed Funding (\$1,000s)									Notes
E&P (PA&ED)									Other funds are displacing RM3 funds
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL									
Fund #3:	Other Fed - Surface Transportation Program (Committed)								Program Code
Existing Funding (\$1,000s)									20.30.010.300
Component	Prior	20-21	21-22	22-23	23-24	24-25	25-26+	Total	Funding Agency
E&P (PA&ED)									Funds allocated to parent EAs 04-2640P & 04-2640R
PS&E	2,000							2,000	
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL	2,000							2,000	
Proposed Funding (\$1,000s)									Notes
E&P (PA&ED)									
PS&E	2,000							2,000	
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL	2,000							2,000	

Fund #4:	State SB1 SCCP - State Highway Account (Committed)								Program Code
Existing Funding (\$1,000s)									20.XX.705.100
Component	Prior	20-21	21-22	22-23	23-24	24-25	25-26+	Total	Funding Agency
E&P (PA&ED)									California Transportation Ventures SB1-SCCP request to fully fund the construction of the project. The project will request advance funding in December 2020 CTC meeting
PS&E									
R/W SUP (CT)									
CON SUP (CT)			14,850					14,850	
R/W									
CON			25,268					25,268	
TOTAL			40,118					40,118	
Proposed Funding (\$1,000s)									Notes
E&P (PA&ED)									Allocation of Construction Capital and Support funds will be requested in the August 2021 CTC meeting.
PS&E									
R/W SUP (CT)									
CON SUP (CT)			14,850					14,850	
R/W									
CON			25,268					25,268	
TOTAL			40,118					40,118	
Fund #5:	RIP - COVID Relief Funds - STIP (Committed)								Program Code
Existing Funding (\$1,000s)									
Component	Prior	20-21	21-22	22-23	23-24	24-25	25-26+	Total	Funding Agency
E&P (PA&ED)									California Transportation Commissio
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL									
Proposed Funding (\$1,000s)									Notes
E&P (PA&ED)									2021 MID-CYCLE STIP Amendment Noticed at May 2021 CTC meeting and programmed in the June 2021 CTC meeting
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON			1,122					1,122	
TOTAL			1,122					1,122	

Fund #6:	Other Fed - Federal Discretionary (MTC) (Committed)								Program Code
Existing Funding (\$1,000s)									
Component	Prior	20-21	21-22	22-23	23-24	24-25	25-26+	Total	Funding Agency
E&P (PA&ED)									Metropolitan Transportation Commiss
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL									
Proposed Funding (\$1,000s)									Notes
E&P (PA&ED)									MTC provided the federal regional discretionary funds in exchange for TAM unrestricted funds; letter attached
PS&E									
R/W SUP (CT)									
CON SUP (CT)			2,500					2,500	
R/W									
CON			73,151					73,151	
TOTAL			75,651					75,651	
Fund #7:	State SB1 LPP - Local Partnership Program - Formula distribution (Uncommitted)								Program Code
Existing Funding (\$1,000s)									
Component	Prior	20-21	21-22	22-23	23-24	24-25	25-26+	Total	Funding Agency
E&P (PA&ED)									California Transportation Commissio
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL									
Proposed Funding (\$1,000s)									Notes
E&P (PA&ED)									LPP-Funds were programmed and allocated at May 2021 CTC meeting. Time extension was approved in the Jun 2021 CTC meeting
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W		3,500						3,500	
CON									
TOTAL		3,500						3,500	



# Metropolitan Transportation Commission Programming and Allocations Committee

May 12, 2021

Agenda Item 2c - 21-0562

## MTC Resolutions Nos. 3989, Revised and 4468

---

**Subject:** Funding exchange agreement with the Transportation Authority of Marin (TAM) for the US 101 High Occupancy Vehicle (HOV) Lane project.

**Background:** In Fall 2020, the California Transportation Commission (CTC) programmed over \$40.1 million in Senate Bill 1 (SB1) Solutions for Congested Corridors (SCC) funds for the Marin-Sonoma Narrows (MSN) High Occupancy Vehicle (HOV) lane project. This project is also identified in Regional Measure 3 (RM3) which has been challenged and is currently under review in the California Supreme Court

The Transportation Authority of Marin (TAM) has requested the assistance of MTC to move forward with the project, in order to maintain the delivery commitment to the CTC for the US 101 MSN HOV Lane project, and to avoid escalation costs for a project ready to proceed to construction, but on hold due to lack of funding. The TAM does not have sufficient funding available to move the project forward while RM3 is on hold.

In April 2021, the Commission approved a Letter of No Prejudice (LONP), allowing TAM to proceed with the project using other funds and be eligible for reimbursement with RM3 funds when and if RM3 funds are made available. The Commission also approved the use of federal MTC discretionary funds, such as Surface Transportation Block Grant Program (STBGP), Congestion Mitigation and Air Quality Improvement (CMAQ), or Federal Highway Infrastructure Program (FHIP) funds, to secure the LONP, with TAM repaying these funds to MTC once RM3 funds become available.

The attached agreement outlines the terms and conditions under which MTC is to provide federal regional discretionary funds, in exchange for TAM unrestricted funds. Highlights of the agreement include:

- Total amount not to exceed roughly \$76 million.
- TAM to repay MTC with unrestricted funds that may be used by MTC anywhere within the region.
- TAM to pay one percent of any remaining unpaid balance if a final resolution of the pending RM3 litigation allows distribution of RM3 funds and is delayed beyond the end of federal fiscal year 2023.
- TAM is not required to repay these funds if the pending litigation is not resolved in favor of allowing disbursement of RM3 funds.


The TAM unrestricted funds will be placed into the MTC exchange account for programming to projects at the discretion of the Commission.

**Issues:** The exchange assumes RM3 is resolved in favor of allowing disbursement of RM3 funds, and for the TAM to pay one percent of any remaining unpaid balance if a favorable outcome occurs after the end of federal fiscal year 2023.

If the pending litigation is not resolved in favor of allowing disbursement of RM3 funds, the regional discretionary funds and one-time payment subject to this exchange agreement would not be required to be paid by TAM. While risk of non-repayment exists, the trade-off is that a regionally significant project will be able to proceed with federal funds that leverage substantial state competitive funding.

**Recommendation:** Refer MTC Resolution Nos. 3989, Revised and 4468 to the Commission for approval.

**Attachments:** MTC Resolution No. 3989 Revised, Attachment A  
MTC Resolution No. 4468

  
Therese W. McMillan

Date: February 23, 2011  
W.I.: 1512  
Referred by: PAC  
Revised: 10/26/11-C 02/26/14-C 12/21/16-C  
07/26/17-C 02/28/18-C 03/28/18-C  
11/28/18-C 03/27/19-C 06/26/19-C  
09/25/19-C 11/20/19-C 03/25/20-C  
11/20/20-C 05/26/21-C

### ABSTRACT

#### Resolution No. 3989, Revised

This resolution establishes the procedures governing the MTC Exchange Program. This resolution supersedes MTC Resolution No. 3018.

Attachment B was revised on October 26, 2011 to provide \$376,000 in Exchange Program funding to the intertribal Electric Vehicle project.

Attachments B and C were respectively revised on February 26, 2014 to include \$10 million in Exchange Program funding for Transit Oriented Affordable Housing (TOAH), and update final balances of the initial STP Exchange Program (Resolution 3018) to reflect final project close out.

Attachments A and B were revised on December 21, 2016 to program \$1.1 million to the Bay Bridge Forward Commuter Parking Initiative and update the name of the Transit Oriented Affordable Housing Program.

Attachments A and B were revised on July 26, 2017 to program \$8.2 million to the Regional Priority Conservation Area (PCA) program and \$2.8 million to the Regional Active Operational Management Program. An additional \$1 million in exchange funds will be committed to a specific project or program through a future Commission action. This action and associated agreement and programming actions are contingent upon California Transportation Commission (CTC) approval of the amendment to the baseline agreement for the Marin Sonoma Narrows project to accept STP/CMAQ funds rather than local funds.

Attachment B was revised on February 28, 2018 to program \$10 million to the Bay Area Preservation Pilot; \$1,024,000 to Richmond's Bike Share Capital and Outreach project; \$826,000 for the joint Transportation Authority of Marin/Sonoma County Transportation Authority (TAM/SCTA) Bike Share Capital and Outreach project along the SMART Corridor;

and redirect \$2,800,000 from Regional Active Operational Management to the Bay Bridge Forward Commuter Parking Initiative project.

Attachment B was revised on March 28, 2018 to program \$30,000 to the Bay Area Greenprint Priority Conservation Area (PCA) Improvements.

Attachments A and B were revised on November 28, 2018 to add the SCVTA SR 85 Transit Guideway Study and the CCTA I-680 NB HOV/Express Lane exchange agreements, and to program \$4,000,000 in Exchange funds to the following projects: \$619,000 to CCTA for Innovative Deployment for Enhanced Arterials; \$621,000 to the city of Walnut Creek for innovative Deployment for Enhanced Arterials; \$500,000 to the city of Richmond for the Richmond-San Rafael Bridge Bikeway Access; \$1,160,000 to MTC for Richmond-San Rafael Bridge Forward; and \$1,100,000 to MTC for Napa Valley Transportation Demand Management Strategies.

Attachment B was revised on March 27, 2019 to change the recipient of the Concord IDEA project from CCTA to the City of Concord and reduce the funding from \$619,000 to \$589,000; and reduce the funding amount for the MTC Richmond-San Rafael Bridge Forward project from \$1,160,000 to \$1,046,000; and redirect these funds to a new project with MTC as the recipient for the Concord IDEA project for \$144,000. The matching funds for the Concord IDEA project as identified in MTC Resolution 4357, are included within the \$144,000 amount. These changes result in no net change to total funds committed to-date.

Attachment A was revised on June 26, 2019 to cancel the \$1,200,000 exchange agreement with the SCVTA for the SR 85 Transit Guideway Study as the funds provided through the exchange are no longer needed.

Attachment B was revised on September 25, 2019 to reflect MTC as the direct recipient of exchange funds for the Concord and Walnut Creek IDEA projects; funds will be provided on a reimbursement basis to each project sponsor pursuant to their respective funding agreements with MTC.

Attachment B was revised on November 20, 2019 to program \$6,023,000 to 13 projects as part of the Priority Conservation Area (PCA) Grant program; funds will be provided on a

reimbursement basis to each project sponsor pursuant to their respective funding agreements with MTC.

Attachment B was revised on March 25, 2020 to redirect \$25,000 from MTC's Bay Bridge Forward Commuter Parking Initiative to MTC's Fruitvale Quick Build project.

Attachment B was revised on November 20, 2020 to program \$647,000 to four projects as part of the Priority Conservation Area (PCA) Grant program. For the Yerba Buena Island Multi-Use Pathway, which provides access to the San Francisco-Oakland Bay Bridge, \$1 million of federal OBAG 2 funds are being provided at this time for cash flow purposes. The Bay Area Toll Authority will repay non-federal funds to the MTC Exchange Program within three years. MTC's funds for the Twin Peaks trail will be provided to the Coastal Conservancy for management of the two fund sources for this project. Because the Conservancy is a state entity, the funds will be provided as an up-front grant rather than on a reimbursement basis. Funds for projects other than the Twin Peaks Trail will be provided on a reimbursement basis to each project sponsor pursuant to their respective funding agreements with MTC.

Attachment A was revised on May 26, 2021 to add the Transportation Authority of Marin's (TAM's) US 101 Marin-Sonoma Narrows (MSN) High-Occupancy Vehicle (HOV) Lanes project for \$75,651,097.

Further discussions are contained in the Programming and Allocations Committee summary sheet dated February 9, 2011, October 12, 2011, February 12, 2014, December 14, 2016, July 12, 2017, February 14, 2018, March 7, 2018, November 14, 2018, March 6, 2019, June 12, 2019, September 4, 2019, November 8, 2019, March 11, 2020, November 4, 2020, and May 12, 2021.

Date: February 23, 2011  
W.I.: 1512  
Referred by: PAC

Re: MTC Exchange Program

METROPOLITAN TRANSPORTATION COMMISSION  
RESOLUTION NO. 3989

WHEREAS, the Metropolitan Transportation Commission (MTC) is the regional transportation planning agency for the San Francisco Bay Area pursuant to California Government Code Section 66500 et seq.; and

WHEREAS, MTC is the designated Metropolitan Planning Organization (MPO) for the nine-county San Francisco Bay Area region (the region) and is the recipient for various federal fund sources for the San Francisco Bay Area; and

WHEREAS, MTC develops policies and procedures to be used in the selection of projects to be funded with various federal fund sources within the region consistent with the regional Transportation Plan (RTP); and

WHEREAS, selected projects are sometimes incompatible with or ineligible for federal funding and projects are often ready for implementation in advance of funding availability; and

WHEREAS, MTC assisted the Santa Clara County Traffic Authority (SCCTA) in 1994 by providing Surface Transportation Program (STP) funds, which initiated the original Exchange program implemented through MTC Resolution 3018; and

WHEREAS, the original exchange funding under MTC Resolution 3018 is nearly exhausted and MTC has entered into new funding exchange agreements where the implementation of specific projects with federal funds in exchange for local funds can achieve regional goals and objectives; now, therefore, be it

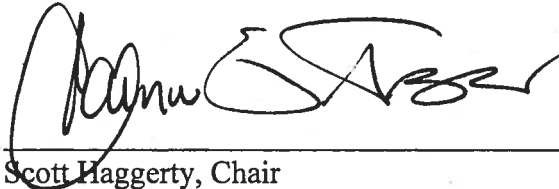
RESOLVED that Attachments A and B reflect the Exchange program balance and agreements approved by the Commission subject to this resolution; and be it further

RESOLVED, that attachment C lists the projects and amounts from the original STP Exchange program (MTC Resolution 3018) incorporated into the new MTC Exchange program; and be it further

RESOLVED that the Executive Director or designee is authorized to revise Attachments A, B and, C as necessary to reflect Commission actions and the on-going balances within the MTC Exchange program; and be it further

RESOLVED that MTC Resolution No. 3018 is superseded by this resolution.

METROPOLITAN TRANSPORTATION COMMISSION

A handwritten signature in black ink, appearing to read "Scott Haggerty", is written over a horizontal line.

Scott Haggerty, Chair

This resolution was entered into by the Metropolitan Transportation Commission at a regular meeting of the Commission held in Oakland, California on February 23, 2011.

**MTC Exchange Program  
Funding Agreements  
Attachment A  
May 26, 2021**

Agency	Project	Res No.	Res Date	Funding Provided by MTC		Funding Provided by Others To-	
				To-Date		Date	
1	SCTA	SON US 101 Steele Lane HOV	3731	2/22/2006	CMAQ	\$1,500,000	Meas M \$1,500,000
2	TAM	MRN US 101 HOV Gap Closure	3842	11/28/2007	CMAQ	\$12,500,000	Meas A \$13,253,049
3	SFMTA	SFPark Parking Pricing	3963	5/26/2010	CMAQ	\$22,000,000	Parking Rev \$22,799,802
4	CCTA	I-80 San Pablo Dam Road I/C	4264	12/21/2016	STP	\$1,100,000	Meas J \$1,100,000
5	SCTA	SON US 101 MSN Phase B	4305	7/26/2017	STP	\$12,000,000	Meas M \$4,000,000
6	SCVTA	SCL SR 85 Transit Guideway Study	4356	7/25/2018	STP	\$1,200,000	Meas B \$0
7	CCTA	CC I-680 NB HOV/Express Lane	4357	9/26/2018	STP	\$4,000,000	Meas J \$4,000,000
8	TAM	MRN US 101 MSN HOV Lane	4468	5/26/2021	STP/CMAQ/FHIP	\$75,651,097	Unrestricted Funds
Total:						\$129,951,097	\$46,652,851



Date: May 26, 2021  
W.I.: 1515  
Referred by: PAC

ABSTRACT

Resolution No. 4468

Establishes conditions for the exchange of Transportation Authority of Marin unrestricted funds with Surface Transportation Block Grant Program (STBGP) and/or Congestion Mitigation and Air Quality Improvement (CMAQ) and/or Federal Highway Infrastructure Program (FHIP) funds provided by the Metropolitan Transportation Commission (MTC). An agreement for the conditions of this exchange of funds between TAM and MTC is included.

The resolution includes the following attachment:

Attachment A – Funding Exchange Agreement

Further discussion of this action is contained in the Programming and Allocation summary sheet dated May 12, 2021.

Date: May 26, 2021  
W.I.: 1515  
Referred by: PAC

RE: Agreement for the Exchange of MTC Regional Discretionary Funds with Transportation Authority of Marin Unrestricted funds

METROPOLITAN TRANSPORTATION COMMISSION  
RESOLUTION NO. 4468

WHEREAS, the Metropolitan Transportation Commission (MTC) is the regional transportation planning agency for the San Francisco Bay Area pursuant to Government Code § 66500 et seq.; and

WHEREAS, MTC is the designated Metropolitan Planning Organization (MPO) for the nine-county San Francisco Bay Area region; and

WHEREAS, the Transportation Authority of Marin (TAM) is a local transportation authority created under California Public Utilities Code 180000 et seq.; and

WHEREAS, the Transportation Authority of Marin (TAM) is the sponsoring agency for the US 101 Marin Sonoma Narrows (MSN) High Occupancy Lane project, which received Solutions for Congested Corridors Program funds from the California Transportation Commission (CTC) and is identified in Regional Measure 3 (RM3); and

WHEREAS the collection of funds under Regional Measure 3 has been challenged and is currently under review in the California Supreme Court; and

WHEREAS, TAM has requested the assistance of MTC to maintain the delivery commitment for the US 101 MSN HOV Lane project by providing Surface Transportation Block Grant Program (STBGP) and/or Congestion Mitigation and Air Quality Improvement (CMAQ) and/or Federal Highway Infrastructure Program (FHIP) funds, hereinafter referred as “MTC Regional Discretionary Funds” in the near term in exchange for TAM non-federal unrestricted funds hereinafter referred to as “TAM Unrestricted Funds” in the longer term; and

WHEREAS, TAM agrees to repay MTC for the MTC Regional Discretionary Funds with TAM Unrestricted Funds as specified in this Agreement, attached and incorporated by reference; and

WHEREAS, the agreement is substantially in the form set forth in Attachment A to this resolution, attached and incorporated as though set forth at length; now, therefore, be it

RESOLVED, that MTC approves the exchange of MTC Regional Discretionary Funds with TAM Unrestricted Funds for the purposes and within the maximum amount established, and subject to the conditions, set forth in Attachment A; and, be it further

RESOLVED, that the TAM Unrestricted Funds shall be placed into the MTC exchange account for programming to project(s) at the discretion of the Commission; and, be it further

RESOLVED, that MTC's Executive Director is authorized to execute Attachment A, and to make non-substantive changes or minor amendments as deemed appropriate: and, be it further

RESOLVED, that upon execution of Attachment A by the signatory agencies, MTC staff shall implement the exchange of the MTC Regional Discretionary Funds with TAM Unrestricted Funds.

METROPOLITAN TRANSPORTATION COMMISSION

---

Alfredo Pedroza, Chair

This resolution was entered into by the Metropolitan Transportation Commission at a regular meeting of the Commission held in San Francisco, California, and at other remote locations on May 26, 2021.

Date: May 26, 2021  
W.I.: 1515  
Referred by: PAC

MTC Resolution No. 4468  
Attachment A

**Agreement for the Exchange of MTC Regional Discretionary  
Funds with Transportation Authority of Marin (TAM)  
Unrestricted funds**

**Agreement between the Metropolitan Transportation Commission (MTC) and the Transportation Authority of Marin (TAM) for the exchange of federal regional discretionary funds for TAM non-federal unrestricted funds.**

This AGREEMENT is entered into on the first day of June 1, 2021, by and between the TRANSPORTATION AUTHORITY OF MARIN (“AUTHORITY”) created under California Public Utilities Code 180000 et seq. and the METROPOLITAN TRANSPORTATION COMMISSION (“MTC”), a regional transportation agency created under California Government Code Sections 66500 et seq.

Recitals

- (1) AUTHORITY is the sponsoring agency for the US 101 Marin-Sonoma Narrows B7 (MSN) High Occupancy Vehicle (HOV) lane project within Main County (“PROJECT”).
- (2) PROJECT will be implemented over several years to relieve traffic congestion on US 101 for travelers within Marin County and between Marin and Sonoma counties and beyond.
- (3) PROJECT is identified in Regional Measure 3 (RM3) and received Solutions for Congested Corridors Program (SCCP) funds from the California Transportation Commission (CTC).
- (4) Project delivery is a deciding factor in the CTC granting SCCP competitive funding, with PROJECT construction scheduled this year.
- (5) PROJECT is currently on hold and unable to proceed without RM3 funds being made available for PROJECT.
- (6) AUTHORITY has requested the assistance of MTC to maintain the delivery commitment of PROJECT by providing seventy-five million, six-hundred fifty one-thousand, ninety-seven dollars (\$75,651,097) in federal regional discretionary funds such as Surface Transportation Block Grant Program (STBGP) and/or Congestion Mitigation and Air Quality Improvement (CMAQ) and/or federal Highway Infrastructure Program (FHIP) funds, hereinafter referred to as (“REGIONAL DISCRETIONARY FUNDS”) for PROJECT in fiscal year 2021-22 in exchange for non-federal funds with no spending or eligibility limitations hereinafter referred to as “TAM UNRESTRICTED FUNDS”
- (7) MTC, the transportation planning, coordinating, and financing agency for the nine-county San Francisco Bay Area, is eligible to program and assign REGIONAL DISCRETIONARY FUNDS, and has discretionary funding authority for the funds requested for PROJECT.
- (8) AUTHORITY and MTC desire to proceed with the funding agreement immediately, as nothing in this Agreement adversely affects MTC's responsibility to provide regional discretionary funds to other existing programmed projects in the Bay Area.

- (9) AUTHORITY and MTC mutually desire to specify the terms and conditions under which MTC is to provide REGIONAL DISCRETIONARY FUNDS to AUTHORITY, in exchange for AUTHORITY's provision of TAM UNRESTRICTED FUNDS to be repaid to MTC.

Now, therefore, in consideration of the mutual covenants contained herein, the parties hereto agree as follows:

Section I

MTC AGREES:

- (1) To perform such actions and to deliver such documents as are necessary to provide REGIONAL DISCRETIONARY FUNDS to AUTHORITY in accordance with this Agreement.
- (2) To program in the federal Transportation Improvement Program (TIP) by July 1, 2021, a maximum total of seventy-five million, six-hundred fifty-one thousand, ninety-seven dollars (\$75,651,097) of MTC-apportioned REGIONAL DISCRETIONARY FUNDS to AUTHORITY for implementation of PROJECT.

Section II

AUTHORITY AGREES:

- (1) To coordinate with Caltrans as the implementing agency of the construction phase of the project to seek authorization from the Federal Highway Administration (FHWA) of entire amount of the REGIONAL DISCRETIONARY FUNDS by September 30, 2021.
- (2) To meet all federal, state, and regional project funding delivery requirements associated with REGIONAL DISCRETIONARY FUNDS.
- (3) To request an allocation of seventy-five million, six hundred fifty-one thousand, ninety-seven dollars (\$75,651,097) in Regional Measure 3 funds from the Bay Area Toll Authority (BATA), within sixty (60) days of final disposition of the RM3 court case, if such disposition allows distribution of RM3 funds to local projects.
- (4) To provide TAM UNRESTRICTED FUNDS in the amount of seventy-five million, six hundred fifty-one thousand, ninety-seven dollars (\$75,651,097) to MTC within sixty (60) days following receipt of RM3 funds from MTC or the Bay Area Toll Authority (BATA).
- (5) To provide MTC a one-time payment of one percent of any remaining unpaid balance if a final favorable resolution of the pending RM3 litigation is delayed past the end of federal fiscal year 2023. Authority shall not use RM3 funds to cover these costs.
- (6) To indemnify, defend and hold harmless MTC, its Commissioners, directors, officers, representatives, agents, and employees from and against all claims, injury, suits, demands, liability, losses, damages, and expenses, whether direct or indirect (including any and all costs and expenses in connection therewith), incurred by reason of any act or

failure to act of AUTHORITY, its officers, employees or agents, or subcontractors or any of them in connection with its performance of PROJECT under this Agreement.

### Section III

#### IT IS MUTUALLY AGREED:

- (1) The term of this Agreement shall commence on June 1, 2021. With the exception of AUTHORITY'S indemnification, defense and hold harmless responsibilities under item 6 of section II above, which shall survive termination of this Agreement, the Agreement shall terminate upon the satisfaction of AUTHORITY's obligations to MTC with TAM UNRESTRICTED FUNDS, as outlined in Section II of this Agreement. Notwithstanding the above, AUTHORITY may terminate this Agreement by written notice to MTC if AUTHORITY has not received an authorization of the REGIONAL DISCRETIONARY FUNDS by December 31, 2021 and no arrangement for availability of these funds after December 31, 2021 has been made by MTC to the satisfaction of AUTHORITY. If the Agreement is terminated by AUTHORITY, MTC will reprogram the seventy-five million, six-hundred fifty-one thousand, ninety-seven dollars (\$75,651,097) in REGIONAL DISCRETIONARY FUNDS to other projects selected at MTC's discretion.
- (2) If the pending litigation is not resolved in favor of allowing disbursement of RM3 funds, AUTHORITY is not obligated to repay the funds subject to this agreement.
- (3) MTC reserves the right to withhold from AUTHORITY future regional discretionary funds otherwise going to AUTHORITY, after consultation with AUTHORITY, if the pending RM3 litigation is resolved in favor of allowing disbursement of RM3 and AUTHORITY fails to meet its obligation to make the full payment to MTC under this agreement.
- (4) This Agreement shall bind and benefit the parties hereto and their heirs, successors, and permitted assigns.
- (5) MTC and AUTHORITY agree to do all such things and take all such actions, and to make, execute and deliver such other documents and instruments, as shall be reasonably requested to carry out the provisions, intent, and purpose of the Agreement.
- (6) This Agreement may not be changed, modified, or rescinded except in writing, signed by all parties hereto, and any attempt at oral modification of this Agreement shall be void and of no effect.
- (7) All required, reports, demands and notices may be sent by regular mail or electronic mail. Notices that are mailed by regular mail shall be deemed delivered two (2) business days after deposited in the mail. Notices may be personally delivered and shall be deemed delivered at the time delivered to the appropriate address set forth below. Notices delivered by electronic mail shall be deemed received upon the sender's receipt of an acknowledgment from the intended recipient (such as by the "return receipt requested" function, as available, return electronic mail or other written acknowledgment of receipt); provided that, if such notice is not sent during normal business hours of the recipient, such

notice shall be deemed to have been sent at the opening of business on the next business day of the recipient. Unless and until notified otherwise in writing, a party shall send or deliver all such communications relating to this Agreement to the following address:

Anne Richman  
Executive Director  
Transportation Authority of Marin  
900 Fifth Avenue, Suite 100  
San Rafael, CA 94901  
arichman@tam.ca.gov

Ross McKeown  
Assistant Director, Funding Policy and Programs  
Metropolitan Transportation Commission  
375 Beale St., Suite. 800  
San Francisco, CA 94105  
rmckeown@bayareametro.gov

- (8) This Agreement is the entire agreement among MTC and AUTHORITY relating to the subject matter of this Agreement. MTC and AUTHORITY acknowledge they have not relied upon any promise, representation or warranty not expressly set forth in this Agreement in executing this Agreement.
- (9) Should any part of this Agreement be declared unconstitutional, invalid, or beyond the authority of MTC or AUTHORITY to enter into or to carry out, such decision shall not affect the validity of the remainder of this Agreement which shall continue in full force and effect; provided that the remainder of this Agreement can, absent the excised portion, be reasonably interpreted to give effect to the intentions of the parties.
- (10) No waiver by either party of any default or breach of any covenant by the other party shall be implied from any omission to take action on account of such default if such default persists or is repeated and no express waiver shall affect any default other than the default specified in such waiver and then such waiver shall be operative only for the time and to the extent stated in such waiver. Waivers of any covenant, term or condition contained herein shall not be construed as a waiver of any subsequent breach of the same covenant, term, or condition. No waiver of any provision under this Agreement shall be effective unless in writing and signed by the waiving party.
- (11) MTC and AUTHORITY represent and warrant that they are authorized to execute this Agreement.
- (12) This Agreement may be executed in counterparts.

IN WITNESS WHEREOF, MTC and AUTHORITY have executed this Agreement as of the date first written above.

TRANSPORTATION AUTHORITY  
OF MARIN

METROPOLITAN TRANSPORTATION  
COMMISSION

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Anne Richman, Executive Director

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Therese W. McMillan, Executive Director



## SUPPLEMENTAL PROJECT REPORT #4


*For Project Approval*



### MARIN SONOMA NARROWS (MSN) PROJECT – SEGMENT B7

#### ON ROUTE 101 IN MARIN COUNTY BETWEEN 0.1 MILE SOUTH OF FRANKLIN AVENUE OVERHEAD AND 0.5 MILE SOUTH OF SAN ANTONIO CREEK BRIDGE

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:

  
Mark L. Weaver, Deputy District Director,  
Right of Way and Land Surveys

APPROVAL RECOMMENDED:

  
Nyaz Wajahat, Project Manager

  
Nick Nguyen, Transportation Authority of Marin

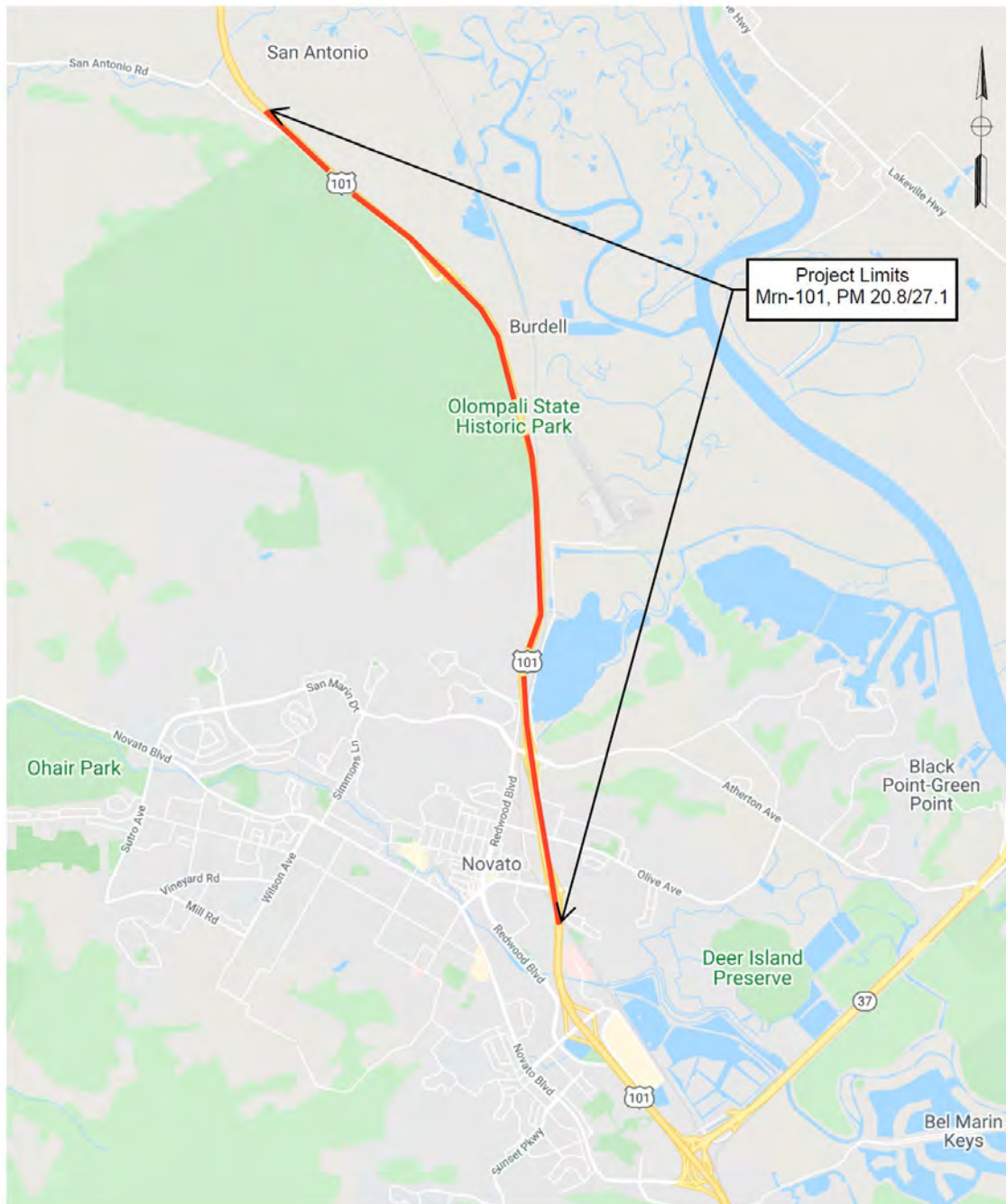
PROJECT APPROVED:

  
Helena (Lenka) Culik-Caro  
Deputy District Director, Design

October 30, 2020

Date

## Vicinity Map



**In Marin County, in and near Novato on State Route 101 between 0.1 mile south of Franklin Avenue Overcrossing and 0.5 mile south of San Antonio Creek Bridge**

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

  
REGISTERED CIVIL ENGINEER

09/07/2020

DATE



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## 1. INTRODUCTION

This Supplemental Project Report (SPR) #4 identifies project changes or variations that have occurred since:

- July 21, 2009 Project Approval and Environmental Document (PA&ED) approval, including the Final Project Report (PR) entitled, “Project Report, Route 101 - Marin/Sonoma Narrows (MSN), In Marin and Sonoma Counties, from the Route 101/37 Separation to north of the Corona Road Overcrossing (OC), (EA 04-264000).”
- November 22, 2011 approval of Supplemental Project (SPR) #1 entitled, “SPR, Marin Sonoma Narrows Project Segment B1 – Redwood Landfill Interchange in Marin County on Route 101 From Route 3.2 Miles North of the North Novato Overhead to 2.1 Miles South of the Sonoma County Line, (EA 04-234071).”

Unchanged or unaffected sections are not included in this SPR and can be referenced by reviewing the approved PR and SPR. Project Changes in this SPR are summarized under Section 5, Alternatives (Project Changes, Nonstandard Design Features and Design Exceptions).

The MSN projects or contracts formerly referred to as MSN A4 and MSN B1-Phase II were combined and again split into two separate projects called MSN B7 and MSN B8 by a Programming Change Request (PCR) approved on October 5, 2018. MSN B7 project comprises all of the roadway works and referred as the US 101 HOV in Marin is located in the City of Novato and unincorporated portions of Marin County, from post mile (PM) 20.8 to 27.1; The HOV project effectively completes, and/or connects to the following completed or ongoing projects in the MSN corridor:

- MSN A2 – EA 04-2640G4 – Completed S/B HOV lane in Novato (south of MSN B7)
- MSN A3 – EA 04-2640L4 – Completed N/B HOV lane in Novato (south of MSN B7)
- MSN B1 – EA 04-264074 – Completed Redwood Landfill I/C and Frontage Roads (within MSN B7 limits)
- MSN B3 – EA 04-264094 – Completed US 101 realignment (north of MSN B7)
- MSN B2- Phase II – EA 04-2640N4- HOV Lanes in Sonoma County (North of MSN B7) currently in construction (anticipated completion in November 2020).

MSN B8 (EA 04-26473) is a separate utility relocation, access control and bike lane project, that is being developed concurrently with MSN B7. MSN B8 requires environmental revalidation and will be covered in a separate Supplemental Project Report.

MSN B7 improvements primarily include mainline widening, reprofiling, and the extension of HOV lanes on the alignment studied and approved in the 2009 PR and 2011 SPR, except as noted in this report. All of the proposed work will be within the Caltrans right-of-way with the exception of; striping and micro surfacing work on Redwood Boulevard.

A Project Location Map and a Vicinity Map is included in Attachments A and B respectively. MSN Project (which includes segment B7) is listed in the Transportation current RTP (Marin TIP ID#, MRN050034). The MSN B7 Project will not preclude any future remaining MSN improvements that

were approved in the 2009 PR.

## **2. RECOMMENDATION**

It is recommended that this SPR be approved, and that the project continue with the current PS&E phase.

The affected local agencies, including the City of Novato and Marin County, have been consulted with and have had an opportunity to identify or comment on a Preferred Alternative as part of the 2009 approved project report and 2011 SPR. Their views have been considered and the local agencies are in general accord with the plan as presented in this SPR.

The program advisor and the Project Development Team (PDT) concur with this recommendation.

## **3. BACKGROUND**

### **Project History**

The MSN Project area is divided into three segments; A, B, and C. These segments were originally presented as three separate Project Study Reports (PSR). The three projects were later combined into a single study area to ensure that the environmental impacts are addressed cumulatively in a comprehensive Environmental Impact Report/ Environmental Impact Statement (EIR/EIS), signed on July 21, 2009. Segments A and C consist of the existing freeway in the cities of Novato and Petaluma, respectively. Prior to the start of MSN construction, Segment B was an expressway between the two cities. Two build alternatives were studied during the Project Approval and Environmental Document (PA&ED) phase: (1) fixed HOV lanes throughout the project limits, and (2) fixed HOV lanes through the cities of Novato and Petaluma and a reversible HOV lane between the two cities. The fixed HOV lanes alternative throughout the project limits is being implemented.

The Project Study Report (PSR) for Segments A and B that cover the improvements within MSN B7 project limits are the following:

- PSR – Segment A (EA 04-28200K) – Approved on April 24, 2001, and proposed HOV operational improvements to the exiting portion of US 101 in Marin County, in the City of Novato from 0.5 km (0.3 miles) south of the Route 101/37 separation to 1.4 km (0.9 miles) north of Atherton Avenue Interchange (IC).
- PSR – Segment B (04-26400K) - Locally referred to as the “Novato Narrows,” was approved on January 29, 1999, and proposed HOV operational improvements and upgrading the existing expressway portion of US 101 to a controlled-access freeway from 0.9 miles north of the Atherton Avenue IC in the city of Novato, Marin County, to 0.1 miles south of the Lakeville Highway/SR 116 Interchange in the city of Petaluma, Sonoma County.

The approved 2009 PR proposed the same upgrades as their respective PSRs for Segment A and B. However, MSN Project Plans, Specifications, and Estimates (PS&E) and construction activities are being performed incrementally using smaller, independent, individual contracts/projects. The contracts have been and continue to be developed and constructed to best utilize available funding and define

scopes of work that make each project operationally independent and provide the most benefit to mobility and safety of the U.S 101 corridor. Caltrans and its partners jointly developed the scopes of work for the phased contracts such that they are operationally independent and can be implemented as funds are programmed. Since the approval of the PR, the three SPRs listed below have been approved among which only SPR #1 covers the MSN B7 projects limits.

1. SPR #1 – MSN Project B1 (04-264071), approved November 22, 2011 – for alignment, revision within MNS B1 limits, to reduce environmental impacts and R/W requirements
2. SPR #2 – MSN Project L1A-Mrn (04-264H31), approved May 4, 2015 – to add a community requested sound wall in Novato
3. SPR #3 – MSN Project C2 (04-2640F1), approved December 5, 2017 – to add auxiliary lanes in Petaluma.

### **Existing Facility**

Within the Segment MSN B7 project limits, US 101 is a freeway with access-controlled right of way in the city of Novato to the Sonoma County Line, except for few breaks that will be closed off by concurrent project MSN B8. From the southern limits of the Project limits, NB US 101 accommodates one 12-foot HOV lane and three 12-foot general purpose lanes. North of the North Novato Overhead, the freeway is reduced from four lanes to three lanes. Approximately 0.5 mile further north, NB US 101 is reduced from three lanes to two lanes. From the northern limits, SB US 101 provides two 12-foot general purpose lanes. Approximately 1.1 miles north of the Atherton Avenue Interchange, SB US 101 widens from two 12-foot lanes to three 12-foot general purpose lanes. After the Franklin Avenue Overhead, the US 101 freeway widens to provide one 12-foot HOV lane and three 12-foot general purpose lanes. The outside shoulders vary between 8 to 10 feet wide and inside shoulders vary between 4 to 10 feet wide in both directions. The median varies between 22 and 54 feet wide and contains a double thrie-beam barrier or concrete barrier. The posted maximum speed is 65 miles per hour (mph) and the design speed is 65 mph for both directions.

The Project limits contains six existing structures:

- Franklin Avenue Overhead (Bridge No. 27-0090L/R)
- De Long Avenue Overcrossing (Bridge No. 27-0091)
- Olive Avenue Undercrossing (Bridge No. 20-27-0092L/R)
- Atherton Avenue Overcrossing (Bridge No. 27-0093)
- North Novato Overhead (Bridge No. 27-0094L/R)
- Redwood Landfill Overcrossing (Bridge No. 27-0115)

## **4. PURPOSE AND NEED**

The purpose and need of this project remain unchanged; to reduce congestion and improve mobility while providing an incentive for commuters to use buses, carpools or vanpools for peak period travel.

## 5. ALTERNATIVES

### 5A. Viable Alternatives

The MSN B7 Project is the selected alternative under consideration, following the alignment specified in the 2009 PR and 2011 SPR #1.

### Proposed Engineering Features

The selected alternative incorporates the following works:

- New HOV lanes along NB US 101 (PM 23.6 to 27.1) and SB US 101 (PM 20.8 to 27.1)
- Roadway realignment, vertical reprofiling, and mainline cross-section reconstruction – two 12-foot single occupant vehicle (SOV) lanes and 10-foot inside and outside shoulders along NB and SB US 101 (PM 23.7 to 27.1)
- New HOV lane striping along NB US 101 (PM 22.6 to 23.7)
- Inside widening along SB 101 - Franklin Avenue Overhead (Bridge No. 27-0090L)
- Inside widening along SB 101 - Olive Avenue Undercrossing (Bridge No. 27-0092L)
- Median concrete safety shape barrier where required (PM 20.8 to 27.1)
- Redwood Landfill Interchange - reconstruction of the diagonal on- and off-ramps at the Redwood Landfill Overcrossing interchange in both the NB and SB directions to conform to new mainline alignment/profile
- New Retaining Walls - construction of 12 retaining walls to minimize earthwork and right-of-way impacts
- Drainage/Hydraulic improvements (including Hydromodification)
- Post construction stormwater quality treatment BMPs along NB/SB US 101
- Installation of ramp metering, Extinguishable Message Signs (EMS), Changeable Message Signs (CMS), Closed Circuit Television (CCTV), traffic-monitoring stations and other Intelligent Transportation System (ITS) elements
- MVPs and CHP Enforcement Areas

As noted earlier, the remaining utility relocations, as well as the right-of-way acquisitions needed for the relocation and access control, will be addressed separately by MSN B8 project. Attachment C shows the current improvements and work limits.

### Project Changes, Nonstandard Design Features and Design Exceptions

As previously discussed, the MSN B7 Project is the combination of two old MSN projects, A4 and B1-Phase II and covers the remaining scope in Segments A and B. With the following exceptions, the proposed improvements for the MSN B7 Project do not deviate from the approved 2009 PR and 2011 SPR:

1. **North Novato Overhead (OH) (Widen)** - Although originally proposed in the 2009 PR, the inside shoulder widening of the southbound bridge structure (Bridge No 27-004L) spanning the railroad has been eliminated from the project scope as part of this SPR.

The bridge widening was eliminated due in part to prior experienced constructability challenges related to access, utilities, local road/highway operations, and impacts to the Sonoma-Marín Area Rail Transit (SMART) railroad operations, as well as the proximity to the



adjacent (existing) NB structure. Furthermore, since the bridge already has 3 SOV lanes, it was determined the conversion of the #1 lane did not necessitate widening, and the project's purpose and need could be accomplished by restriping a 12-foot HOV lane instead.

Following discussions with DES-OSFP and the PDT, it was agreed the existing bridge structure would remain un-widened, and the existing inside shoulder to remain (measuring 5-feet in width), and will be processed/documentated as a non-standard design feature under the DSDD process.

2. **SB 101 On-Ramp from the Redwood Landfill Interchange (San Antonio Road)** – As part of the 2011 SPR, a tight-diamond interchange (along with mainline alignment and profile adjustments) was presented and environmentally cleared (revalidation); the footprint significantly reduced the right of way impacts to the Silveira properties, and minimized encroachment onto the Olompali State Historic Park (OSHP). The mainline work was deferred to Phase 2, but the interchange/ramp construction was included as part of MSN B1/Phase 1 advertised package following RTL. To support the ramp improvements at the southwest quadrant, a small triangular land acquisition parcel from OSHP was needed and pursued during PS&E. However, due to an extended and restricted State Parks land transfer process, order of possession (during advertisement under a Cert 3W right-of-way certification process) was determined to be infeasible, and would have compromised the project award milestone, construction schedule and funding.

Just prior to advertisement, a decision was made to re-design and adjust the alignment and profile of the SB 101 on-ramp from the Redwood Landfill I/C (San Antonio Road) to avoid encroachment (and right-of-way needs) into OSHP at the southwest quadrant; a supplemental Fact Sheet Exception Report to Advisory Design Standards and an addendum was released during advertisement in 2012, and the ramp was constructed, including a CCO.

This SPR therefore formally documents the constructed (and soon to be reconstructed) alignment/profile for the southbound US 101 on-ramp from the Redwood Landfill Interchange, necessary to avoid right of way impacts to OSHP. In conjunction with the mainline realignment work proposed in B7, the reconstructed on-ramp work will either create or propagate prior non-standard design features, including gore dimensions, gore algebraic grade difference, and on-ramp (entrance) intersection angle at San Antonio Road.

Table 5.1 identifies the nonstandard design features requested in this Project. Some of these nonstandard features were documented and approved under previous MSN component projects.

**Table 5.1 Nonstandard Design Features**

ID#	<u>Description</u> Location Proposed	Standard (Required)
B1	<u>Inside Shoulder Widths</u> SB 101 "N2" 172+80 to 177+42 (Lt) 5 feet	10 feet (HDM Index 302.1)

U1	<b><u>Cross Slopes (algebraic grade difference)</u></b> SB 101 Redwood Landfill Interchange on-ramp <i>53%</i>	5% (HDM Index 301.3(2))
U2	<b><u>Intersection Angle</u></b> SB 101 Redwood Landfill Interchange on-ramp <i>63 degrees</i>	75 degrees (HDM Index 403.3)
U3	<b><u>Freeway Exit Design</u></b> SB 101 Redwood Landfill Interchange on-ramp <i>16 feet</i>	23 feet (HDM Index 504.2)
U4	<b><u>Horizontal Clearance</u></b> NB US 101 (13 Locations) “N2” 267+51.67 to 402+28.46 <i>Varies 23.0 feet to 29.1 feet</i>	30.0 feet (HDM Index 309.1(2)(a))
U5	<b><u>Vertical Clearance</u></b> SB US 101 (Franklin Ave OC) “N2” 105+40 <i>22.85 feet</i>	23.33 feet (HDM Index 309.5(1))

The Design Standard Decision Document (DSDD) was approved on October 09, 2020 in support of these non-standard boldface and underlined design features.

A Fact Sheet Exception to Ramp Metering Policy on the MSN B1 – Phase 1 Project was prepared and approved on April 28, 2010 for the NB and SB 101 On-Ramps from Redwood Landfill Interchange.

### Utility and Other Owner Involvement

A Temporary Longitudinal Encroachment exception was conditionally approved on August 25, 2011, allowing the existing utility to remain, or to be temporarily relocated within the State R/W, with the condition that Phase 2 MSN projects will relocate, all of the remaining utilities outside of the State R/W. The remaining utilities in State R/W includes:

- Frontier Telecommunications (Formerly Verizon) overhead poles located along SB US 101 in front of the Olompali State Historic Park.
- PG&E overhead electrical poles located along NB US 101 between SMART and the Silveira Ranch Road cul-de-sac.
- PG&E overhead electrical poles located along NB US 101 between Redwood Landfill Road Interchange and Corda property.

MSN B8 Project, which is fully funded and in design concurrently with MSN B7 will relocate the above-mentioned utilities to comply with conditional exception approved in 2011. Due to the R/W requirements of MSN B8, its construction is expected to follow MSN B7 construction.

The DSDD previously discussed requests for the existing PG&E electrical poles and Verizon (Frontier Telecommunication) overhead communication poles to remain in place, within the 30' clear recovery zone, until they are relocated by the MSN B8 Project. Since B8 represents the final Phase 2 MSN work within the corridor, this conditional utility exception approval to leave the poles in place (originally granted on August 25, 2011) has been confirmed by Caltrans Office of Project Support – Division of

Design to remain in effect, until which time Phase 2 (MSN B8) is complete.

### **5B. Rejected Alternatives**

Non-viable or rejected alternatives were not considered in the scope of this SPR.

## **6. CONSIDERATIONS REQUIRING DISCUSSION**

### **6A. Hazardous Waste**

The Preliminary Site Investigation report has been completed and is in the final approval process. Aerially deposited lead (ADL) exists primarily along NB US 101 in the median areas and will be managed through excavation and/or placement/capping. Construction cost associated with managing and excavating the ADL is approximately \$450,000.

### **6B. Right of Way**

#### General

The project has no need to attain any right-of-way or temporary construction easements. All project work will be within the State R/W. A Right of Way Data Sheet has been prepared based on the scope of work described for the Build Alternative (see Attachment D). Estimated cost information for the project is provided in the Right of Way Data Sheet.

#### Railroad

There is an active SMART railroad within the project limits. The SMART corridor currently crosses beneath US 101 at Franklin Avenue OH and North Novato OH.

Due to the widening of the Franklin Avenue OH, construction operations within the SMART right-of-way will be required; however, it is anticipated that railroad operations will not be affected during bridge widening activities. The contractor will need to coordinate and obtain work permit application from SMART for working within the rail corridor. A Construction and Maintenance (C&M) Agreement has been initiated between Caltrans and SMART and will be secured before RTL. Funding for reimbursement for flagging and other SMART related work has been programmed into the Project. In addition, a GO 88-B application has been submitted to CPUC for their review.

#### Utilities

Verifications of utilities, except for a gas distribution line along the eastside of US 101, has been completed. A positive identification has identified that a ¾" gas service line, crossed US 101, located approximately 3400 feet north of Redwood Landfill Interchange is in conflict with the retaining wall and expose due to lowering of roadway profile. The gas service line will be relocated before the commencement of the construction work for this project. The project team is in contact with the utility owner.

### **6C. Environmental Compliance**

The improvements proposed in this Project and SPR are covered by the approved Environmental Impact Report / Environmental Impact Statement (EIR/EIS), signed July 21, 2009. Although there are

design refinements, the scope of work is within the study limits of the approved 2009 EIR/EIS. The revalidation dated October 30, 2020 (Attachment E) evaluated the design changes and concluded that the existing 2009 EIR/EIS is still valid and the project can proceed to the next federal milestone.

A separate NEPA/CEQA re-validation is ongoing for MSN B8, to identify and document any other changes and new project features and information since the approval of the EIR/EIS.

## **7. OTHER CONSIDERATIONS AS APPROPRIATE**

### **Permits**

Due to the extensive vegetation removal, construction of several retaining walls, and its proximity to the Petaluma River and San Pablo Bay, the project requires Section 401, Section 404, and Section 1602 permits.

### **Cooperative Agreements and Other Agreements**

Cooperative Agreement 04-2742-A1 for the PS&E phase and right-of-way between Caltrans and TAM was approved on December 20, 2019 (see Attachment F).

A Cooperative Agreement for construction will be required prior to RTL of the project. A draft has been attached (see Attachment G), and this SPR authorizes the construction cooperative agreement with the Transportation Authority of Marin.

### **Transportation Management Plan**

A Transportation Management Plan (TMP) is a specialized program tailored to prevent and mitigate the impacts of a construction project by applying a variety of techniques, including system management, demand management, construction strategies, and public awareness measures. The basic objectives of a TMP are to maintain efficient and safe movement of vehicles through the construction zone; to foster a high level of awareness of potential impacts among residents, motorists, and the media; to achieve public acceptance of the project and traffic mitigation measures; and to minimize disruptions to traffic on nearby roads, streets, or lanes. A Transportation Management Plan for the project has been prepared and concurred by the Office of Traffic Management. (see Attachment H).

The TMP includes press releases to notify and inform motorists, businesses, community groups, impacted cities, emergency services providers, and local officials about upcoming closures or detours and the various TMP elements such as portable changeable message signs, construction strategies for mainline traffic, and the implementation of a Construction Zone Enhanced Enforcement Program (COZEEP) to minimize and prevent delays to the traveling public during construction along with the preliminary estimated cost for these elements.

### **Stage Construction**

The project construction work will be performed behind temporary railing (type K) and will use lane closures while leaving traveled lanes operational and keeping traffic disruption to a minimum. Due to the high traffic volume within the project limits, construction activities that require the closing of traffic lanes will be undertaken at night, when lighter traffic is expected. The construction staging plan has been developed and incorporated in the PS&E package.

## Complete Streets

The intent of Caltrans Deputy Directive DD-64-R2 on Complete Streets is to ensure that travelers of all ages and abilities can move safely and efficiently along and across a network of “complete streets.” Opportunities to include Complete Streets elements were evaluated to improve safety, access, and mobility for all travelers. Outside of the remaining mainline HOV improvements in MSN B7, complete streets elements for this stretch of the MSN Corridor were previously implemented in the form of a gap-closure providing continuous bicycle/pedestrian system (Class I, II, and III) connection, from Novato to San Antonio Creek running adjacent to southbound US 101, along Redwood Blvd, Olompali State Historic Park Access Road/Multi-Use Pathway, and San Antonio Road. As part of the minor pavement surfacing work occurring along Redwood Blvd between Atherton Avenue and the former Birkenstock Property, a portion of the Class II bike lane network will be refined/restriped to reinforce the multimodal complete streets elements along this portion of the MSN corridor.

## Asset Management

This project does not have any funding from the State Highway Operation and Protection Program (SHOPP). Currently, there is no requirement to track the assets in this project since there is no SHOPP funding. In the future, if this project gets any SHOPP funding, it will be subject to the Asset Management requirements for the SHOPP.

## 8. PROGRAMMING/FUNDING

### Funding

MSN B7 construction component is partially funded at this time with Regional Measure 3 (RM 3) Program. MSN B7 is expected to receive funding from Senate Bill 1 (SB 1), Solutions for Congested Corridors Program (SCCP), to bridge the funding gap. The California Transportation Commission (CTC) intends to program two years of funding in the 2020 Program in fiscal years 2021-22 and 2022-23. The CTC is expected to finalize the SCCP 2020 project list by December 2020 with potential allocation in the same meeting or soon afterward. MSN B7 will be made ready to advertise (achieve RTL milestone) based on a conditional cooperative agreement with TAM that will activate only after all funding is allocated to the project. The table below shows current funding arrangements.

Fund Type	Project Component (in \$1000)						
	PA&ED	PS&E	R/W Support	Construction Support	R/W Capital	Construction Capital	Total
Local		\$4,800	\$50		\$300		\$5,150
Federal-STP		\$2,000					\$2,000
SB1-LLP		\$500					\$500
RM3				\$2,500	\$6,995	\$78,373	\$87,873
SB1-SCCP				\$14,850		\$25,268	\$40,118
<b>Total</b>		\$7,300	\$50	\$17,350	\$7,295	\$103,646	\$135,641

Refer to the original project report for more information related to corridor programming and funding. The MSN Corridor Project, including MSN B7, is fully funded in the fiscally constraint RTP.

## Estimate

The current estimated construction and right of way costs for the project are \$103,646,000 and \$7,295,000, respectively with a total cost of \$110,941,000. The Project Cost Estimate Summary is provided in Attachment **L**.

## 9 RISKS

A Risk Management Plan identifying the major risks for the project is provided as Attachment **J**.

## 10. EXTERNAL AGENCY COORDINATION

### Federal Highway Administration

The project is considered to be an Assigned Project in accordance with the current Joint Stewardship and Oversight Agreement between the FHWA and Caltrans (signed on May 28, 2015).

### Other Agency Coordination

The key agencies with whom the Project Team is in coordination are listed below.

#### United States Army Corps of Engineers

Clean Water Act Section 404 Nationwide Permit

#### United States Fish and Wildlife Service

Biological Opinion

#### National Marine Fisheries Service

Programmatic Biological Opinion

#### California Department of Fish and Wildlife

Section 1602 Lake or Streambed Alteration Agreement

#### Regional Water Quality Control Board

Clean Water Act Section 401 and Water Quality Certification

State Waste Discharge Requirements (Porter Cologne).

## 11. PROJECT REVIEWS

<b>Review Topic</b>	<b>Assigned Reviewer</b>	<b>Date of Review</b>
Project Sponsor	Nick Nguyen/TAM	2/14/2020
Project Manager	Nyaz Wajahat	2/14/2020
District Biology	Rebecca Carson	2/14/2020
HQ Project Delivery Coordinator	Robert Effinger	2/14/2020
District Design Liaison	Solomon Tesfe	2/14/2020

District Maintenance	Leah Budu	2/14/2020
District Cooperative Agreement	Tiffany Wong	2/14/2020
District Constructability	Robert Kobal	2/14/2020
FHWA	Omar Quddus	2/14/2020
District Landscape Architecture	Susan Lindsay	2/14/2020
District Traffic Safety	Katie Yim	2/14/2020
Highway Operations	Johnny Ferdinand	2/14/2020

## 12. PROJECT PERSONNEL

AGENCIES	CONTACT PERSON	TELEPHONE
Caltrans District 4 Project Management – North Bay 111 Grand Avenue Oakland, CA 94612	Nyaz Wajahat, Project Manager	(510) 286-5119
Caltrans District 4 Design South – Santa Clara 111 Grand Avenue Oakland, CA 94612	Tung Ly, District Branch Chief	(510) 286-5076
Caltrans District 4 Environmental Planning 111 Grand Avenue Oakland, CA 94612	Yolanda Rivas, Branch Chief	(510) 622-1705
Caltrans District 4 Right of Way Project Management 111 Grand Avenue Oakland, CA 94612	Grant Semple, R/W Project Coordination Branch Chief	(510) 286-5476
Transportation Authority of Marin 750 Linardo Street, Suite 200 San Rafael, CA 94901	Nick Nguyen, Project Manager	(415) 226-0831
BKF Engineers 4670 Willow Road, Suite 250 Pleasanton, CA 94588	Natalia Bernardi, Project Manager	(925) 396-7700
BKF Engineers 4670 Willow Road, Suite 250 Pleasanton, CA 94588	Gordon Sweet, Project Engineer	(925) 396-7700

## 13. ATTACHMENTS (Number of Pages)

- A. Project Location Map (1)
- B. Project Vicinity Map (1)
- C. Title Sheet & Layouts (25)
- D. Right of Way Data Sheet (6)

- E. Environmental Revalidation (27)
- F. Executed Cooperative Agreement (04-2742) (24)
- G. Draft Executable Construction Cooperative Agreement (19)
- H. Transportation Management Plan (39)
- I. Cost Estimate (12)
- J. Risk Register & Certification (4 pages)



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**ATTACHMENT A**  
**PROJECT LOCATION MAP**



**MARIN/SONOMA NARROWS – SEGMENT B7**

IN MARIN COUNTY

FROM 0.1 MILE SOUTH OF FRANKLIN OVERHEAD  
TO 0.5 MILE SOUTH OF SAN ANTONIO CREEK BRIDGE

04-Mrn-101, PM R20.8/27.1

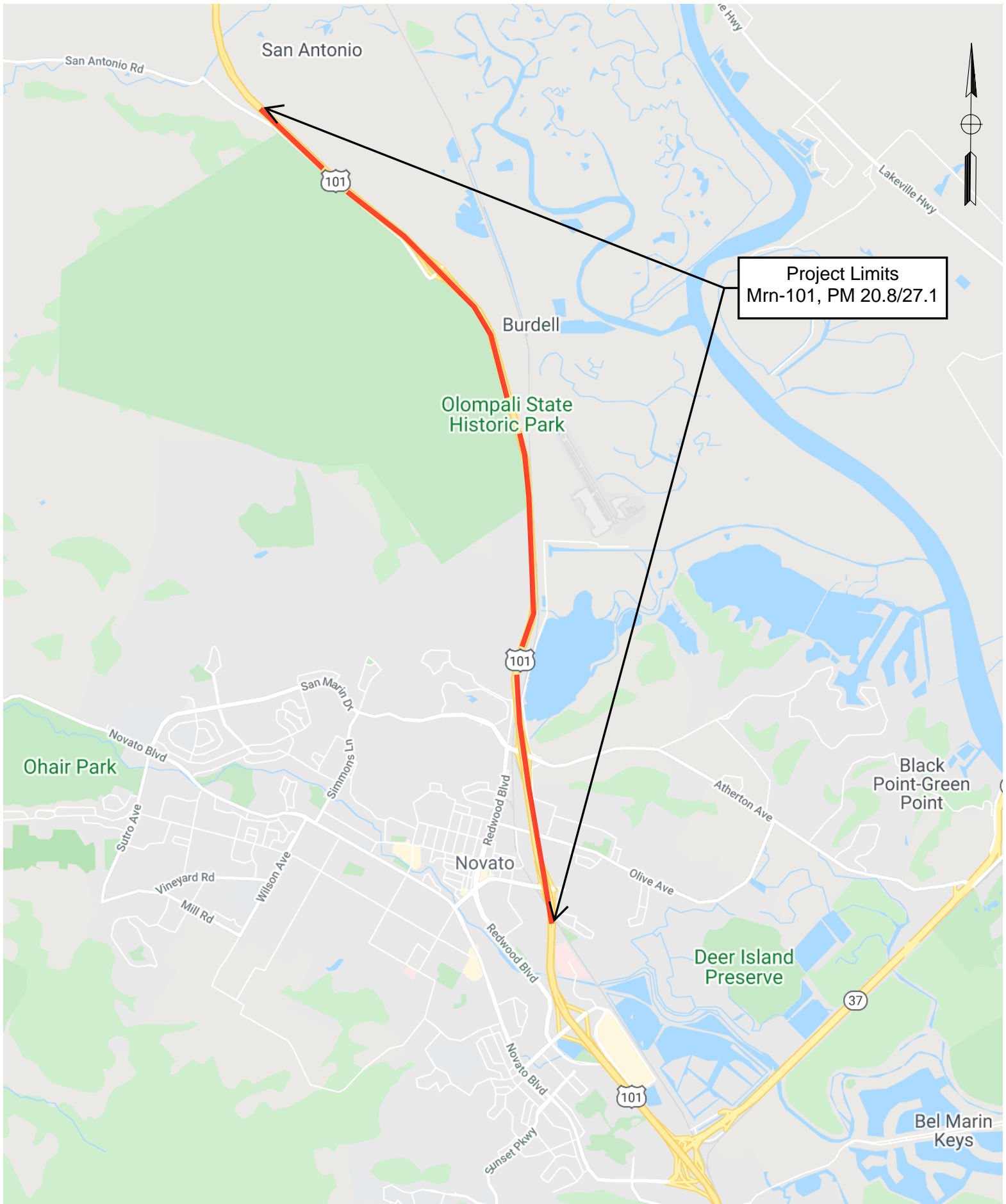
**PROJECT LOCATION MAP**

NOT TO SCALE

**ATTACHMENT A**

ATTACHMENT B

VICINITY MAP



San Antonio

San Antonio Rd

101

Lakeville Hwy

Project Limits  
Mrn-101, PM 20.8/27.1

Burdell

Olompali State  
Historic Park

101

San Marin Dr

Ohair Park

Novato Blvd

Simmons Ln

Sutro Ave

Vineyard Rd

Mill Rd

Wilson Ave

Novato

Redwood Blvd

Redwood Blvd

Novato Blvd

Sunset Pkwy

Olive Ave

Atherton Ave

Black  
Point-Green  
Point

Deer Island  
Preserve

37

Bel Marin  
Keys

101

ATTACHMENT C

LAYOUTS

APPROVED AS TO IMPACT ON STATE FACILITIES AND CONFORMANCE WITH APPLICABLE STATE STANDARDS AND PRACTICES AND THAT TECHNICAL OVERSIGHT WAS PERFORMED.

DATE SIGNED

LICENSE Exp DATE 9-30-20

REGISTRATION No. CT0344

CALTRANS DESIGN OVERSIGHT APPROVAL

CHEE KIN YAP

CONSULTANT DESIGN MANAGER

GORDON SWEET

INDEX OF PLANS

SHEET No.	DESCRIPTION
1	TITLE SHEET AND LOCATION MAP
2-26	TYPICAL CROSS SECTIONS
27	KEY MAP AND LINE INDEX
28-29	PROJECT CONTROL
30-53	LAYOUT
54-80	PROFILE AND SUPERELEVATION DIAGRAM
81-167	CONSTRUCTION DETAILS
168-261	TEMPORARY WATER POLLUTION CONTROL PLAN, DETAILS AND QUANTITIES
262-264	CONTOUR GRADING
265-391	DRAINAGE PLAN, PROFILES, DETAILS AND QUANTITIES
392-430	SUBSURFACE DRAINAGE PLAN, PROFILES AND QUANTITIES
431-454	UTILITY PLAN
455-458	CONSTRUCTION AREA SIGNS
459-500	STAGE CONSTRUCTION PLAN, TEMPORARY DRAINAGE PLAN, PROFILES AND QUANTITIES
501-591	TRAFFIC HANDLING PLAN AND QUANTITIES
592-603	DETOUR PLAN AND QUANTITIES
604-635	PAVEMENT DELINEATION PLANS AND QUANTITIES
636-668	SIGN PLAN, DETAILS AND QUANTITIES
669-677	SUMMARY OF QUANTITIES
678-720	RETAINING WALL PLAN
721-750	EROSION CONTROL LEGEND, PLAN, DETAILS AND QUANTITIES
751-804	ELECTRICAL PLANS
805-865	REVISED STANDARD PLANS
STRUCTURE PLANS	
866-896	FRANKLIN Ave OVERHEAD (WIDEN) - BRIDGE No. 27-0090L
897-915	OLIVE Ave UNDECROSSING - BRIDGE No. 270092L
916-928	RETAINING WALL No. 2 - BRIDGE No. 27E0076
929-944	RETAINING WALL No. 12 - BRIDGE NUMBER No. 27E0077

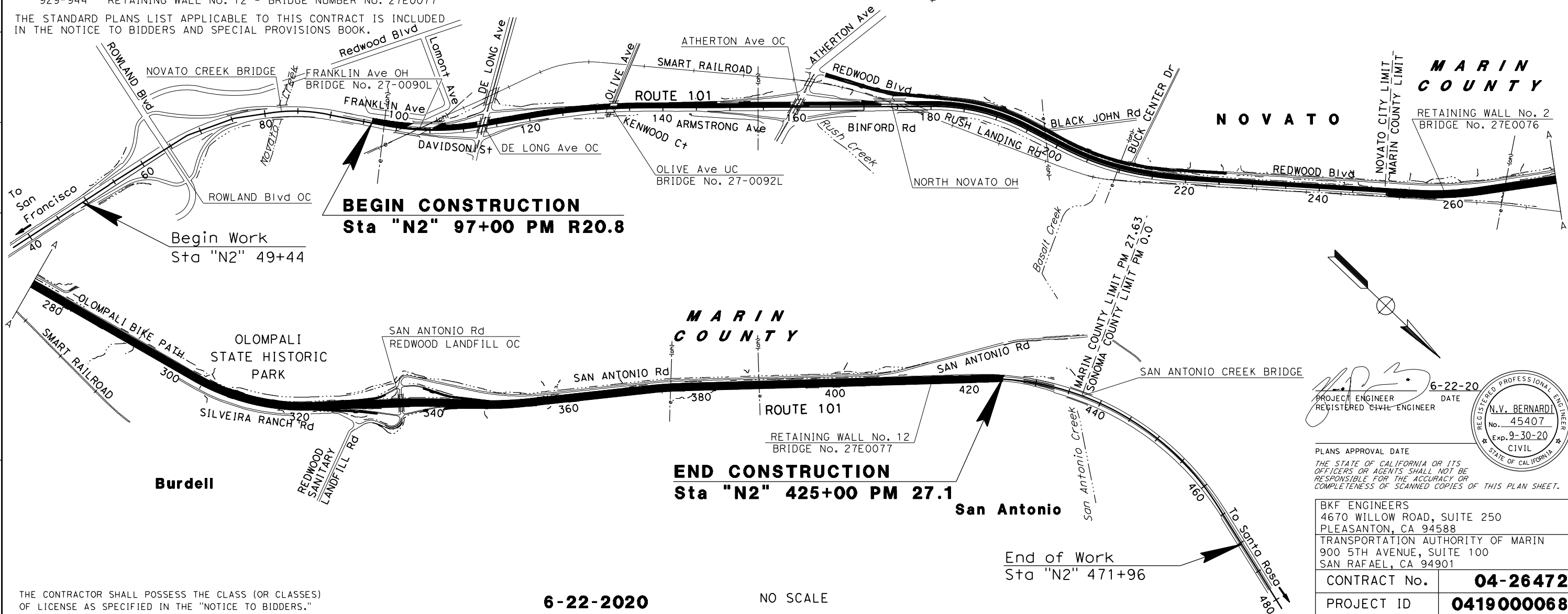
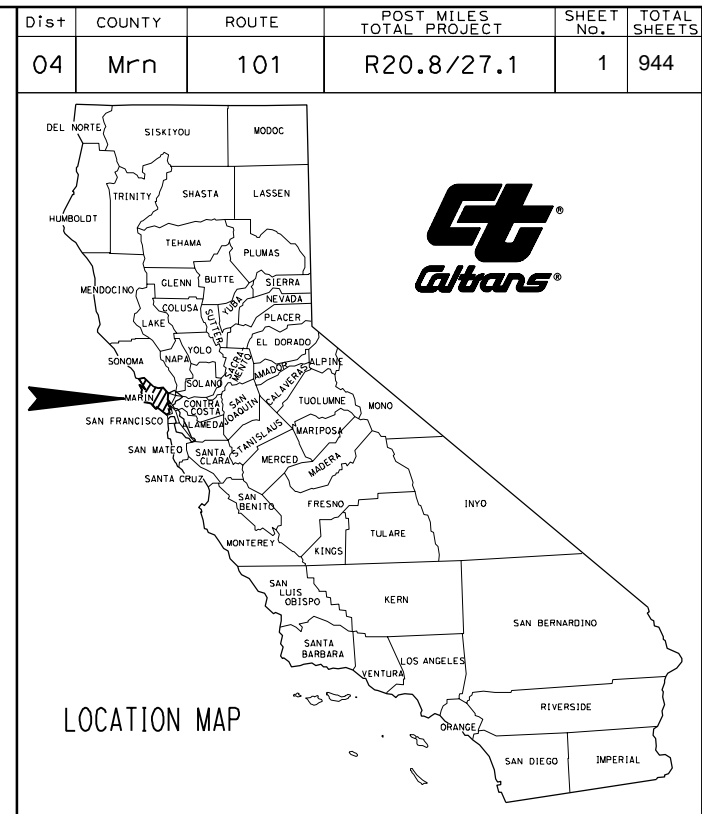
THE STANDARD PLANS LIST APPLICABLE TO THIS CONTRACT IS INCLUDED IN THE NOTICE TO BIDDERS AND SPECIAL PROVISIONS BOOK.

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

PROJECT PLANS FOR CONSTRUCTION ON  
STATE HIGHWAY  
IN MARIN COUNTY  
IN AND NEAR NOVATO

FROM 0.1 MILE SOUTH OF FRANKLIN AVENUE OVERHEAD  
TO 0.5 MILE SOUTH OF SAN ANTONIO CREEK BRIDGE

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2018



6-22-20  
PROJECT ENGINEER  
REGISTERED CIVIL ENGINEER  
DATE  
N.V. BERNARDI  
No. 45407  
Exp. 9-30-20  
CIVIL  
STATE OF CALIFORNIA

PLANS APPROVAL DATE  
THE STATE OF CALIFORNIA OR ITS  
OFFICERS OR AGENTS SHALL NOT BE  
RESPONSIBLE FOR THE ACCURACY OR  
COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

BKF ENGINEERS  
4670 WILLOW ROAD, SUITE 250  
PLEASANTON, CA 94588  
TRANSPORTATION AUTHORITY OF MARIN  
900 5TH AVENUE, SUITE 100  
SAN RAFAEL, CA 94901

CONTRACT No.	04-264724
PROJECT ID	0419000068

- NOTES:
- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
  - FOR EXISTING AERIALY DEPOSITED LEAD (ADL) AREAS AND LIMITS TO BE REMOVED AND PLACED, SEE CONSTRUCTION DETAILS.
  - FOR RETAINING WALL 2 AND 12, SEE STRUCTURE PLANS.
  - SEE CONSTRUCTION DETAILS SHEETS FOR DETAILS NOT SHOWN.
  - FOR DRAINAGE EASEMENTS, SEE DRAINAGE PLANS.
  - FOR UTILITY EASEMENTS, SEE UTILITY PLANS.
  - FOR MVP, SEE CONSTRUCTION DETAILS SHEETS.
  - SEE CONSTRUCTION DETAILS SHEET FOR ESA AND TEMPORARY HIGH VISIBILITY FENCE LOCATIONS.
  - FOR REMOVE BASE AND SURFACING, UNSUITABLE MATERIAL AND Conc Pvm+, SEE CONSTRUCTION DETAILS SHEETS.
  - FOR OBLITERATE Exist Pvm+, SEE CONSTRUCTION DETAILS SHEETS.
  - FOR CONCRETE BARRIER TRANSITIONS, SEE CONSTRUCTION DETAILS SHEETS.
  - FOR REDWOOD Blvd MICROSURFACING, SEE CONSTRUCTION DETAILS SHEETS C-85 THRU C-87.
  - SEAL ALL CRACKS 1/4" OR WIDER AND REPLACE FAILED EXISTING AC PAVEMENT PRIOR TO THE SPECIFIED OVERLAYS.

- ABBREVIATIONS:
- |       |                                     |
|-------|-------------------------------------|
| AITs  | ALTERNATIVE IN-LINE TERMINAL SYSTEM |
| AMA   | ARCHAEOLOGICAL MONITORING AREA      |
| Barr  | BARRIER                             |
| CSC   | CROSS SLOPE CORRECTION              |
| ICO   | IRRIGATION CONDUIT                  |
| LSS   | LIMIT OF STRUCTURAL SECTION         |
| PNT   | POINT                               |
| Rem   | REMOVE                              |
| SMART | SONOMA-MARIN AREA RAIL TRANSIT      |
| VGC   | VEGETATION CONTROL                  |

- LEGEND:
- |                      |   |
|----------------------|---|
| (No.)                | CURVE DATA NUMBER                                       |
| No.                  | STRUCTURAL SECTION NUMBER                               |
| (VGC)                | VEGETATION CONTROL (MINOR CONCRETE)                     |
| (Hatched Box)        | EXTEND GORE PAVING                                      |
| (Diagonal Lines Box) | MINIR Conc (TEXTURED PAVING)                            |
| (Diagonal Lines Box) | Rem Conc (TEXTURED PAVING)                              |
| (Cross-hatched Box)  | 0.15' TO 0.35' COLD PLANE AC PAVEMENT AND HMA SURFACING |
| (Cross-hatched Box)  | HMA OVERLAY W/ CSC                                      |
| (Diagonal Lines Box) | AMA   |
| (Dotted Box)         | REPLACE AC TO FULL DEPTH OF 0.50' AC LAYER              |

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Mrn	101	R20.8/27.1	30	944

REGISTERED CIVIL ENGINEER

6-15-20

DATE

N.V. BERNARDI

No. 45407

Exp. 9-30-20

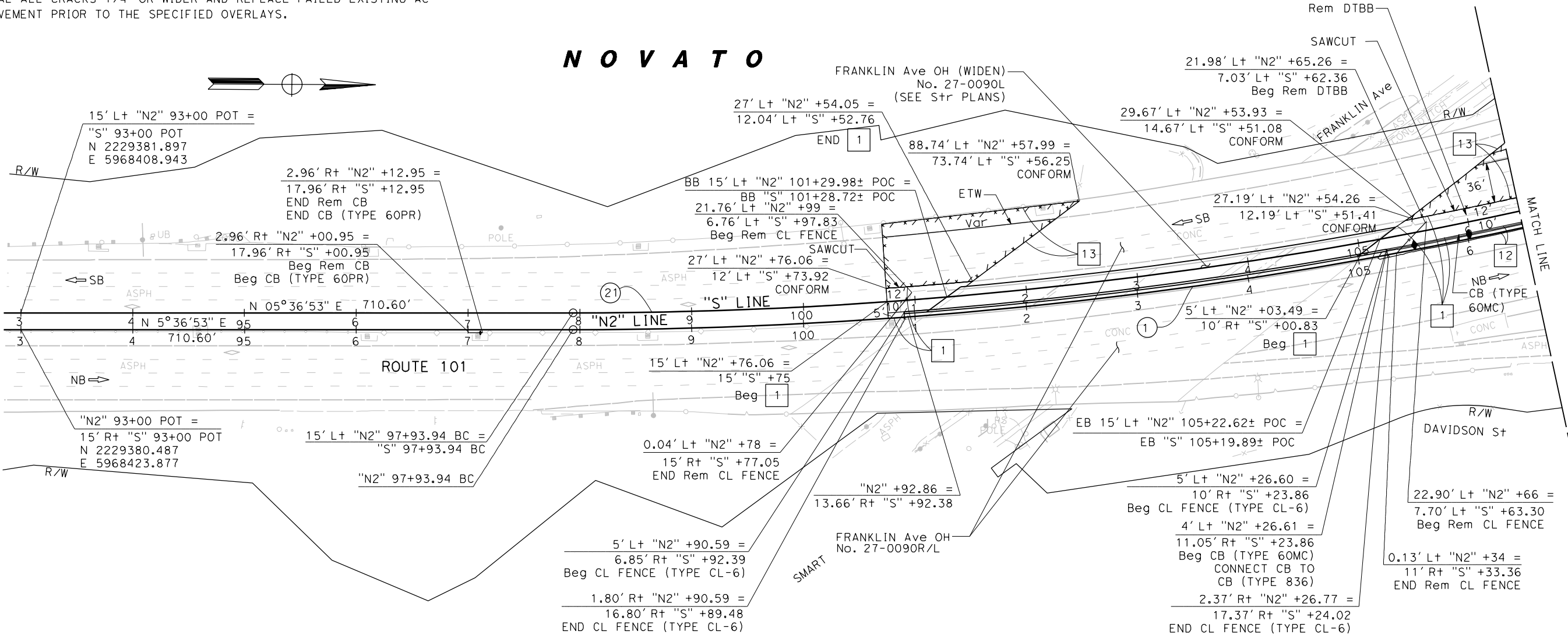
CIVIL

STATE OF CALIFORNIA

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

BKF ENGINEERS 4670 WILLOW ROAD, SUITE 250 PLEASANTON, CA 94588	TRANSPORTATION AUTHORITY OF MARIN 900 5TH AVENUE, SUITE 100 SAN RAFAEL, CA 94901
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CURVE DATA						
No.	(X)	R	Δ	T	L	NORTHING
1		4000'	20°50'55"	735.89'	1455.51'	2,230,598.730
21		3985'	20°50'55"	733.13'	1450.05'	2,230,263.352
						5,964,491.388

LAYOUT  
SCALE: 1" = 50'



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

CURVE DATA						
No.	(X)	R	Δ	T	L	
1		4000'	20°50'55"	735.89'	1455.51'	2,230,598.730
21		3985'	20°50'55"	733.13'	1450.05'	2,230,263.352

Dist

COUNTY

ROUTE

POST MILES  
TOTAL PROJECT

SHEET  
No.

TOTAL  
SHEETS

04

Mrn

101

R20.8/27.1

31

944

REGISTERED CIVIL ENGINEER

DATE

6-15-20

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS  
OR AGENTS SHALL NOT BE RESPONSIBLE FOR  
THE ACCURACY OR COMPLETENESS OF SCANNED  
COPIES OF THIS PLAN SHEET.

BKF ENGINEERS  
4670 WILLOW ROAD, SUITE 250  
PLEASANTON, CA 94588

TRANSPORTATION AUTHORITY OF MARIN  
900 5TH AVENUE, SUITE 100  
SAN RAFAEL, CA 94901

REGISTERED PROFESSIONAL ENGINEER

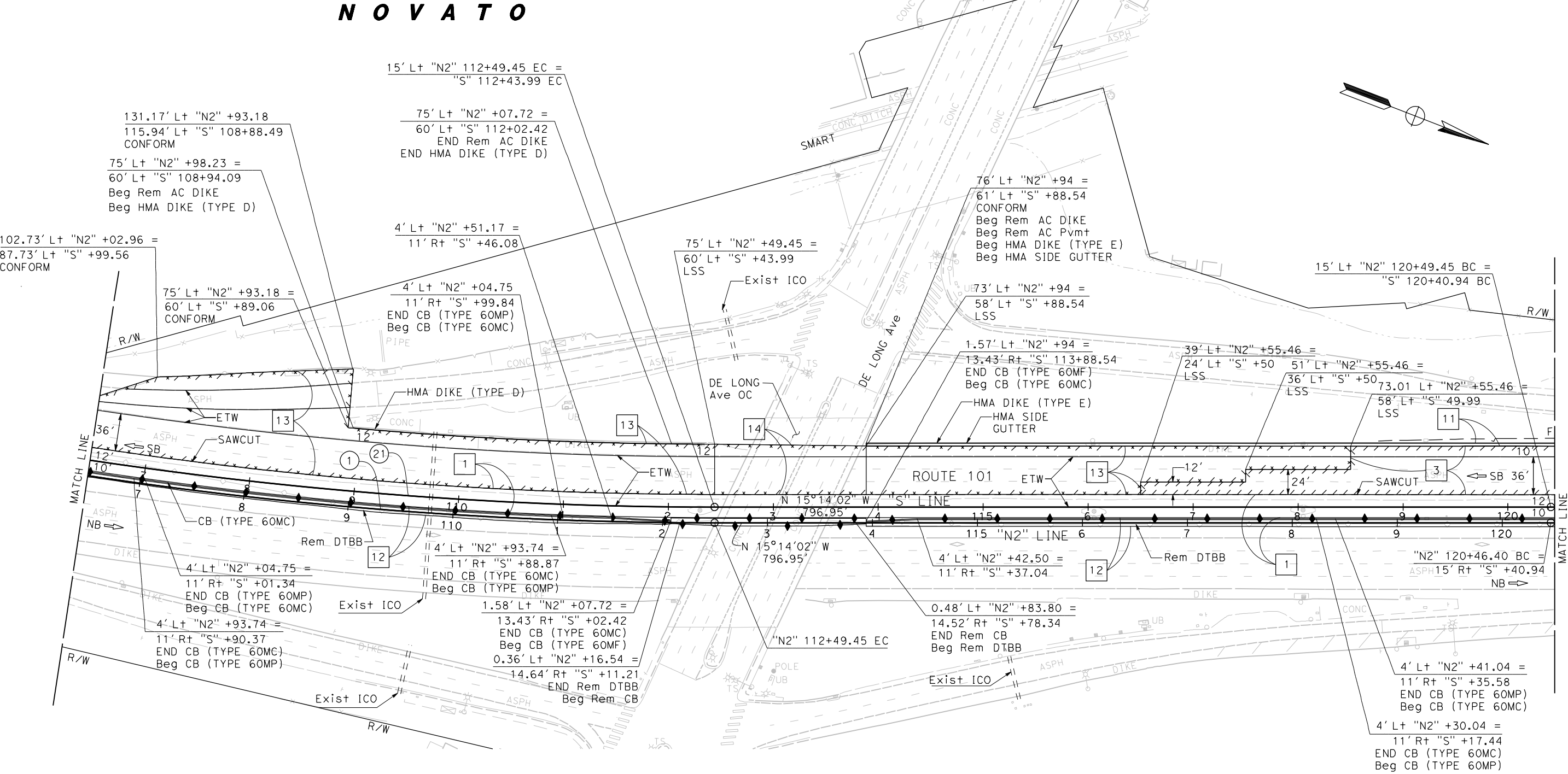
N.V. BERNARDI

No. 45407

Exp. 9-30-20

CIVIL

STATE OF CALIFORNIA



FOR NOTES, ABBREVIATIONS  
AND LEGEND, SEE SHEET L-1

LAYOUT  
SCALE: 1" = 50'

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

CURVE DATA						
No. (X)	R	Δ	T	L	NORTHING	EASTING
2	9990'	9°25'04"	822.89'	1642.07'	2,232,883.495	5,967,958.468
22	10005'	9°25'04"	824.12'	1644.54'	2,234,708.315	5,967,780.389

Dist

COUNTY

ROUTE

POST MILES  
TOTAL PROJECT

SHEET  
No.

TOTAL  
SHEETS

04

Mrn

101

R20.8/27.1

32

944

REGISTERED CIVIL ENGINEER

6-15-20

DATE

N.V. BERNARDI

No. 45407

Exp. 9-30-20

CIVIL

STATE OF CALIFORNIA

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS  
OR AGENTS SHALL NOT BE RESPONSIBLE FOR  
THE ACCURACY OR COMPLETENESS OF SCANNED  
COPIES OF THIS PLAN SHEET.

BKF ENGINEERS

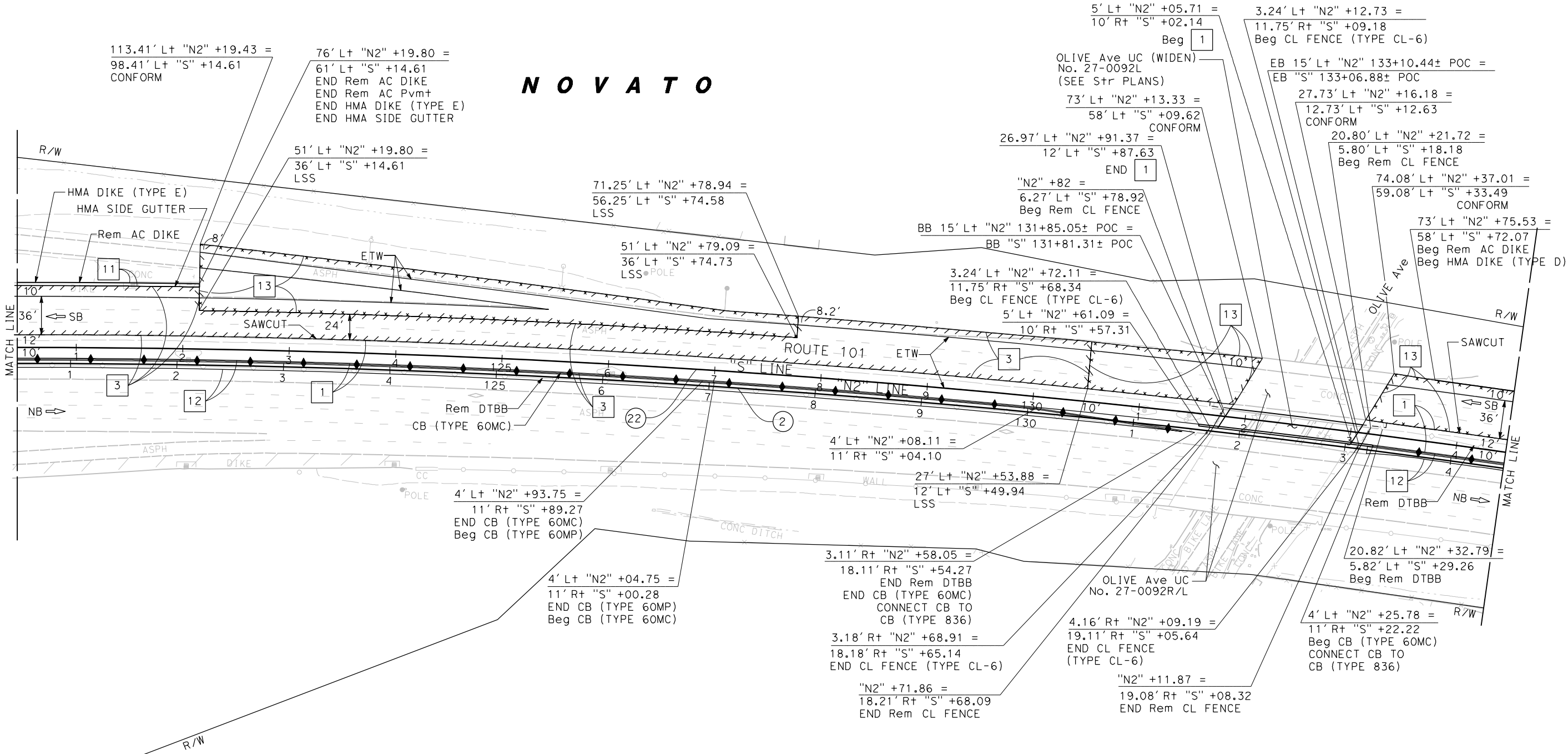
4670 WILLOW ROAD, SUITE 250

PLEASANTON, CA 94588

TRANSPORTATION AUTHORITY OF MARIN

900 5TH AVENUE, SUITE 100

SAN RAFAEL, CA 94901



FOR NOTES, ABBREVIATIONS  
AND LEGEND, SEE SHEET L-1

LAYOUT  
SCALE: 1" = 50'

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

CURVE DATA						
No. (X)	R	Δ	T	L	NORTHING	EASTING
2	9990'	9°25'04"	822.89'	1642.07'	2,232,883.495	5,967,958.468
22	10005'	9°25'04"	824.12'	1644.54'	2,234,708.315	5,967,780.389
31	3000'	3°11'29"	83.57'	167.10'	2,234,779.705	5,967,671.281

Dist

COUNTY

ROUTE

POST MILES  
TOTAL PROJECT

SHEET  
No.

TOTAL  
SHEETS

04

Mrn

101

R20.8/27.1

33

944

REGISTERED CIVIL ENGINEER

DATE

6-15-20

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS  
OR AGENTS SHALL NOT BE RESPONSIBLE FOR  
THE ACCURACY OR COMPLETENESS OF SCANNED  
COPIES OF THIS PLAN SHEET.

BKF ENGINEERS  
4670 WILLOW ROAD, SUITE 250  
PLEASANTON, CA 94588

TRANSPORTATION AUTHORITY OF MARIN  
900 5TH AVENUE, SUITE 100  
SAN RAFAEL, CA 94901

REGISTERED PROFESSIONAL ENGINEER

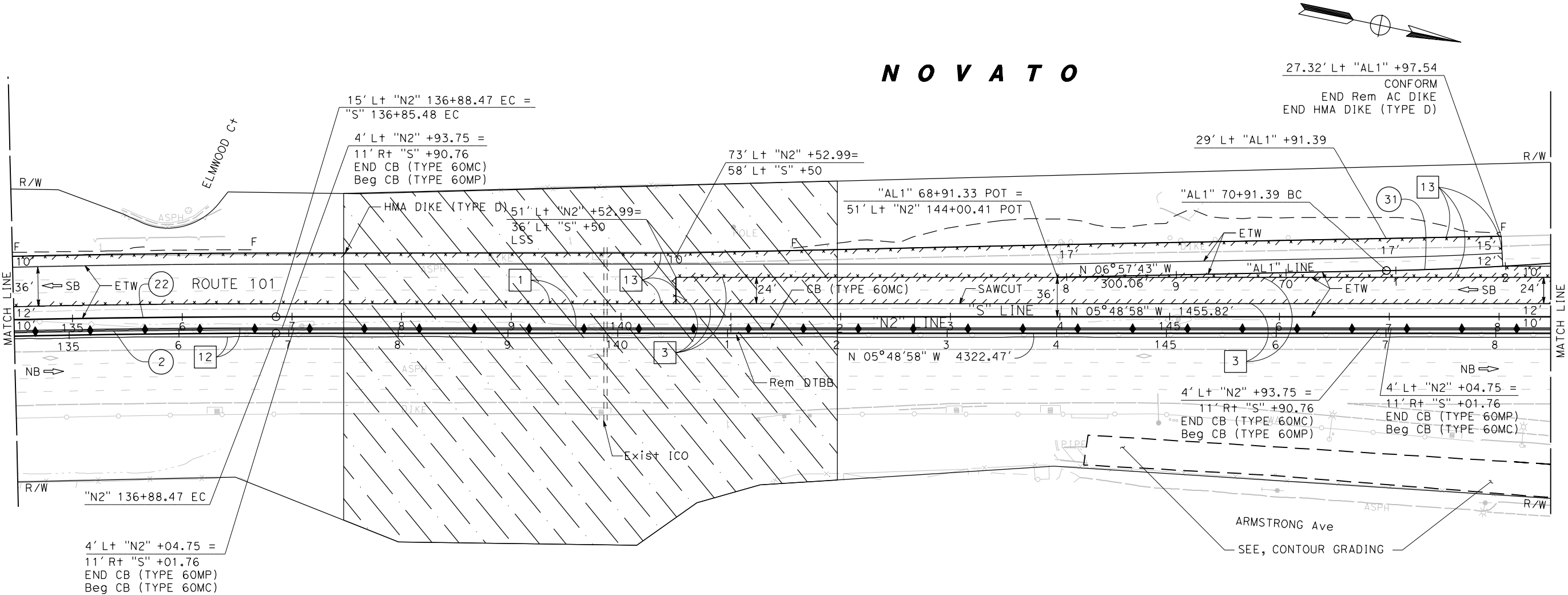
N.V. BERNARDI

No. 45407

Exp. 9-30-20


CIVIL

STATE OF CALIFORNIA



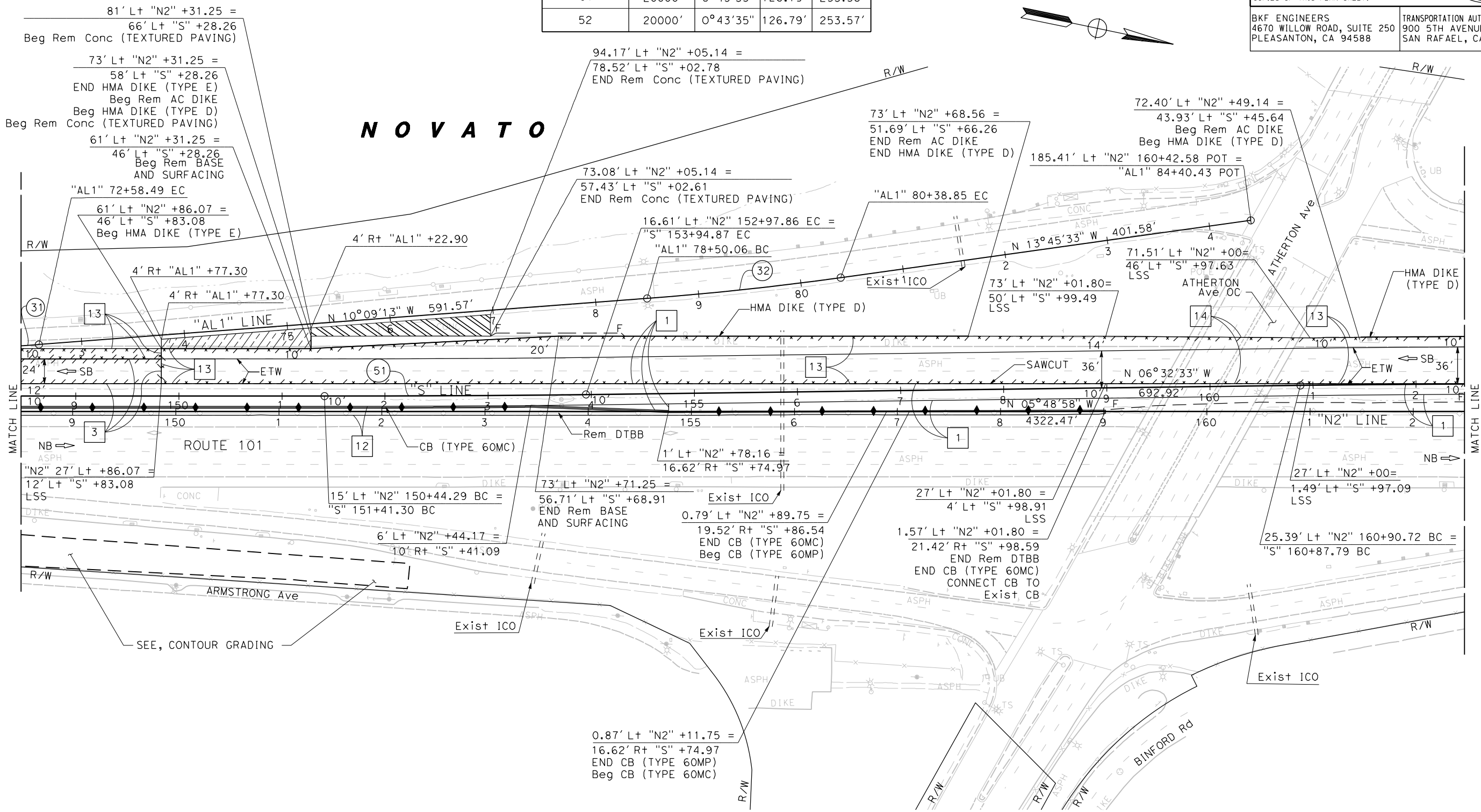
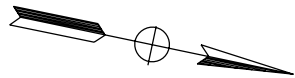
FOR NOTES, ABBREVIATIONS  
AND LEGEND, SEE SHEET L-1


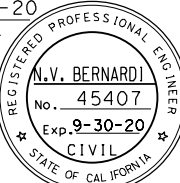
LAYOUT  
SCALE: 1" = 50'

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION		CONSULTANT FUNCTIONAL SUPERVISOR							
		GORDON SWEET		CALCULATED- DESIGNED BY	INNA ASHUROV	REVISED BY	1A	1A	
				CHECKED BY	DAT Q. NGUYEN	DATE REVISED	8-1-19	11-18-19	6-15-20

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

No. (X)	R	$\Delta$	T	L	NORTHING	EASTING
31	3000'	3° 11' 29"	83.57'	167.10'	2,234,779.705	5,967,671.281
32	3000'	3° 36' 20"	94.42'	188.79'	2,235,537.089	5,967,535.315
51	20000'	0° 43' 35"	126.79'	253.58'		
52	20000'	0° 43' 35"	126.79'	253.57'		



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Mtn	101	R20.8/27.1	34	944
			6-15-20		
REGISTERED CIVIL ENGINEER			DATE		
PLANS APPROVAL DATE					
<p>THE STATE OF CALIFORNIA OR ITS OFFICERS OF AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</p>					
BKF ENGINEERS 4670 WILLOW ROAD, SUITE 250 PLEASANTON, CA 94588			TRANSPORTATION AUTHORITY OF MARIN 900 5TH AVENUE, SUITE 100 SAN RAFAEL, CA 94901		

FOR NOTES, ABBREVIATIONS  
AND LEGEND, SEE SHEET L-1

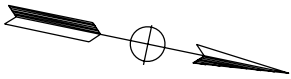
**LAYOUT**  
SCALE: 1" = 50'

**L-5**

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

CURVE DATA

No.	(X)	R	Δ	T	L
52		20000'	0°43'35"	126.79'	253.57'



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Mrn	101	R20.8/27.1	35	944

REGISTERED CIVIL ENGINEER

6-15-20

DATE

N.V. BERNARDI

No. 45407

Exp. 9-30-20

CIVIL

STATE OF CALIFORNIA

PLANS APPROVAL DATE

BKF ENGINEERS

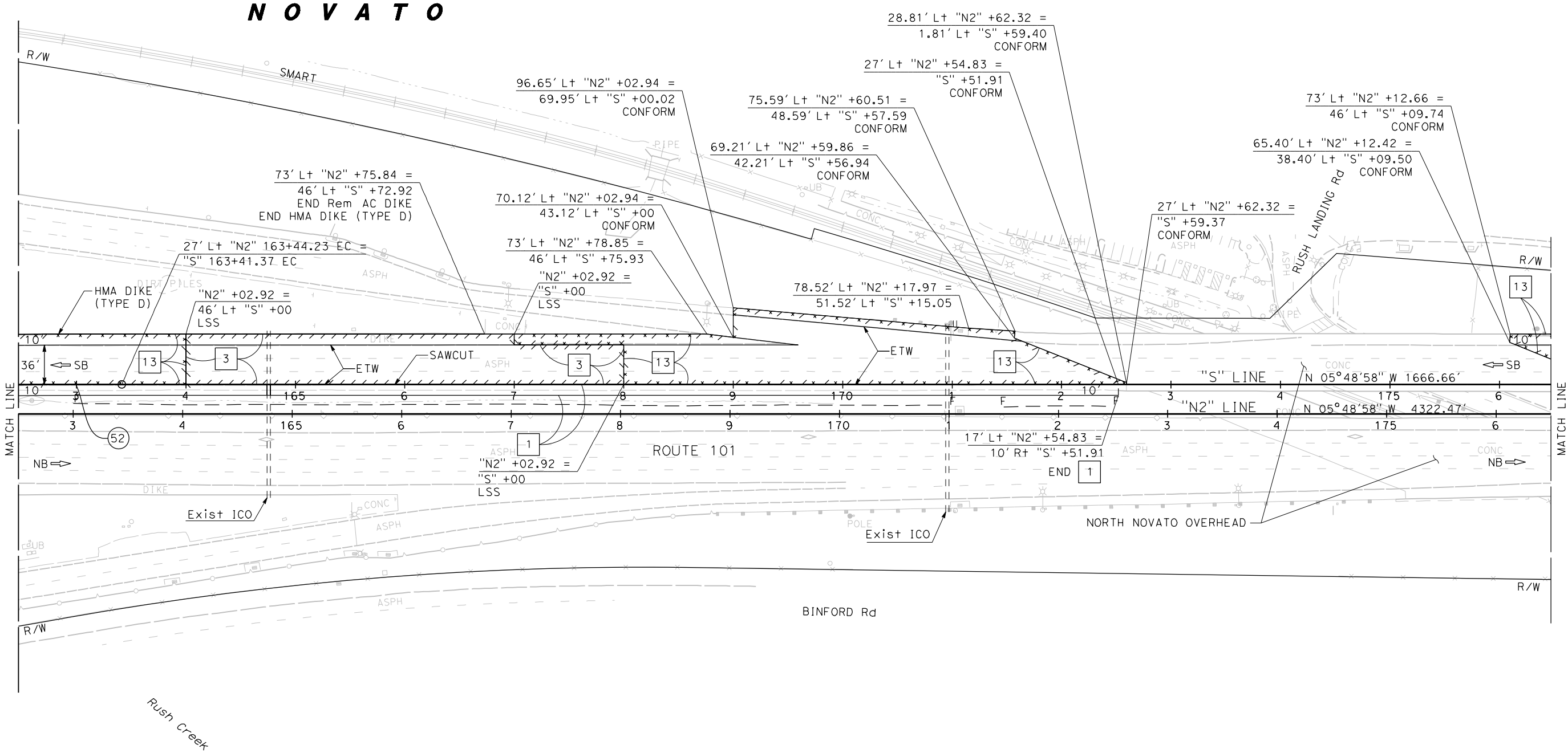
4670 WILLOW ROAD, SUITE 250

PLEASANTON, CA 94588

TRANSPORTATION AUTHORITY OF MARIN

900 5TH AVENUE, SUITE 100

SAN RAFAEL, CA 94901



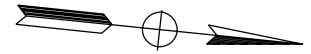
FOR NOTES, ABBREVIATIONS  
AND LEGEND, SEE SHEET L-1

LAYOUT  
SCALE: 1" = 50'

**X**

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

CURVE DATA



15-20  
DATE  
S  
ED

REGISTERED PROFESSIONAL ENGINEER  
N.V. BERNARDI  
No. 45407  
Exp. 9-30-20  
CIVIL  
STATE OF CALIFORNIA

**L-7**

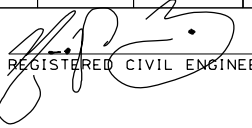
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DATE PLOTTED => 6/17/2020	LAST REVISION
TIME PLOTTED => 8:00:37 AM	6-15-20

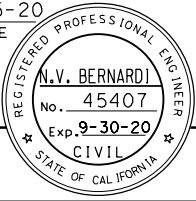
NOTE:  
FOR ACCURATE RIGHT OF WAY DATA, CONTACT  
RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

CURVE DATA						
No.	X	R	Δ	T	L	
4		3050'	27°35'07"	748.74'	1468.43'	2,238,728.505
5		4000'	17°37'12"	619.95'	1230.12'	2,240,613.056
24		3077'	27°35'07"	755.36'	1481.43'	2,238,305.265
25		3973'	15°16'56"	533.01'	1059.69'	2,241,510.079
53		4502'	23°49'14"	949.56'	1871.69'	5,964,126.551

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Mrn	101	R20.8/27.1	37	944



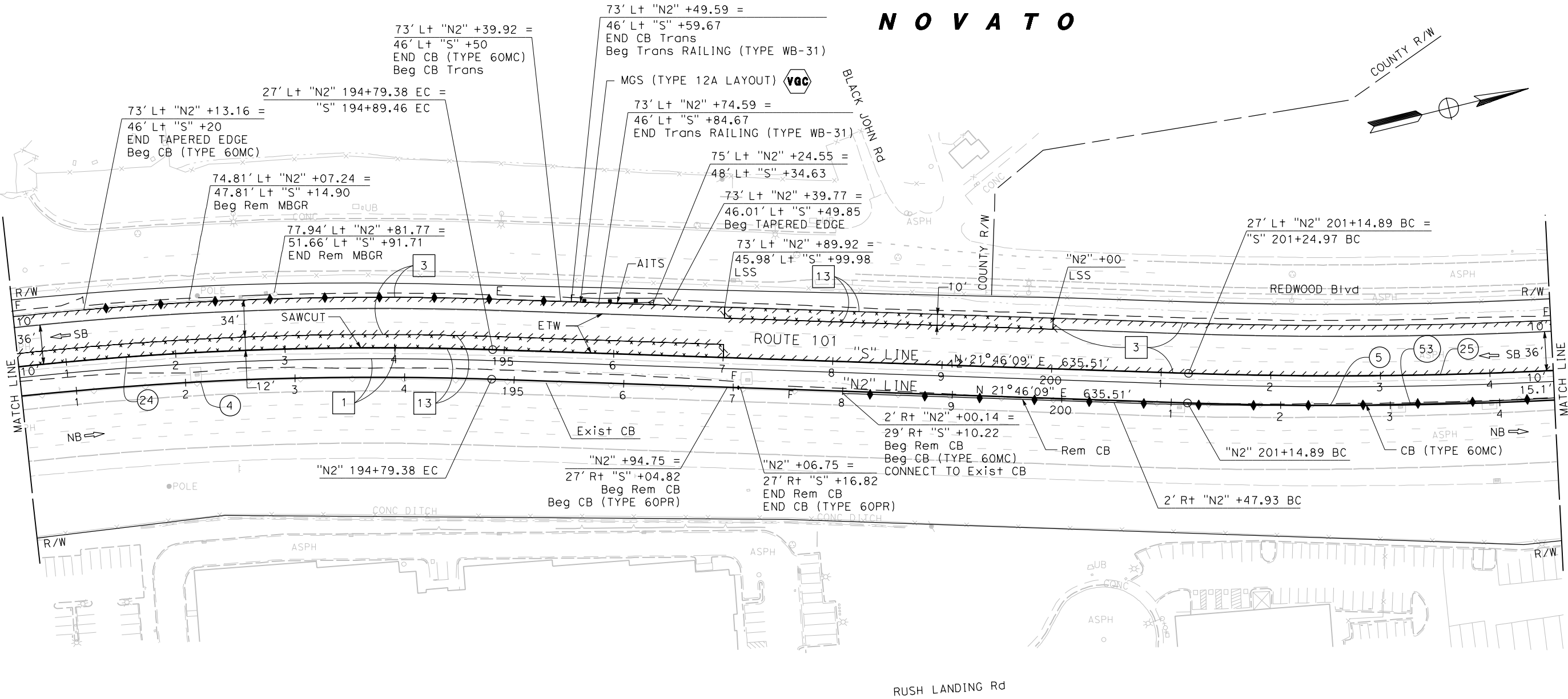
6-15-20  
REGISTERED CIVIL ENGINEER DATE



PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS  
OR AGENTS SHALL NOT BE RESPONSIBLE FOR  
THE ACCURACY OR COMPLETENESS OF SCANNED  
COPIES OF THIS PLAN SHEET.

BKF ENGINEERS 4670 WILLOW ROAD, SUITE 250 PLEASANTON, CA 94588	TRANSPORTATION AUTHORITY OF MARIN 900 5TH AVENUE, SUITE 100 SAN RAFAEL, CA 94901
--	--



FOR NOTES, ABBREVIATIONS  
AND LEGEND, SEE SHEET L-1

LAYOUT  
SCALE: 1" = 50'

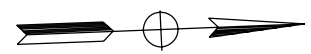


**X**

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

CURVE DATA

BKF ENGINEERS 4670 WILLOW ROAD, SUITE 250 PLEASANTON, CA 94588	TRANSPORTATION AUTHORITY OF MARIN 900 5TH AVENUE, SUITE 100 SAN RAFAEL, CA 94901
--	--



# LAYOUT

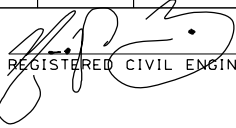
SCALE: 1" = 50'



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

CURVE DATA						
No. (X)	R	Δ	T	L	NORTHING	EASTING
6	7000'	6°12'02"	379.13'	757.53'	2,241,599.002	5,968,133.240
26	7000'	8°32'18"	522.55'	1043.17'	2,241,852.063	5,961,118.931
54	7000'	8°32'18"	522.55'	1043.17'		

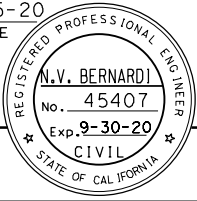
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Mrn	101	R20.8/27.1	39	944



REGISTERED CIVIL ENGINEER

6-15-20  
DATE

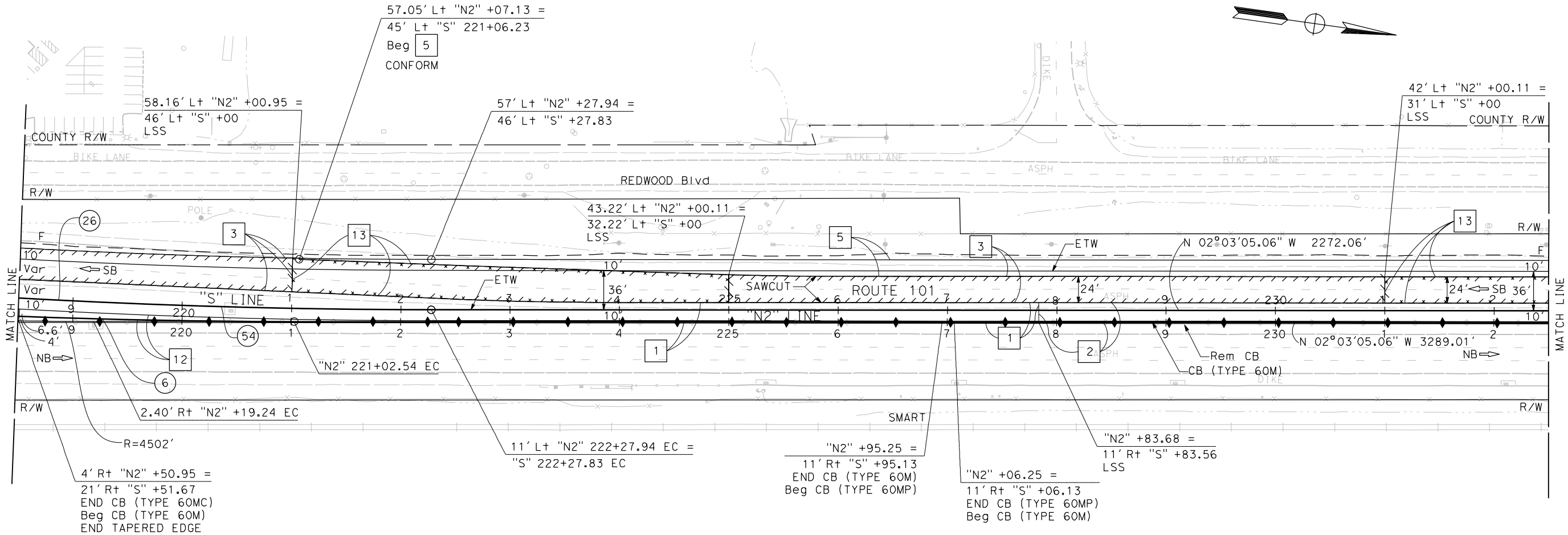
PLANS APPROVAL DATE



BKF ENGINEERS  
4670 WILLOW ROAD, SUITE 250  
PLEASANTON, CA 94588

TRANSPORTATION AUTHORITY OF MARIN  
900 5TH AVENUE, SUITE 100  
SAN RAFAEL, CA 94901

NOVATO

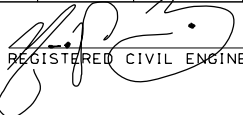


FOR NOTES, ABBREVIATIONS  
AND LEGEND, SEE SHEET L-1

LAYOUT  
SCALE: 1" = 50'

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

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Mrn	101	R20.8/27.1	40	944



REGISTERED CIVIL ENGINEER

6-15-20  
DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER

N.V. BERNARDI

No. 45407

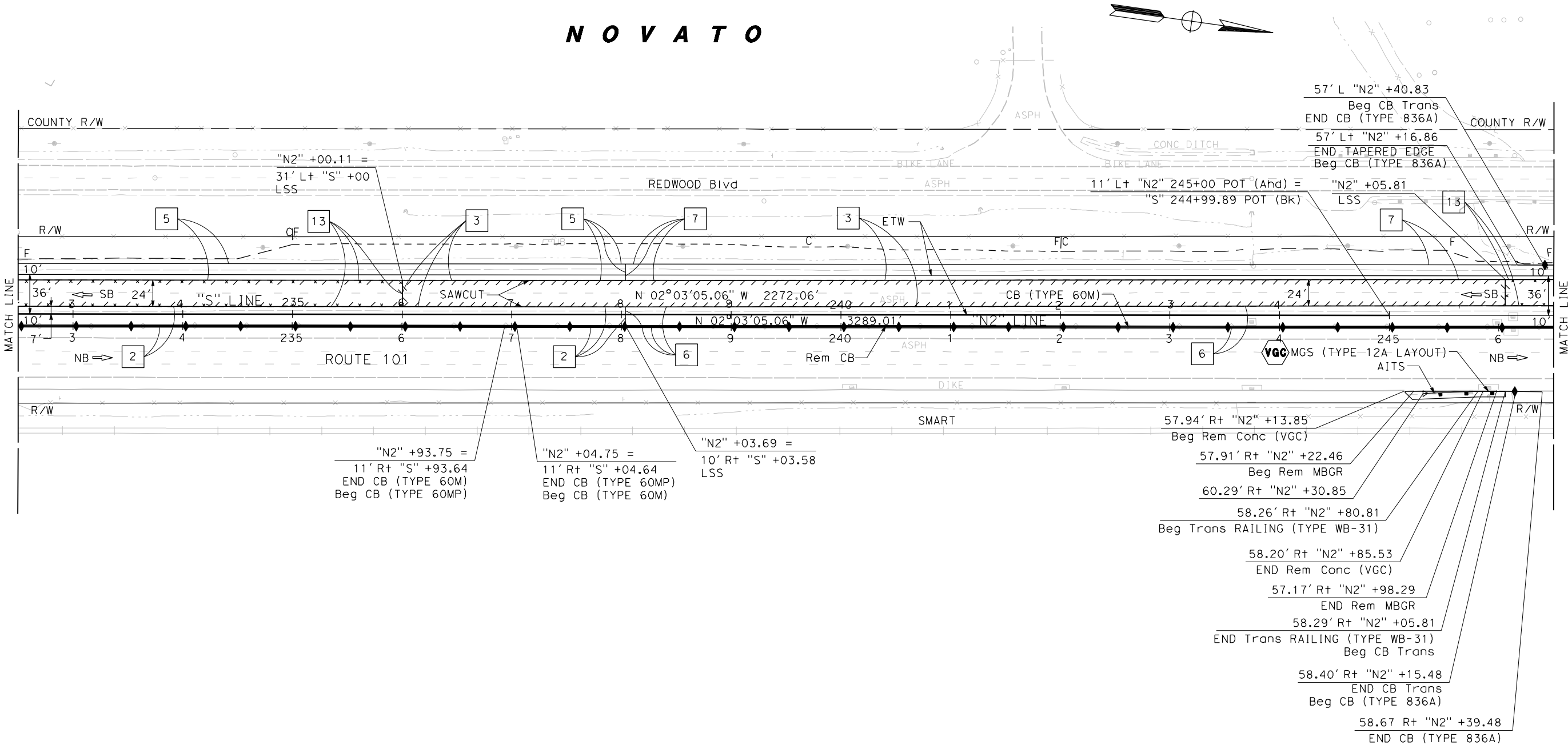
Exp. 9-30-20

CIVIL

STATE OF CALIFORNIA

BKF ENGINEERS  
4670 WILLOW ROAD, SUITE 250  
PLEASANTON, CA 94588

TRANSPORTATION AUTHORITY OF MARIN  
900 5TH AVENUE, SUITE 100  
SAN RAFAEL, CA 94901

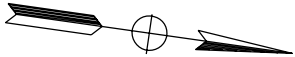


FOR NOTES, ABBREVIATIONS  
AND LEGEND, SEE SHEET L-1

LAYOUT  
SCALE: 1" = 50'

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

CURVE DATA						
No.	(X)	R	Δ	T	L	NORTHING
7		5000'	11°56'25"	522.88'	1041.97'	2,245,783.348
						EASTING
						5,967,966.477



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Mrn	101	R20.8/27.1	41	944

REGISTERED CIVIL ENGINEER

6-15-20

DATE

N.V. BERNARDI

No. 45407

Exp. 9-30-20

CIVIL

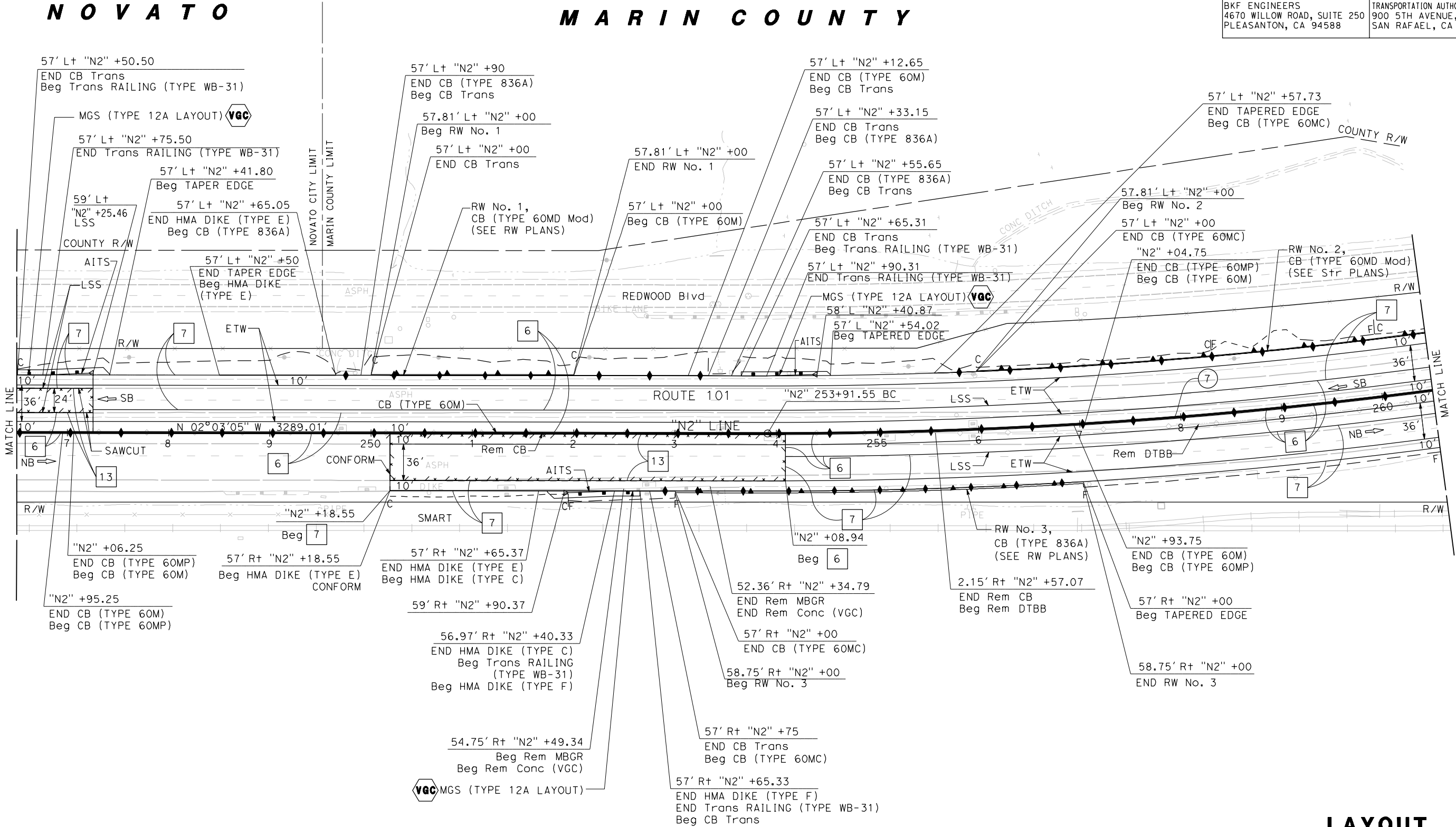
STATE OF CALIFORNIA

PLANS APPROVAL DATE

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THE ACCURACY OR COMPLETENESS OF SCANNED  
COPIES OF THIS PLAN SHEET.


BKF ENGINEERS  
4670 WILLOW ROAD, SUITE 250  
PLEASANTON, CA 94588

TRANSPORTATION AUTHORITY OF MARIN  
900 5TH AVENUE, SUITE 100  
SAN RAFAEL, CA 94901



FOR NOTES, ABBREVIATIONS  
AND LEGEND, SEE SHEET L-1

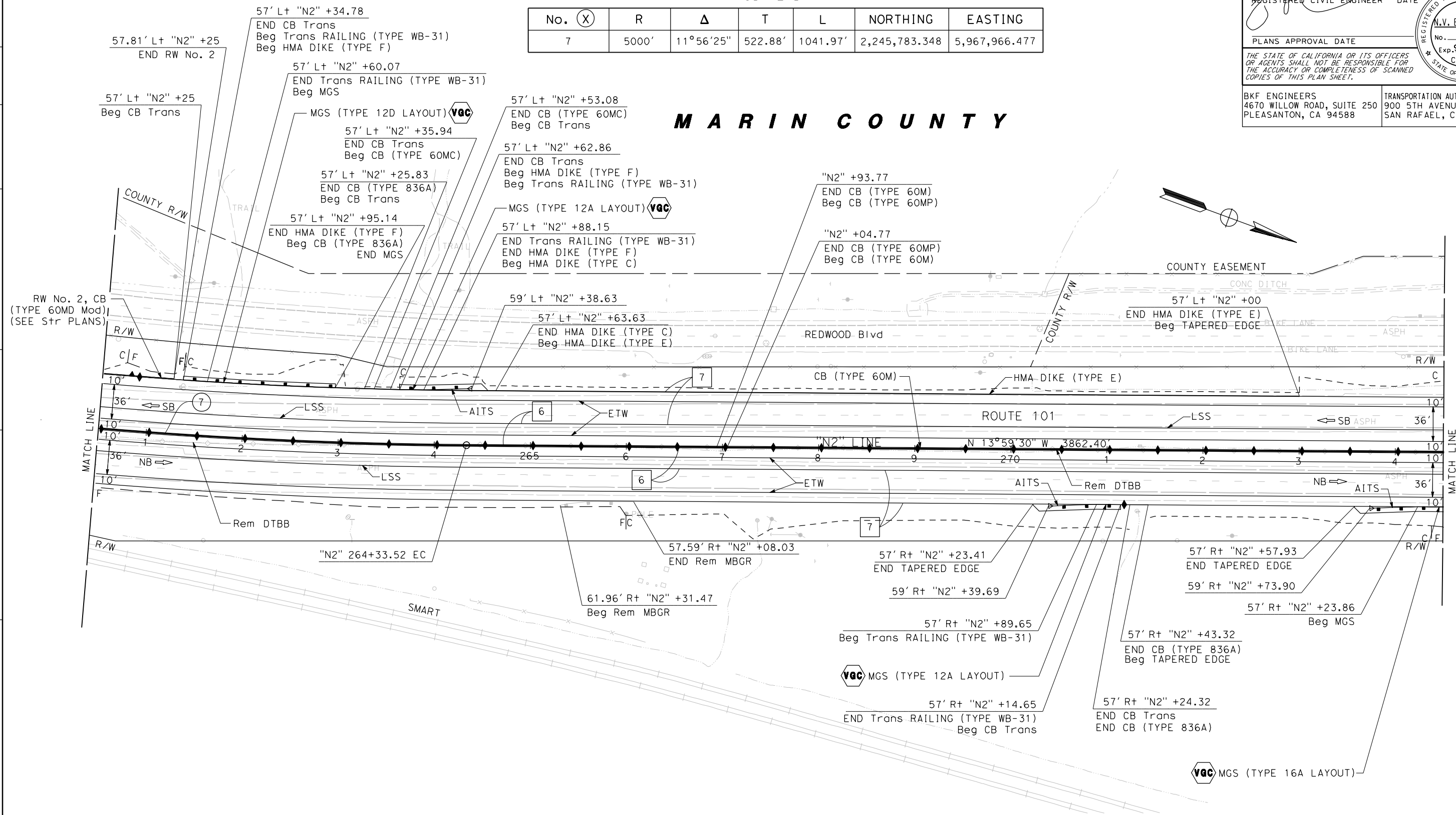
LAYOUT  
SCALE: 1" = 50'

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	CONSULTANT FUNCTIONAL SUPERVISOR							
	GORDON SWEET		CALCULATED- DESIGNED BY	INNA ASHUROV	REVISED BY	IA	CDB	IA
			CHECKED BY	DAT Q. NGUYEN	DATE REVISED	8-1-19	11-18-19	6-15-20

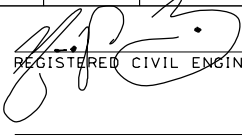
NOTE:  
FOR ACCURATE RIGHT OF WAY DATA, CONTACT  
RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

CURVE DATA						
No. (X)	R	Δ	T	L	NORTHING	EASTING
7	5000'	11°56'25"	522.88'	1041.97'	2,245,783.348	5,967,966.477

**M A R I N C O U N T Y**



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Mrn	101	R20.8/27.1	42	944


 6-15-20  
 REGISTERED CIVIL ENGINEER      DATE

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS  
 AGENT SHALL NOT BE RESPONSIBLE FOR  
 THE ACCURACY OR COMPLETENESS OF SCANNED  
 COPIES OF THIS PLAN SHEET.

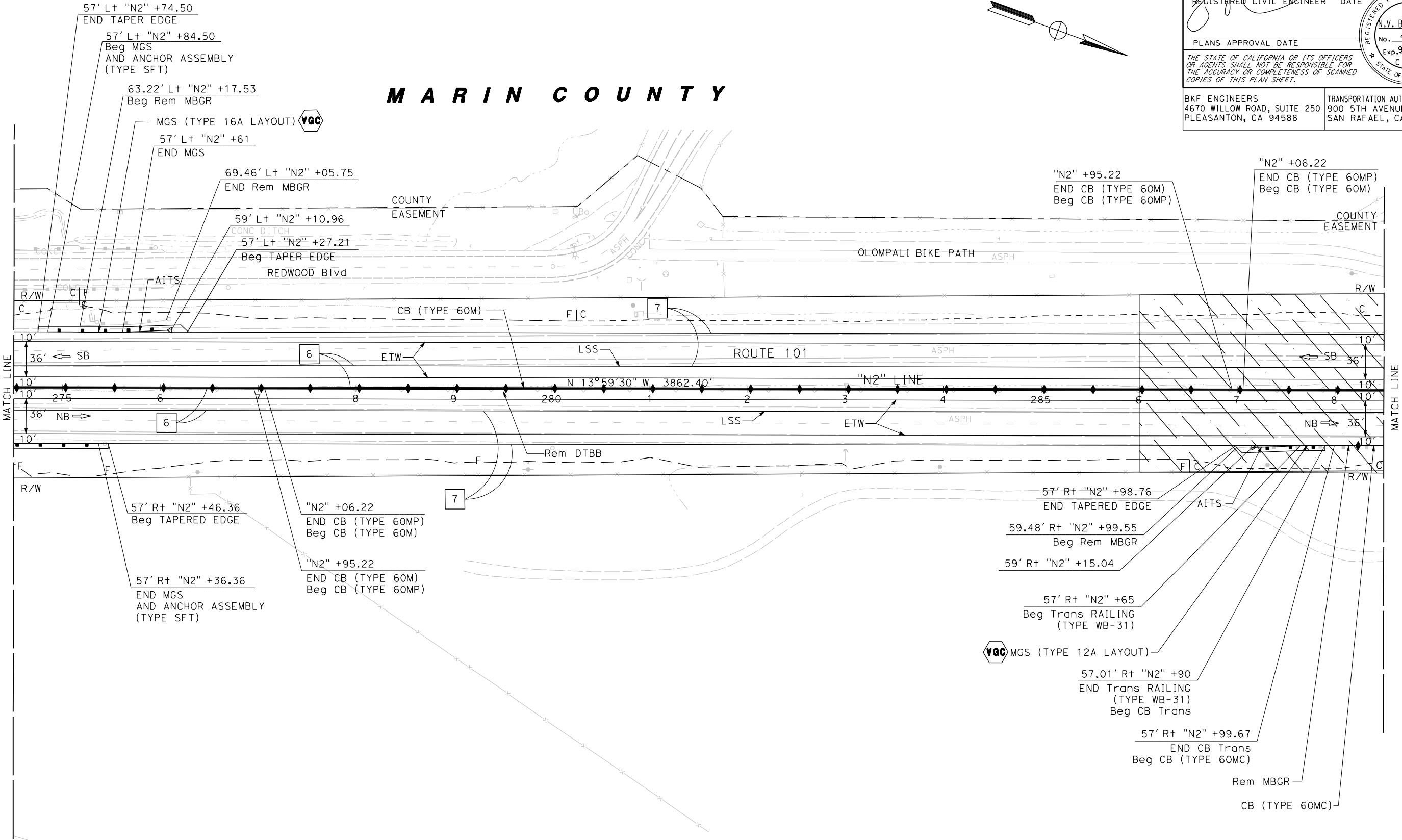
N.V. BERNARDI  
 No. 45407  
 Exp. 9-30-20  
 CIVIL  
 STATE OF CALIFORNIA

BKF ENGINEERS 4670 WILLOW ROAD, SUITE 250 PLEASANTON, CA 94588	TRANSPORTATION AUTHORITY OF MARIN 900 5TH AVENUE, SUITE 100 SAN RAFAEL, CA 94901
--	--

FOR NOTES, ABBREVIATIONS  
AND LEGEND, SEE SHEET L-1

**LAYOUT**  
SCALE: 1" = 50'


**L-13**



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Mrn	101	R20.8/27.1	43	944
REGISTERED CIVIL ENGINEER			6-15-20	DATE	
PLANS APPROVAL DATE					
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.					
BKF ENGINEERS 4670 WILLOW ROAD, SUITE 250 PLEASANTON, CA 94588			TRANSPORTATION AUTHORITY OF MARIN 900 5TH AVENUE, SUITE 100 SAN RAFAEL, CA 94901		

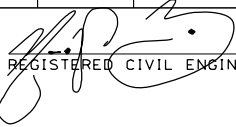
LAYOUT

SCALE: 1" = 50'

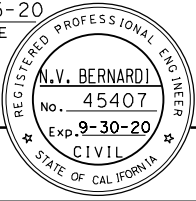
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION 	CONSULTANT FUNCTIONAL SUPERVISOR GORDON SWEET		CALCULATED-DESIGNED BY CHECKED BY		INNA ASHUROV DAT O. NGUYEN		REVISED BY DATE REVISED	1A 8-1-19	CDB 11-18-19	1A 6-15-20

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

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Mrn	101	R20.8/27.1	44	944



6-15-20  
REGISTERED CIVIL ENGINEER DATE

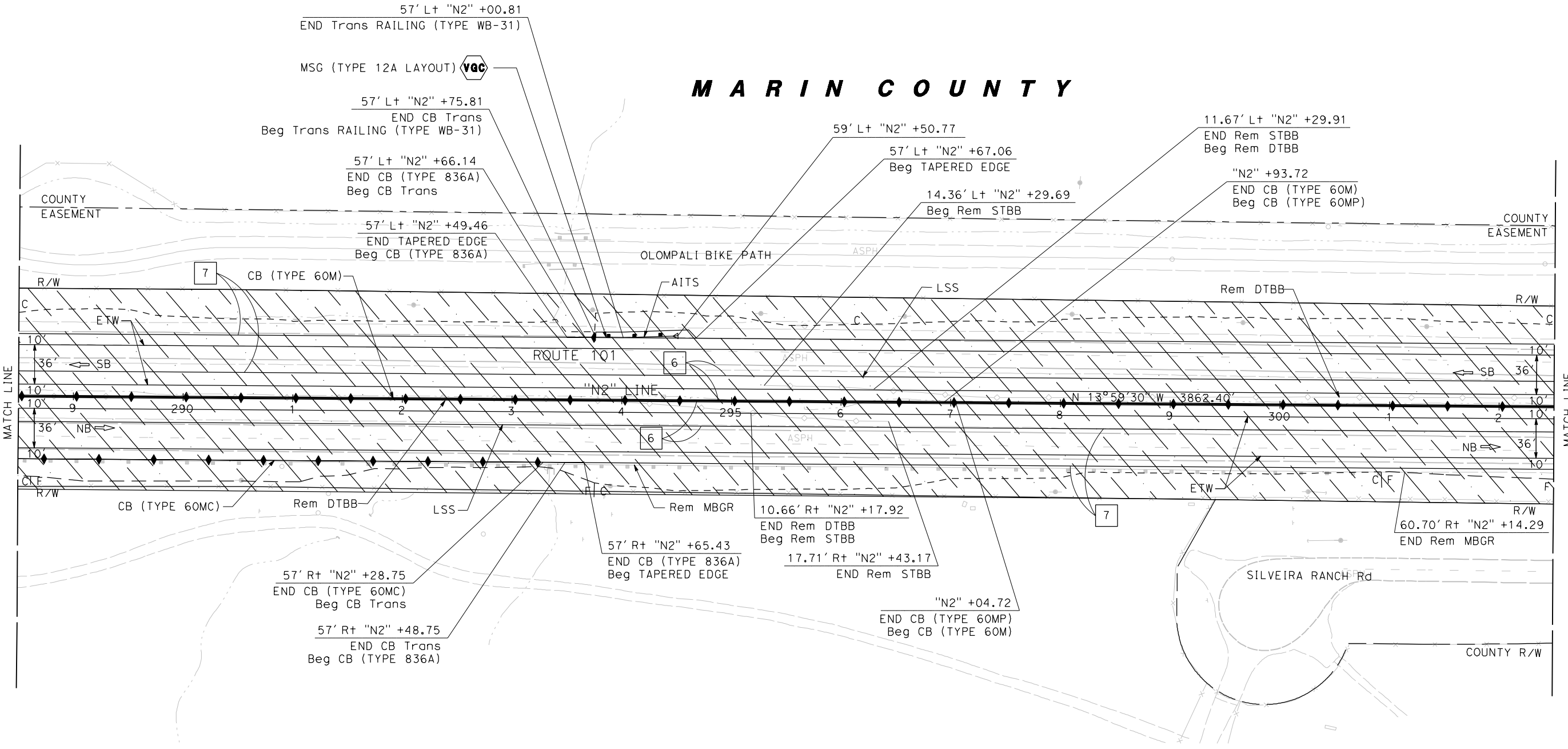


PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS  
OR AGENTS SHALL NOT BE RESPONSIBLE FOR  
THE ACCURACY OR COMPLETENESS OF SCANNED  
COPIES OF THIS PLAN SHEET.

BKF ENGINEERS  
4670 WILLOW ROAD, SUITE 250  
PLEASANTON, CA 94588

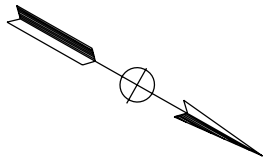
TRANSPORTATION AUTHORITY OF MARIN  
900 5TH AVENUE, SUITE 100  
SAN RAFAEL, CA 94901



LAYOUT  
SCALE: 1" = 50'

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

CURVE DATA						
No. (X)	R	Δ	T	L	NORTHING	EASTING
8	3459'	32°06'13"	995.24'	1938.12'	2,250,937.776	5,966,571.106
55	3300'	32°06'13"	949.49'	1849.03'		



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Mrn	101	R20.8/27.1	45	944

REGISTERED CIVIL ENGINEER

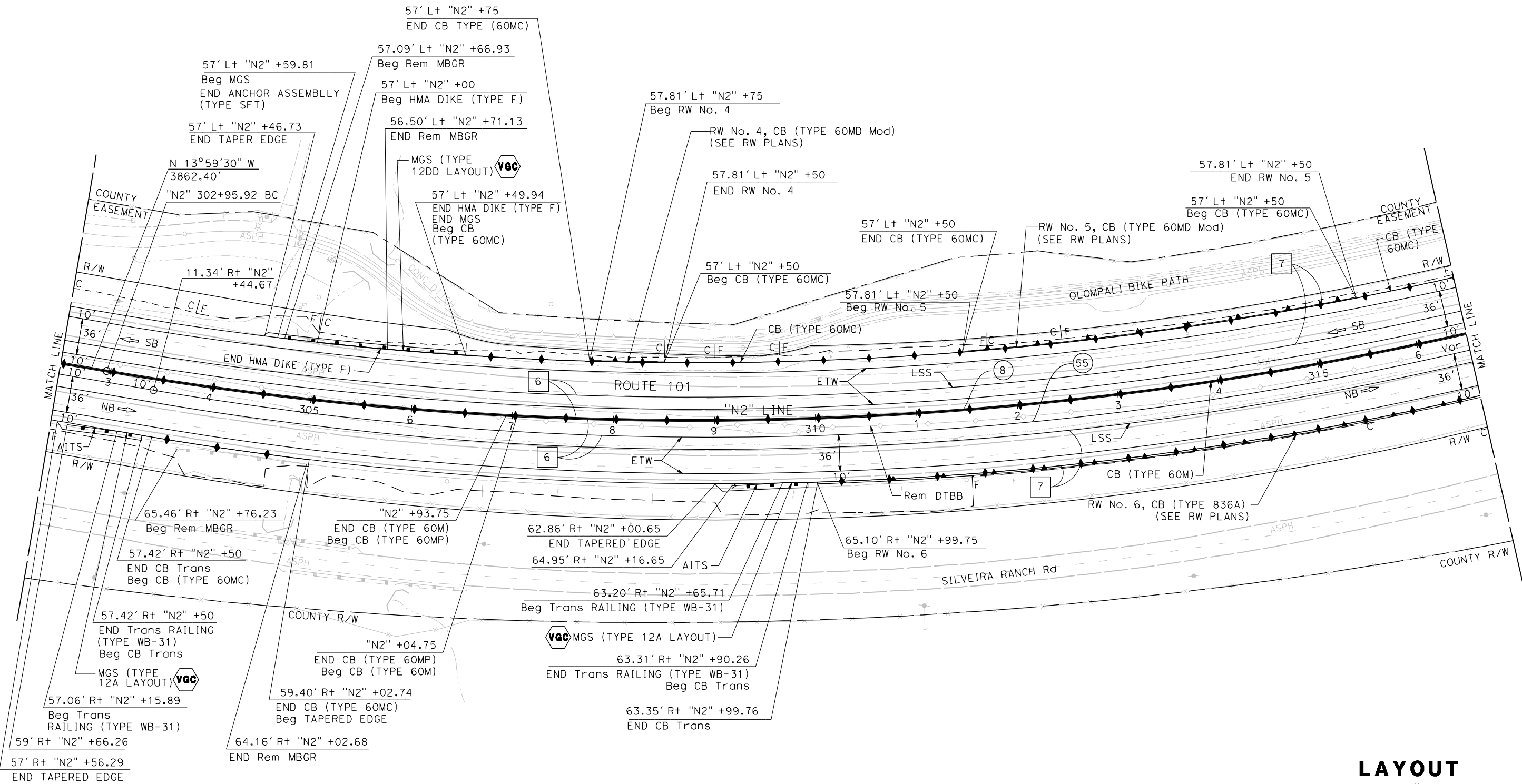
DATE 6-15-20

PLANS APPROVAL DATE

BKF ENGINEERS  
4670 WILLOW ROAD, SUITE 250  
PLEASANTON, CA 94588


TRANSPORTATION AUTHORITY OF MARIN  
900 5TH AVENUE, SUITE 100  
SAN RAFAEL, CA 94901

M A R I N C O U N T Y




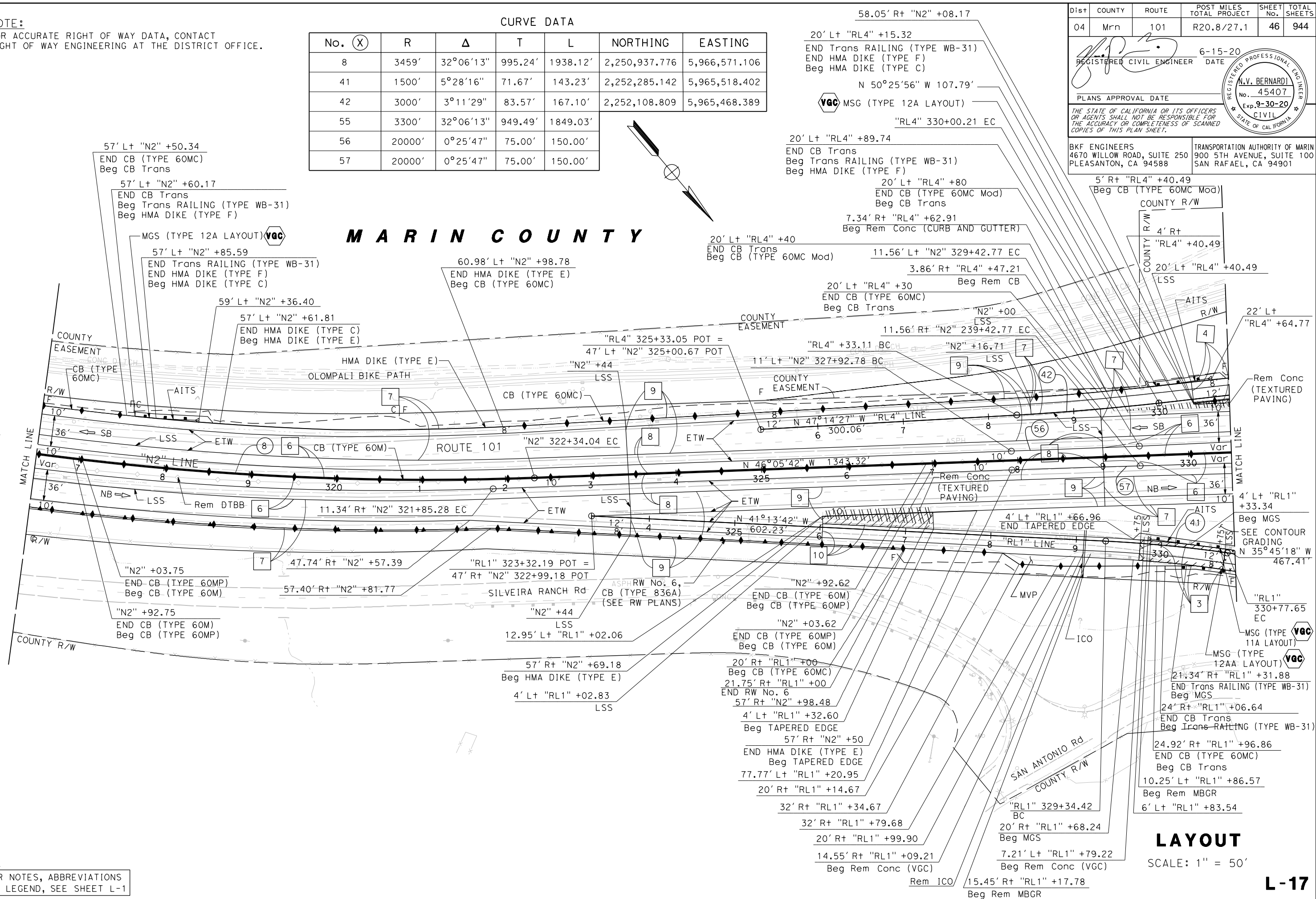
FOR NOTES, ABBREVIATIONS  
AND LEGEND, SEE SHEET L-1

LAYOUT  
SCALE: 1" = 50'

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	CONSULTANT FUNCTIONAL SUPERVISOR							
	GORDON SWEET		CALCULATED- DESIGNED BY	INNA ASHUROV	REVISED BY	IA	CDB	IA
			CHECKED BY	DAT O. NGUYEN	DATE REVISED	8-1-19	11-18-19	6-15-20

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

No. (X)	R	$\Delta$	T	L	NORTHING	EASTING
8	3459'	32°06'13"	995.24'	1938.12'	2,250,937.776	5,966,571.106
41	1500'	5°28'16"	71.67'	143.23'	2,252,285.142	5,965,518.402
42	3000'	3°11'29"	83.57'	167.10'	2,252,108.809	5,965,468.389
55	3300'	32°06'13"	949.49'	1849.03'		
56	20000'	0°25'47"	75.00'	150.00'		
57	20000'	0°25'47"	75.00'	150.00'		



# LAYOUT

SCALE: 1" = 50'



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

M A R I N C O U N T Y

CURVE DATA

No. (X)	R	Δ	T	L	NORTHING	EASTING
9	7000'	4°04'00"	248.52'	496.83'	2,252,805.142	5,964,831.785
43	550'	21°34'12"	104.77'	207.06'	2,252,289.652	5,965,236.111
44	850'	9°58'03"	74.12'	147.87'	2,252,977.081	5,964,795.345
45	3000'	3°11'29"	83.57'	167.10'	2,253,291.073	5,964,463.046
46	450'	21°31'40"	85.55'	169.08'	2,252,583.092	5,964,730.307
47	850'	11°41'06"	86.98'	173.35'	2,253,004.511	5,964,515.870
58	20000'	0°25'47"	75.00'	150.00'		
59	20000'	0°25'47"	75.00'	150.00'		
60	7000'	4°04'00"	248.52'	496.84'		
61	7000'	4°04'00"	248.52'	496.84'		

Dist

COUNTY

ROUTE

POST MILES TOTAL PROJECT

SHEET No.

TOTAL SHEETS

04

Mrn

101

R20.8/27.1

47

944

6-15-20

DATE

REGISTERED CIVIL ENGINEER

N.V. BERNARDI

No. 45407

Exp. 9-30-20

CIVIL

STATE OF CALIFORNIA

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

BKF ENGINEERS

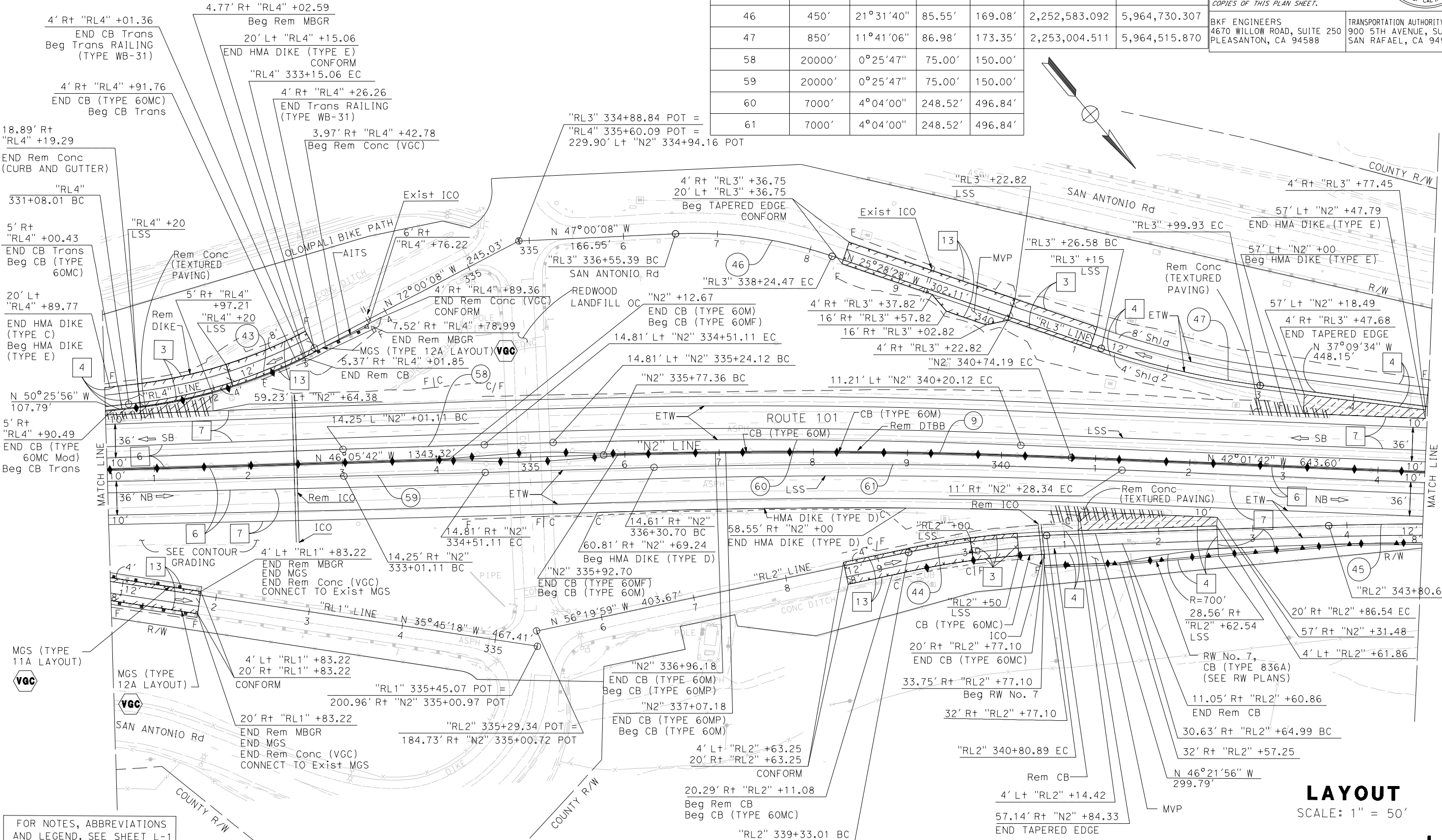
4670 WILLOW ROAD, SUITE 250

PLEASANTON, CA 94588

TRANSPORTATION AUTHORITY OF MARIN

900 5TH AVENUE, SUITE 100

SAN RAFAEL, CA 94901

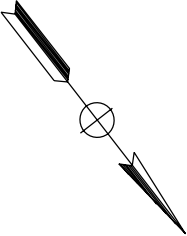


FOR NOTES, ABBREVIATIONS  
AND LEGEND, SEE SHEET L-1

LAYOUT  
SCALE: 1" = 50'

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

CURVE DATA						
No.	(X)	R	Δ	T	L	NORTHING
10		5006'	8°03'20"	352.50'	703.83'	2,253,717.672
45		3000'	3°11'29"	83.57'	167.10'	2,253,291.073
48		5053'	1°07'36"	49.68'	99.36'	2,253,533.644



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Mrn	101	R20.8/27.1	48	944

6-15-20

REGISTERED CIVIL ENGINEER

DATE

REGISTERED PROFESSIONAL ENGINEER

N.V. BERNARDI

No. 45407

Exp. 9-30-20

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STATE OF CALIFORNIA

PLANS APPROVAL DATE

BKF ENGINEERS

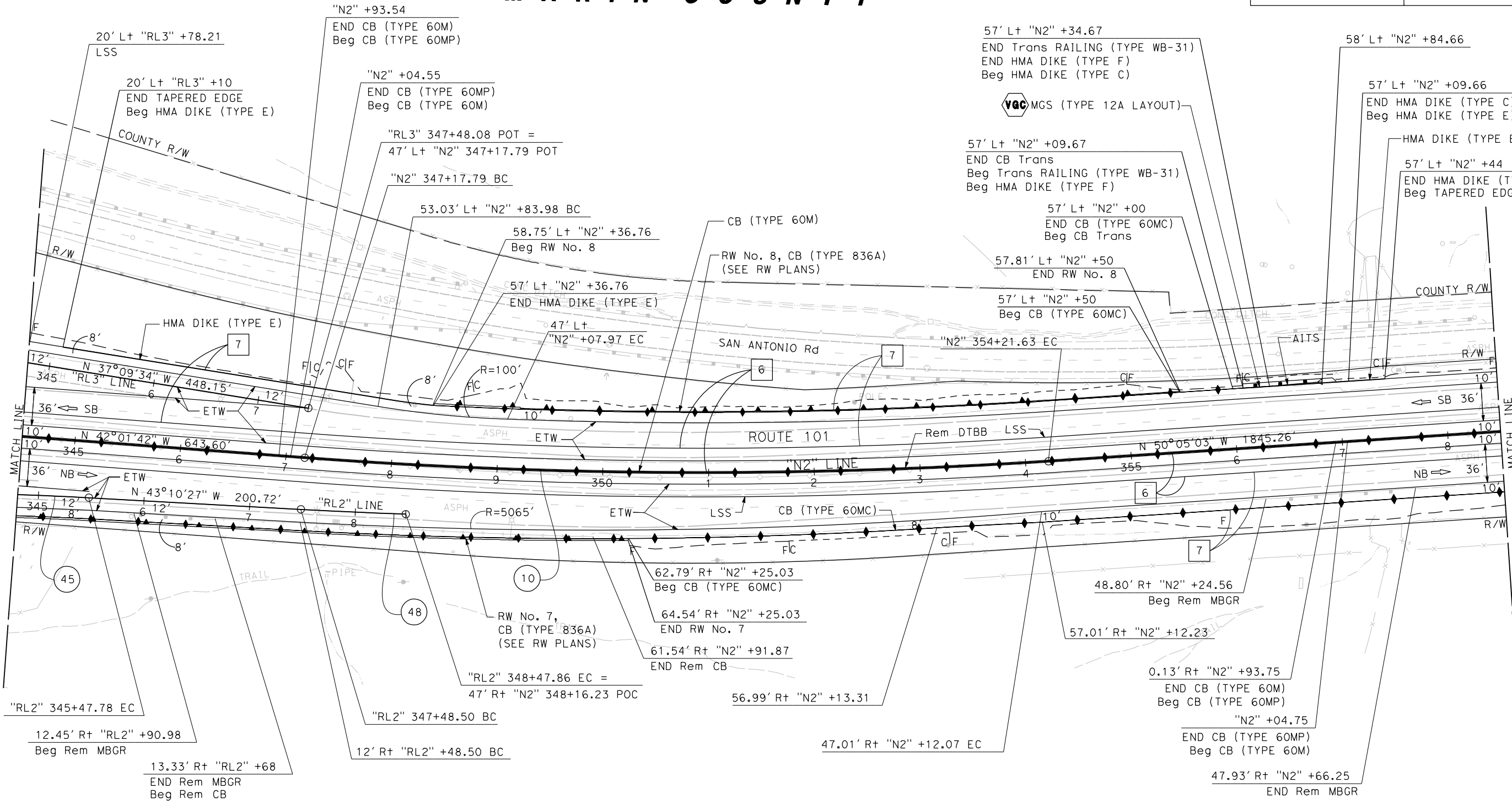
4670 WILLOW ROAD, SUITE 250

PLEASANTON, CA 94588

TRANSPORTATION AUTHORITY OF MARIN

900 5TH AVENUE, SUITE 100

SAN RAFAEL, CA 94901

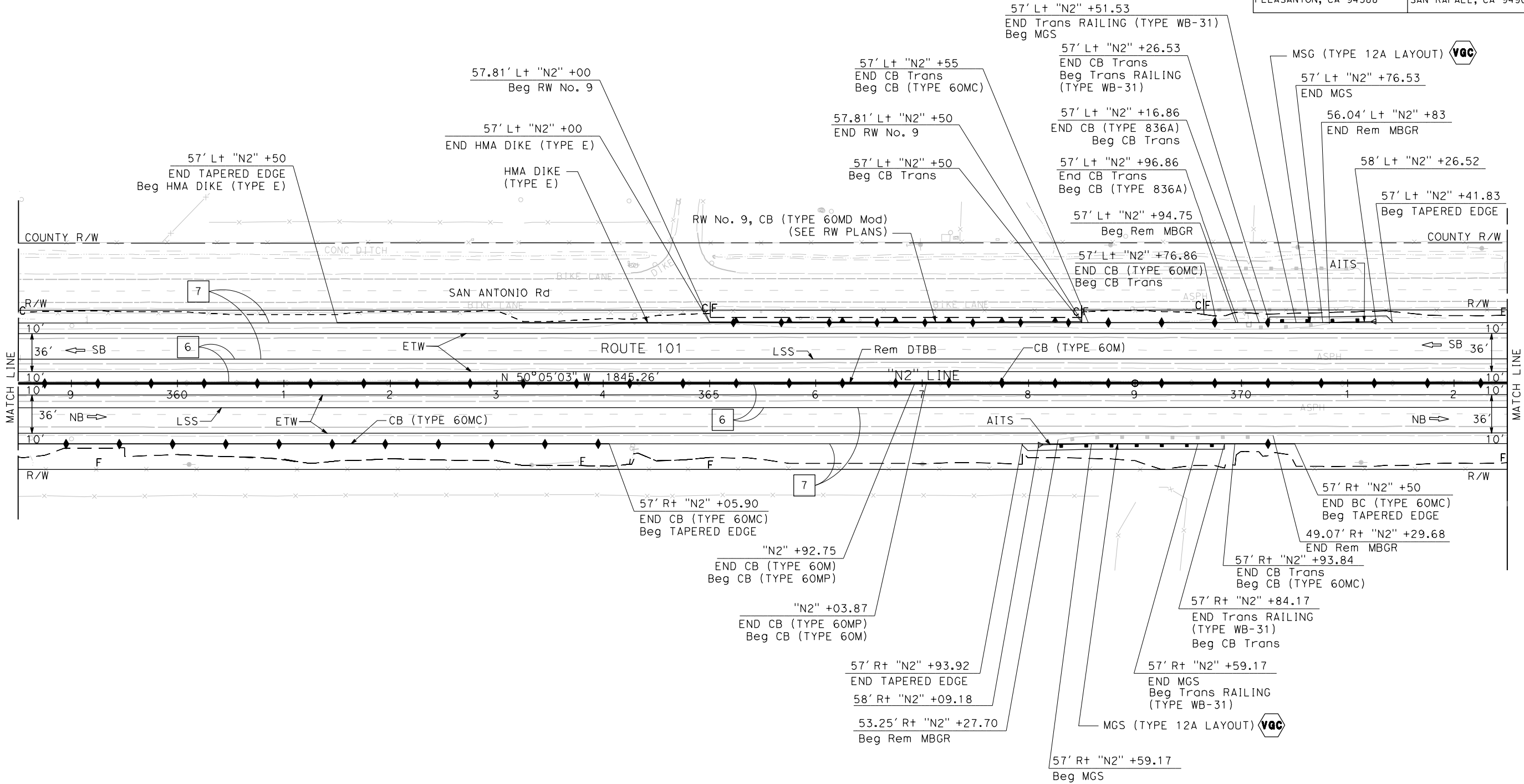


FOR NOTES, ABBREVIATIONS  
AND LEGEND, SEE SHEET L-1

LAYOUT  
SCALE: 1" = 50'

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

M A R I N C O U N T Y



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Mrn	101	R20.8/27.1	49	944

REGISTERED CIVIL ENGINEER

6-15-20

DATE

PLANS APPROVAL DATE

6-15-20

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REGISTERED PROFESSIONAL ENGINEER

N.V. BERNARDI

No. 45407

Exp. 9-30-20

CIVIL

STATE OF CALIFORNIA

BKF ENGINEERS

4670 WILLOW ROAD, SUITE 250

PLEASANTON, CA 94588

TRANSPORTATION AUTHORITY OF MARIN

900 5TH AVENUE, SUITE 100


SAN RAFAEL, CA 94901

LAYOUT  
SCALE: 1" = 50'

**X**

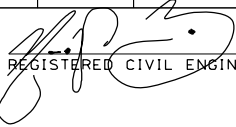
FOR NOTES, ABBREVIATIONS  
AND LEGEND, SEE SHEET L-1

DATE PLOTTED => 6/17/2020	LAST REVISION
TIME PLOTTED => 10:30:00 AM	6-15-20

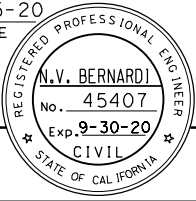
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  	CONSULTANT FUNCTIONAL SUPERVISOR		CALCULATED- DESIGNED BY	INNA ASHUROV	REVISED BY	1A	CDB	1A
	GORDON SWEET							
			CHECKED BY		6-15-20			

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

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Mrn	101	R20.8/27.1	51	944



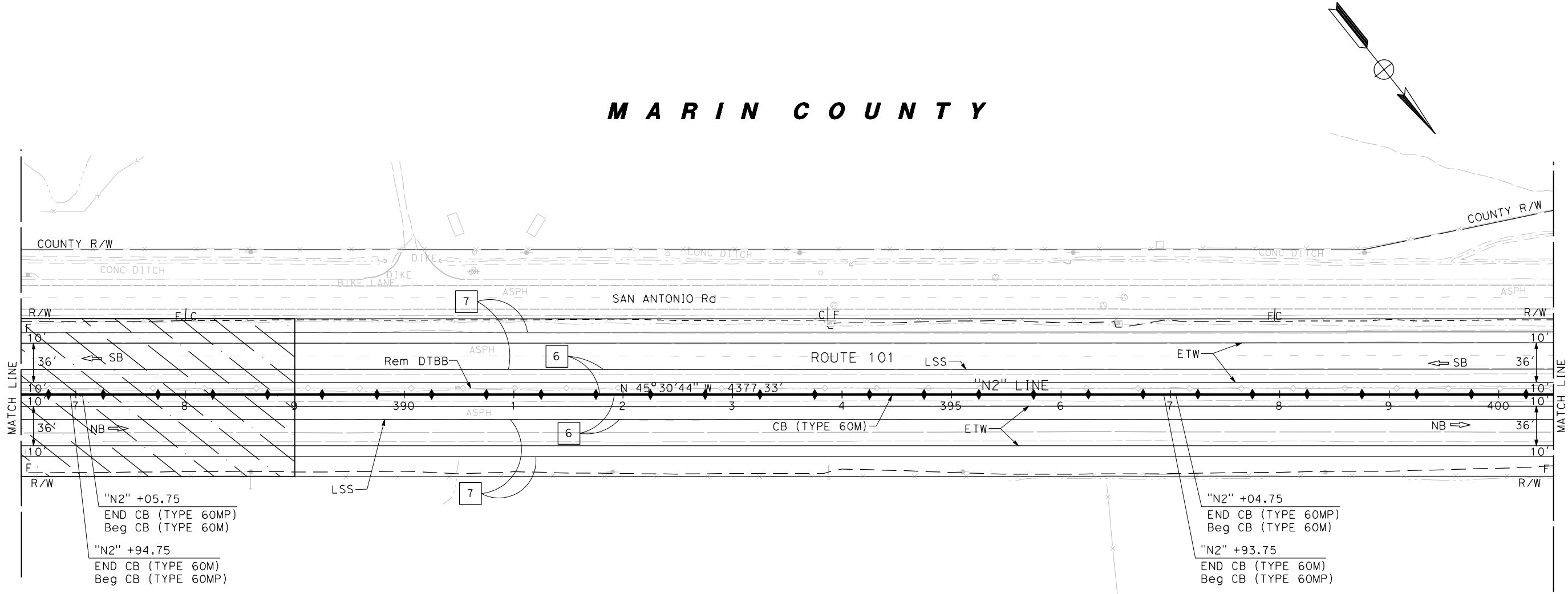
6-15-20  
REGISTERED CIVIL ENGINEER DATE



PLANS APPROVAL DATE

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OR AGENTS SHALL NOT BE RESPONSIBLE FOR  
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COPIES OF THIS PLAN SHEET.

BKF ENGINEERS 4670 WILLOW ROAD, SUITE 250 PLEASANTON, CA 94588	TRANSPORTATION AUTHORITY OF MARIN 900 5TH AVENUE, SUITE 100 SAN RAFAEL, CA 94901
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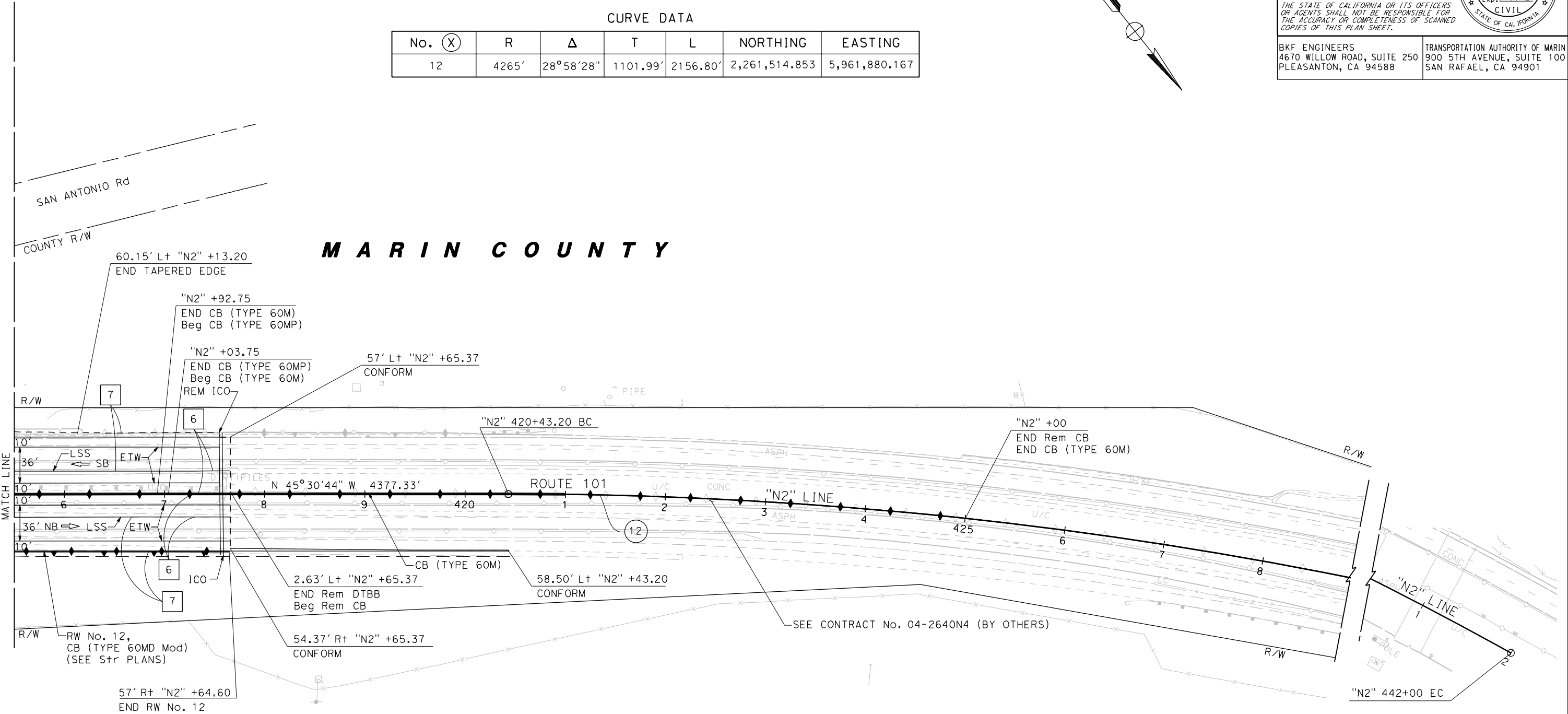
FOR NOTES, ABBREVIATIONS  
AND LEGEND, SEE SHEET L-1

**LAYOUT**  
SCALE: 1" = 50'

**X**

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

CURVE DATA						
No. (X)	R	Δ	T	L	NORTHING	EASTING
12	4265'	28°58'28"	1101.99'	2156.80'	2,261,514.853	5,961,880.167



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Mrn	101	R20.8/27.1	53	944

REGISTERED CIVIL ENGINEER  
DATE 6-15-20

PLANS APPROVAL DATE

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BKF ENGINEERS  
4670 WILLOW ROAD, SUITE 250  
PLEASANTON, CA 94588

TRANSPORTATION AUTHORITY OF MARIN  
900 5TH AVENUE, SUITE 100  
SAN RAFAEL, CA 94901

REGISTERED PROFESSIONAL ENGINEER  
N.V. BERNARDI  
No. 45407  
Exp. 9-30-20  
CIVIL  
STATE OF CALIFORNIA

FOR NOTES, ABBREVIATIONS  
AND LEGEND, SEE SHEET L-1

LAYOUT  
SCALE: 1" = 50'

ATTACHMENT D

RIGHT OF WAY DATA SHEET



To: BKF

Date 7/22/2020  
Dist 4 Co Mtn Rte 101 PM R20.8/27.1

Attention: GORDON SWEET  
Project Engineer

Project ID: 04-1900-0068 (26472)

From: MONA POON  
Right of Way Resource Manager

**D.S. #7259 UPDATED**


MSN B7

Subject: Current Estimated Right of Way Costs

We have completed an estimate of the right of way costs for the above referenced project based on maps we received from you on June 28, 2020, and the following assumptions and limiting conditions.

- ☐ 1. The mapping did not provide sufficient detail to determine the limits of the right of way required.
- ☐ 2. The transportation facilities have not been sufficiently designed so our estimator could determine the damages to any of the remainder parcels affected by the project.
- ☐ 3. Additional right of way requirements are anticipated, but are not defined due to the preliminary nature of the early design requirements.
- ☐ 4. This estimate does not include \$ \_\_\_\_\_ right of way costs previously incurred on the project, which may affect the total project right of way costs for programming purposes.
- ☐ 5. We have determined there are no right of way functional involvements in the proposed project at this time, as designed.

Right of Way Lead Time will require a minimum of 15 months after we begin receiving final right of way requirements (PYPSCAN node No. 224), necessary environmental clearance has been obtained, and freeway agreements have been approved. From the date of receipt of final right of way requirements (PYPSCAN node No. 265), we will require a minimum of 12 months prior to the date of certification of the project. Shorter lead times will require either more right of way resources or an increased number of condemnation suits to be filed. Either of these actions may reflect adversely on the District's other programs or our public image generally.

  
\_\_\_\_\_  
Right of Way Resource Manager

Attachments:

- ☒ Right of Way Data Sheet – Page One (always required)
- ☒ Right of Way Data Sheet – All Pages (required when interest in real property is being acquired)
- ☒ Utility Information Sheet
- ☒ Railroad Information Sheet



Project Description: MSN B7

Enter PMCS Screens By

4. Are there any major items of construction contract work?  
Yes ☐ No ☒ (If yes, explain)
5. Provide a general description of the right of way and excess lands required(zoning, use, major improvements critical or sensitive parcels, etc.).  
No right of way required. ☒
6. Is there an effect on assessed valuation? (If yes explain)  
Yes ☐ Not Significant ☐ No ☒
7. Are utility facilities or rights of way affected? Yes ☒ No ☐  
If yes, attach Utility Information Sheet Exhibit 01-01-05)
8. Are railroad facilities or rights of way affected? Yes ☒ No ☐  
If yes, attach Railroad Information Sheet Exhibit 01-01-06)
9. Were any previously unidentified sites with hazardous waste and/or material found?  
Yes ☐ None evident ☒  
(If yes, attach memorandum per Procedural Handbook Volume 1, Section 101.011)
10. Are RAP displacements required? Yes ☐ No ☒  
(If yes, provide the following information)
- No. of personal property relocations \_\_\_\_\_
- No. of single family \_\_\_\_\_ No. of business/non profit \_\_\_\_\_
- No. of multi-family \_\_\_\_\_ No. of farms \_\_\_\_\_
- Based on Draft / Final Relocation Impact Statement / Study dated \_\_\_\_\_, it is anticipated that sufficient replacement housing will / will not be available without Last Resort Housing.
11. Are material borrow and / or disposal sites required? Yes ☐ No ☒  
(If yes, explain)
12. Are there potential relinquishments / abandonments? Yes ☐ No ☒  
(If yes, explain)
13. Are there any existing and/or potential Airspace sites? Yes ☐ No ☒  
(If yes, explain)



14. Are there Environmental Mitigation costs? Yes ☒ No ☐  
(If yes, explain)  
Per Gordon Sweet, mitigation costs of \$6,995,000 is required for riparian/wetlands and the red-legged frog.
15. Indicate the anticipated Right of Way schedule and lead time requirements. (Discuss if District proposes less than PMCS lead time and / or if significant pressures for project advancement are anticipated.)

PYPSCAN lead time (from Regular R/W to project certification) 15 months.

16. Is it anticipated that all Right of Way work be performed by CALTRANS staff?  
Yes ☒ No ☐ (If no, discuss)

### Assumptions and Limiting Conditions

- This data sheet was completed without a hazardous waste/materials report.
- Information on this data sheet was based on maps provided by Gordon Sweet on 6/29/20

Evaluation Prepared By: Lynn White

Right of Way: Name  Date 7/10/2020

Railroad: Name  Date 07/13/2020

Utilities: Name  Date 7/10/2020

Recommended for Approval:

  
Right of Way Capital Cost Coordinator

I have personally reviewed this Right of Way Data Sheet and all supporting information. It is my opinion that the probable Highest and Best Use, estimated values, escalation rates, and assumptions are reasonable and proper subject to the limiting conditions set fourth, and find this Data Sheet complete and current.

  
Chief, R/W Project Management Services

7/14/2020  
Date

cc: Program Manager  
Project Manger

**UTILITY INFORMATION SHEET**

1. Utility owners located within project limits:  
PG&E, PG&E-Service
2. Facilities potentially impacted by project (if known, include Owners(s) & facility type(s)):  
PG&E 3/4 inch service facility will need to be lowered. The cost for this will be 50%/50%. We are currently awaiting PG&E liability claim letter for official estimate.
3. Anticipated Workload:

<u>      X      </u>	Utility Verification required	
<u>      X      </u>	Positive Identification	25k
<u>      X      </u>	Utility Relocation	400K
<u>          </u>	Other (Specify)	
4. Additional information concerning anticipated utility involvements (include limiting conditions and a narrative addressing likelihood that conflicts will occur);  
Per PE there are 32 ADA curb ramps that will be adjusted to current standards. It is still unknown how many utilities will be impacted  
                     Involves possible relocation of electric transmission facilities  
                          (If X'd, Data sheet should be forwarded to environmental)
5. PMCS input information

U4-1	<u>          </u>	Owner Expense Involvements
U4-2	<u>          </u>	State Expense Involvements (Conventional, No Fed Aid)
U4-3	<u>          </u>	State Expense Involvements (Freeway, No Fed Aid)
U4-4	<u>          </u>	State Expense Involvements (Conventional or Freeway, Fed Aid)
U5-7	<u>      2      </u>	Verifications - without involvements
U5-8	<u>          </u>	Verifications - 50% involvements
U5-9	<u>          </u>	Verifications resulting in involvements

NOTE: The sum of U-4's must equal the sum of 1/2 of the U5-8's and all of the U5-9's.

**ESTIMATED STATE SHARE OF COSTS \$**           225,000.00          

Prepared by:           Dan Asprogerakas          

  
\_\_\_\_\_  
Right of Way Utility Coordinator

          7/21/2020            
\_\_\_\_\_  
Date

### RAILROAD INFORMATION SHEET

1. Describe railroad facilities or right of way affected.  
SMART
2. When branch lines or spurs are affected, would acquisition and/or payment of damages to businesses and/or industries served by the railroad facility be more cost effective than construction of a facility to perpetuate the rail services? (See Procedural Handbook Volume 4a, Chapter 440 for further detail.)  
Yes ☐ No ☐ (If yes, explain)
3. Discuss types of agreements and rights required from the railroads. Are grade crossings requiring service contracts, or grade separations requiring construction and maintenance agreements involved?  
Right of Way Agreement and a C & M Agreement
4. Remarks (Nonoperating railroad right of way involved?)

5. PMCS Input Information

RR Involvements		Estimated Cost	
None			
C&M Agreement	<u>X</u>	Phase 4*	\$ <u>270,000.00</u>
R/W Agreement	<u>X</u>	Phase 9	\$ <u>20,000.00</u>
	Design <u>X</u>		
	Const. <u>X</u>		
Lic/RE/Clauses	<u>X</u>		

\*not part of page 1 total

**TOTAL ESTIMATED COST**      \$ 290,000.00

Prepared by: Alden Chalk

  
Right of Way Railroad Coordinator

07/13/2020  
Date

ATTACHMENT E

ENVIRONMENTAL REVALIDATION





## NEPA/CEQA RE-VALIDATION FORM

<b>DIST-CO-RTE:</b> <u>04-MRN/SON-101</u>
<b>PM/PM:</b> <u>MRN 18.6/27.7 and SON 0.0/7.2</u>
<b>EA or Fed-Aid Project No.:</b> <u>26400 &amp; 26472</u>
<b>Other Project No. (specify):</b> <u>0419000068</u>
<b>Project Title:</b> <u>Marin Sonoma Narrows HOV Widening Project</u>
<b>Environmental Approval Type:</b> <u>EIR/EIS</u>
<b>Date Approved:</b> <u>10/30/09</u>
<b>Reason for Consultation (23 CFR 771.129), check one:</b> <input checked="" type="checkbox"/> Project proceeding to next major federal approval <input checked="" type="checkbox"/> Change in scope, setting, effects, mitigation measures, requirements <input type="checkbox"/> 3-year timeline (EIS only) <input type="checkbox"/> <b>N/A</b> (Re-Validation for CEQA only)
<b>Description of Changed Conditions:</b> <i>Briefly describe the changed conditions or new information on page 2. Append continuation sheet(s) as necessary. Include a revised Environmental Commitments Record (ECR) when applicable.</i>

### NEPA CONCLUSION - VALIDITY

Based on an examination of the changed conditions and supporting information: (Check ONE of the three statements below, regarding the validity of the original document/determination (23 CFR 771.129). If document is no longer valid, indicate whether additional public review is warranted and whether the type of environmental document will be elevated.)

- ☐ The original environmental document or CE remains valid. No further documentation will be prepared.
- ☒ The original environmental document or CE is in need of updating; further documentation has been prepared and ☐ is included on the continuation sheet(s) or ☒ is attached. With this additional documentation, the original ED or CE remains valid.  
Additional public review is warranted (23 CFR 771.111(h)(3)) ☐ Yes ☐ No
- ☐ The original document or CE is no longer valid.  
Additional public review is warranted (23 CFR 771.111(h)(3)) ☐ Yes ☐ No  
Supplemental environmental document is needed. ☐ Yes ☐ No  
New environmental document is needed. ☐ Yes ☐ No (If "Yes," specify type: )

### CONCURRENCE WITH NEPA CONCLUSION

I concur with the NEPA conclusion above.

<u>Golanda Rivas</u>	<u>10/29/20</u>
Signature: Environmental Branch Chief	Date
<u>Wajahat Nyaz</u>	<u>10/30/2020</u>
Signature: Project Manager/DLAE	Date

## NEPA/CEQA RE-VALIDATION FORM

### **CEQA CONCLUSION** (Only mandated for projects on the State Highway System.)

Based on an examination of the changed conditions and supporting information, the following conclusion has been reached regarding appropriate CEQA documentation: (*Check ONE of the five statements below, indicating whether any additional documentation will be prepared, and if so, what kind. If additional documentation is prepared, attach a copy of this signed form and any continuation sheets.*)

- ☐ Original document remains valid. No further documentation is necessary.
- ☒ Only minor technical changes or additions to the previous document are necessary.  
☒ An addendum has been or will be prepared and is ☐ included on the continuation sheets or ☐ will be attached. It need not be circulated for public review. (CEQA Guidelines, §15164)
- ☐ Changes are substantial, but only minor additions or changes are necessary to make the previous document adequate. A Supplemental environmental document will be prepared, and it will be circulated for public review. (CEQA Guidelines, §15163)
- ☐ Changes are substantial, and major revisions to the current document are necessary. A Subsequent environmental document will be prepared, and it will be circulated for public review. (CEQA Guidelines, §15162)  
(Specify type of subsequent document, e.g., Subsequent FEIR):
- ☐ The CE is no longer valid. New CE is needed. ☐ Yes ☐ No

### **CONCURRENCE WITH CEQA CONCLUSION**

I concur with the CEQA conclusion above.

<u>Golanda Rivas</u>	<u>10/29/20</u>
Signature: Environmental Branch Chief	Date
<u>Wajahat Nyaz</u>	<u>10/30/2020</u>
Signature: Project Manager/DLAE	Date

## NEPA/CEQA RE-VALIDATION FORM

### **CONTINUATION SHEET(S)**

Address only changes or new information since approval of the original document and only those areas that are applicable. Use the list below as section headings as they apply to the project change(s). Use as much or as little space as needed to adequately address the project change(s) and the associated impacts, minimization, avoidance and/or mitigation measures, if any.

#### **Changes in project design, e.g., scope change; a new alternative; change in project alignment.**

The following CEQA/NEPA Re-Validation applies to the Marin-Sonoma Narrows Project Contract B7.

#### **Background**

Caltrans approved the Fixed HOV Alternative for the Marin Sonoma Narrows HOV Widening Project (MSN Project) based on the 2009 FEIR/S and Project Report. This alternative included roadway widening of US 101 in Marin and Sonoma counties (MRN-101-PM 18.6/27.7 and SON-101-PM 0.0/7.2) for HOV lanes within the existing median in Segment A in the southbound (SB) and northbound (NB) directions. In Segment B, the HOV lanes would continue and upgrade the US 101 facility from an expressway with at-grade intersections and access control breaks for driveways, to a fully access controlled freeway with frontage roads to access existing driveways. Programming for the project was split into phases based on available funding. In Marin County, **Phase 1** was constructed, and included segments A and portions of Segment B, which were subdivided into the following contracts:

1. MSN A1: NB and SB 101 HOV Widening Project (PM 18.6/R22.3)
2. MSN A2: SB 101 HOV Widening Extension Project (PM R20.5/R20.9)
3. MSN A3: NB 101 HOV Widening Extension Project (PM R22.2/24.3)
4. MSN B1: Redwood Landfill I/C and Frontage/Bike Path Project (PM R23.2/27.1)

Other contracts in the MSN corridor are B3, B2/B4, which have completed construction, and C2, which is currently in construction.

#### **Project Description**

The contract, formerly referred to as MSN A4/B1 Phase 2, has been renamed to MSN B7, and reflects the MSN “gap closure” located in the City of Novato and unincorporated portions of Marin County from approximately PM 20.9 to 27.0. As originally described and cleared in the 2009 MSN EIR/EIS and subsequent environmental revalidations that supported Phase 1, the Project purpose, need, and description has not deviated; improvements will include the same alignment and inside and outside widening of US 101 to add (extend) HOV lanes.

Although included in the original design concept in the 2009 EIR/EIS, the following “specific” design details/refinements/adjustments are summarized as follows:

- Mainline horizontal curve correction and vertical profile adjustments from approximately:
  - Sta 211+50 Near Buck Center (Novato City Limits) to Sta 417+64.60 – Near San Antonio Creek,
- Two (2) Caltrans Special Design Retaining Walls (see discussion below)
- Ten (10) Caltrans Standard Plan Retaining Walls (see discussion below)
- Drainage cross culverts (placement, replacement, upsizing, or rehabilitation),
- Post Construction Stormwater Quality Treatment BMPs along NB/SB US 101. (see discussion below).

## NEPA/CEQA RE-VALIDATION FORM

### Structures – Bridges

The existing Franklin Avenue Overhead consists of two parallel structures, one carrying northbound and the other carrying southbound Highway 101 traffic. Widening is proposed along the southbound Franklin Avenue Overhead which currently carries three traffic lanes, a 5-foot shoulder (inside) and varying shoulder (outside) with a minimum width of 8-foot (ramp) and 10-foot (mainline). A proposed 17.25-foot  $\pm$  widening will accommodate an additional 12-foot HOV lane, a 10-foot shoulder (inside), along with a barrier replacement along the inside edge of the structure. The widening will occur on the east side of the existing left bridge between the northbound and southbound structures.

The existing Olive Avenue Undercrossing left and right bridges are located on Highway 101 carrying northbound and southbound traffic respectively over Olive Avenue. Widening is proposed along the southbound Olive Ave UC which currently carries three traffic lanes, a 5-foot inside shoulder and 10-foot outside shoulder. A proposed 17.25-foot  $\pm$  widening will accommodate an additional 12-foot HOV lane, a 10-foot shoulder (inside), along with a barrier replacement along the inside edge of the structure. The widening will occur on the east side of the existing left bridge between the northbound and southbound structures.

- Franklin Ave OH (Widen) - The proposed southbound interior widening consists of a single frame, cast-in-place prestressed concrete box girder to match the existing bridge superstructure type. Span lengths will match that of the existing bridge. Structure depth will match the existing superstructure depth of 4.5-foot which meets AASHTO and Caltrans' minimum recommended depth-to-span ratio of 0.040 for continuous spans. The 17.25-foot wide new structure will be supported on a single 4-foot x 6-foot oblong column at each bent. One-way column flare geometry will match that of the existing columns but the column flares will be detailed as isolated architectural flares per current seismic design practice. The new and existing superstructures will be connected by a deck closure pour. New bent caps will not be connected to the existing bent caps since the existing bent cap reinforcing is not detailed to resist transverse seismic moments if the bents were connected. In order to provide lateral stability of the new single column bents, a "fixed" column base is necessary. Large 9-foot diameter Type II CIDH pile shafts are proposed to provide fixity to the new columns based on discussion with the geotechnical consultants. The new abutments will consist of concrete diaphragm abutments supported on 6-foot diameter CIDH piles with permanent steel casing. The railroad crash wall originally installed during MSN A1 will be replaced/reconstructed as required by SMART and to facilitate construction of the Franklin Ave OH (Widen).
- Olive Ave UC (Widen) - This project proposes to widen only the left bridge along the inside edge. The left bridge will be widened by 17.25-feet $\pm$  to accommodate the addition a 12-footHOV lane and a 10-foot inside shoulder. The widening will be connected to the existing bridge via a deck closure pour. The widening will match the existing left bridge and will consist of a single-span cast-in-place post-tensioned concrete box girder structure 5-foot deep, supported on diaphragm abutments. The depth to span ratio for the widenings will be 0.040.

Type 836 concrete barrier will be placed along the inside edge of widening. The existing inside overhang and barrier on existing left bridge will be removed and the existing deck reinforcement retained for incorporation into the closure pour. No modifications will be made to the existing Type 25 barrier on the outer left edge of the existing bridge.

## NEPA/CEQA RE-VALIDATION FORM

Both abutments for the widening will be in line with the existing bridge abutments and be connected to the existing abutment diaphragms and footings. An abutment diaphragm closure pour will be placed after the superstructure is post-tensioned. The abutment footings will be supported on Class 140 Alt X piles.

- Atherton Avenue OC – Mainline work is limited to barrier replacement and will not affect the bridge structure or median column.
- North Novato Overhead (OH) – It should be noted that a design exception (5-foot inside shoulder) has been conditionally approved at this location along SB 101, and the inside widening/barrier replacement of the N. Novato OH originally cleared in the 2009 EIR/EIS has been eliminated from the scope of this contract.
- Redwood Landfill OC – Mainline work is limited to barrier replacement and will not affect the bridge structure or median column.

### Structures - Retaining Walls

Twelve retaining wall are proposed within the project limits. Twelve retaining walls are along US-101 along the northbound and southbound directions, from Buck Center to San Antonio Creek. Ten have been identified as standard Caltrans Type 1 walls and two are special design (soil nail) walls. The average retaining height of these walls is approximately eight feet with a three-foot minimum and eleven foot maximum. Excavation for standard retaining wall footing is required. All retaining walls are located within Caltrans Right of Way.

- RW 1 – Height: 3-5 feet, Length: 200 feet (Sta 250+00 to Sta 252+00), Lt
- RW 2 – Height: 3-10 feet, Length: 518.93 feet (Sta 256+00 to Sta 261+25), Lt
- RW 3 – Height: 3-4 feet, Length: 403.62 feet (Sta 253+00 to Sta 257+00), Rt
- RW 4 – Height: 3-4 feet, Length: 73.75 feet (Sta 307+75 to Sta 308+50), Lt
- RW 5 – Height: 3-5 feet, Length: 393.32 feet (Sta 311+50 to Sta 315+50), Lt
- RW 6 – Height: 3-10 feet, Length: 1,688.58 feet (Sta 309+99.75 to Sta “RL1” 327+00), Rt
- RW 7 – Height: 3-11 feet, Length: 981.31 feet (Sta “RL2” 340+77.10 to Sta “N2” 350+25.03), Rt
- RW 8 – Height: 3-4 feet, Length: 706.48 feet (Sta 348+36.76 to Sta 355+50), Lt
- RW 9 – Height: 3-7 feet, Length: 350.02 feet (Sta 365+00 to Sta 368+50), Lt
- RW 10 – Height: 3-5 feet, Length: 200 feet (Sta 381+50 to Sta 383+50), Rt
- RW 11 – Height: 3-11 feet, Length: 400 feet (Sta 403+00 to Sta 407+00), Lt
- RW 12 – Height: 3-11 feet, Length: 1,314.60 feet (Sta 404+50 to Sta 417+64.60), Rt

## NEPA/CEQA RE-VALIDATION FORM

### Post Construction Stormwater Quality Treatment BMPs

After the approved Caltrans' 2009 FEIR/S, the San Francisco Bay Regional Water Quality Control Board (RWRQCB) issued a National Pollutant Discharge Elimination System (NPDES) permit that regulates stormwater discharges from Caltrans facilities in 2013. The permit requires Caltrans to maintain and implement an effective Stormwater Management Plan (SWMP) that identifies and describes the Best Management Practices (BMPs) used to control the discharge of pollutants to waters of the United States. In accordance to the Caltrans SWMP, Water Quality Treatment BMPs are now added to the Project. As part of the permanent post-construction stormwater BMPs, linear bioretention areas (LBAs) and infiltration strips are proposed along the project limits and within Caltrans's Right of Way as follows. The specific locations of the LBAs are listed on the attached Summary of Treatment BMPs.

LBAs vary in width between 1-9 feet with a subsurface drainage system (8-inch and 6-inch perforated plastic pipe (PPP)) and depth of approximately 2.9 feet, including 18-inches of imported biofiltration soil (IBS), 12-inches of permeable material, and filter fabric allowing stormwater flow along the swale to percolate through the IBS and collect/convey (via PPP) to an outfall/connection point.

Infiltration strips are constructed with 4:1 slope (or flatter) along the edges of the shoulder, consisting of approximately 6-inches of IBS with a width of 15-feet. Stormwater is treated by passing over the strips and percolating through the IBS.

Construction work for MSN B7 will be conducted mostly within Caltrans Right of Way, except for the Franklin Avenue OH (Widening). This will require the execution of a Railroad Construction and Management Agreement between Caltrans and SMART. No additional right of way will be required for MSN B7 and existing utilities will remain in place.

### NEPA/CEQA Re-Validation Discussion

The following discussion summarizes technical analysis prepared for the purposes of this Re-Validation, which includes a review of potential changes in impact to the Natural Environment (Biology), Water Quality, Visual/Aesthetics, and Cultural Resources. Discussion of these topics are limited to areas where changes are relevant. Topics not found to warrant further discussion based upon the scope of the proposed changes are not mentioned.

### Changes in environmental setting, e.g., new development affecting traffic or air quality.

#### *Cultural Resources*

There are no additional cultural resources located within the current Area of Potential Effects (APE) for the project. However, due to the design refinements, additional Extended Phase I (XPI) identification studies and Phase III Data Recovery excavations were completed in 2019 and as permitted in the 2008 Memorandum of Agreement. This work was undertaken to evaluate and mitigate for project impacts due to the design refinements. As a result of these investigations, eleven archaeological sites previously identified as being within or adjacent to the APE had record updates resulting in changes to the recorded site boundaries to several of the recorded sites within the B7 segment project area. Specifically, three archaeological sites have been combined under the same identification number and the boundary of the archaeological sites now extends further into Caltrans right-of-way, and on both sides of the current highway. An additional two sites were combined under one identifier resulting in a larger site boundary.

## NEPA/CEQA RE-VALIDATION FORM

An updated Archaeological APE was prepared and signed on September 30, 2020, to capture the changes to archaeological site boundaries within the project. The Architectural History APE remains unchanged.

### **Changes in environmental circumstances, e.g., a new law or regulation; change in the status of a listed species.**

#### *Biology*

Species lists from the US Fish and Wildlife (USFWS) and National Marine Fisheries services (NMFS) have been updated as of September 17, 2020. Based upon the species lists and project description, there are no new Threatened or Endangered species or species of concern since the October 2009 Record of Decision that would be affected by the project. Also, there are no project changes or changes in designated critical habitat that would require reopening consultation with USFWS or NMFS. Therefore, Caltrans' original Biological Opinions for California Red-legged Frog; Salt Marsh Harvest Mouse; Central California Coast steelhead and critical habitat; and North American Green Sturgeon and critical habitat are still in effect for the project.

#### *Water Quality*

Since the approval of the MSN FEIR/S (2009) , the San Francisco Bay Regional Water Quality Control Board (RWRQCB) has issued a National Pollutant Discharge Elimination System (NPDES) permit that regulates stormwater discharges from Caltrans facilities in 2013. The permit requires Caltrans to maintain and implement an effective Stormwater Management Plan (SWMP) that identifies and describes the Best Management Practices (BMPs) used to control the discharge of pollutants to waters of the United States. In accordance to the Caltrans SWMP, Water Quality Treatment BMPs are now added to the Project.

In addition, the NPDES permits necessitate compliance with region-specific trash-reduction requirements. Both the above requirements would be met as part of the Clean Water Act (CWA) Section 401 permit.

### **Changes to environmental impacts of the project, e.g., a new type of impact, or a change in the magnitude of an existing impact.**

#### *Cultural Resources*

Multiple Contract B7 project elements have had refinements in location and design. These refinements necessitated a re-evaluation and of the potential impacts to the previously identified archaeological sites within the project area. An XPI/PIII investigation was completed in 2019 in order to complete identification efforts and mitigate for impacts of the B7 refinements. Although the project refinements have changed the specifics of the impacts to the archaeological sites within the project area, the overall magnitude of the impacts has not change from the 2009 FEIR/S.

## NEPA/CEQA RE-VALIDATION FORM

### *Visual/Aesthetics*

For design refinements involving retaining walls, the locations, limits, and lengths are all within the original study area. There are no further aesthetic concerns as the wall/barrier profiles haven't substantially changed within the study area based on the Contract B7 PS&E.

The tree removal under Contract B7 is consistent with that which was anticipated in the MSN Project FEIR/S.

### **Changes to avoidance, minimization, and/or mitigation measures since the environmental document was approved.**

### *Biology*

Roadway widening and culvert extensions within the scope of Contract B7 would impact jurisdictional areas such as Waters of the US and riparian habitats. Therefore, Caltrans is seeking a CWA Section 404 Nationwide Permit and CDFW 1600 Streambed Alteration Agreement.

### *Water Quality*

To meet CWA Section 401 requirements, new and re-worked impervious areas and additional treated areas (ATA) measuring 44.16 acres will be treated through LBAs and Infiltration Strips. The Project will treat approximately 22.05 acres within Caltrans Right of Way. Balance of treatment will be addressed off-site (see Summary of MSN Contract B7 Mitigation Plan).

### *Cultural Resources*

The XPI/PIII testing and data recovery completed in 2019 resulted in the change in archaeological site boundaries of several sites. To account for the new boundaries, and the project's impact on them, Environmentally Sensitive Areas and Archaeological Monitoring Areas have been established. These mitigation measures were agreed to in the 2008 Memorandum of Agreement executed for this project and documented in the 2009 FEIR/S.

### *Visual/Aesthetics*

For visual/aesthetics, there are no substantial changes, as the same mitigation measures that apply to the project in general also apply to trees being removed as part of the MSN B7 Contract. Mitigation for tree removal is described in the attached Summary of MSN Contract B7 Mitigation Plan.

### **Changes to environmental commitments since the environmental document was approved, e.g., the addition of new conditions in permits or approvals. When this applies, append a revised Environmental Commitments Record (ECR) as one of the Continuation Sheets.**

A variety of mitigation solutions are proposed for natural environment, water quality and visual/aesthetic impacts and summarized under the attached Summary of MSN Contract B7 Mitigation Plan.



## NEPA/CEQA RE-VALIDATION FORM

### *Cultural Resources*

Mitigation measures were agreed to in the 2008 Memorandum of Agreement executed for this project and documented in the 2009 FEIR/FEIS. The project PS&E has included bid items and notes to reserve all excavated soil from within the right of way, between Station 288+50 to Station 292+25, which has been deemed sensitive for archaeological materials, and rebury/use the soil within the Segment B7 project limits. This measure is achieved through standard bid-items and Non-Standard Special Provisions (NSSPs). The work will be monitored by an archaeologist as per the standard Archaeological Monitoring Area procedures.

### **Summary**

Based upon the above analysis, project impacts under MSN Contract B7 are found to be minor and consistent with the MSN Project FEIR/S. Consequently, no further analyses are required, and the 2009 MSN Project FEIR/S remains valid. This Re-Val is not complete without the following attachments:

1. Linear Bioretention Areas (LBAs)
2. Summary of MSN Contract B7 Mitigation Plan
3. USFWS Species List 9/22/20
4. NMFS Species List 9/17/20

Linear Bioretention Areas/Bio-Strips

District-County-Route: 04-Mrn-101  
EA: 0419000068

BMP Id No.	County	Route	Station Limits		Lt/Rt	Post Mile Limits		Surface Area of BMP		Impervious Area to BMP	Impervious Area to BMP	BMP area to Impervious Area	Impervious Area Treated	Impervious Area Treated	BMP area to Treated Area	BAHM				
			Begin	End		Begin	End			sq-ft	acres	sq-ft	acres	Ratio	sq-ft	acres	Ratio	Modeled		
Existing BMPs			Existing Linear Bioretention Areas or Biofiltration Strips								(sq-ft)	acres			% - percent		% - percent			
EX1	Mrn	101	S	179+56	to	S	181+99	Lt	22.39	22.44	482	0.01	25,792	0.59	1.9%	25,792	0.59	1.9%	Yes	
EX2	Mrn	101	S	182+24	to	S	187+12	Lt	22.44	22.54	967	0.02	28,751	0.66	3.4%	28,751	0.66	3.4%	Yes	
EX3	Mrn	101	S	199+19	to	S	205+21	Lt	22.76	22.88	2,390	0.05	45,064	1.03	5.3%	45,064	1.03	5.3%		
EX4	Mrn	101	S	205+21	to	S	211+48	Lt	22.88	23.00	2,471	0.06	34,786	0.80	7.1%	34,786	0.80	7.1%		
EX5	Mrn	101	S	211+48	to	S	215+17	Lt	23.00	23.07	1,453	0.03	20,886	0.48	7.0%	20,886	0.48	7.0%		
EX6	Mrn	101	S	215+17	to	S	220+08	Lt	23.07	23.16	1,949	0.04	33,561	0.77	5.8%	33,561	0.77	5.8%		
EX7	Mrn	101	S	224+00	to	S	225+38	Lt	23.23	23.26	1,318	0.03	19,417	0.45	6.8%	19,417	0.45	6.8%		
EX8	Mrn	101	S	225+38	to	S	235+78	Lt	23.26	23.46	4,151	0.10	59,294	1.36	7.0%	59,294	1.36	7.0%		
EX9	Mrn	101	S	235+78	to	S	243+59	Lt	23.46	23.61	3,123	0.07	44,007	1.01	7.1%	44,007	1.01	7.1%		
EX10	Mrn	101	N2	262+71	to	N2	265+38	Lt	23.97	24.02	To Be Removed By MSN B7									
EX11	Mrn	101	N2	270+95	to	N2	265+38	Rt	24.12	24.02	To Be Removed By MSN B7									
EX12	Mrn	101	N2	334+50	to	N2	332+05	Lt	25.33	25.28	986	0.02	14,593	0.34	6.8%	14,593	0.34	6.8%		
EX13	Mrn	101	N2	337+22	to	N2	342+29	Lt	25.38	25.47	To Be Removed By MSN B7									
EX14	Mrn	101	RL1	332+83	to	N2	321+59	Rt	25.30	25.08	To Be Removed By MSN B7									
EX15	Mrn	101	N2	329+00	to	N2	334+50	Rt	25.22	25.33	8,234	0.19	32,969	0.76	25.0%	32,969	0.76	25.0%		
EX16	Mrn	101	RL2	341+59	to	RL2	340+78	Rt	25.46	25.45	To Be Removed By MSN B7									
EX17	Mrn	101	RL3	338+37	to	RL3	340+35	Rt	25.40	25.44	To Be Removed By MSN B7									
EX18	Mrn	101	RL3	340+35	to	RL3	345+00	Lt	25.44	25.53	To Be Removed By MSN B7									
EX19	Mrn	101	N2	339+00	to	N2	340+52	Rt	25.41	25.44	565	0.01	11,346	0.26	5.0%	11,346	0.26	5.0%		
EX20	Mrn	101	N2	408+25	to	N2	411+21	Lt	26.72	26.78	1,483	0.03	39,724	0.91	3.7%	39,724	0.91	3.7%	Yes	
											9.42						9.42			
Proposed Southbound			Linear Bioretention Areas																	
1	Mrn	101	S	187+19	to	S	192+07	Lt	22.54	22.63	978	0.02	29,062	0.67	3.4%	29,062	0.67	3.4%	Yes	
2	Mrn	101	S	192+20	to	S	197+10	Lt	22.63	22.72	980	0.02	28,423	0.65	3.4%	28,423	0.65	3.4%	Yes	
3	Mrn	101	N2	243+82	to	N2	245+51	Lt	23.61	23.64	675	0.02	10,782	0.25	6.3%	10,782	0.25	6.3%		
4	Mrn	101	N2	262+33	to	N2	263+05	Lt	23.96	23.97	140	0.00	10,870	0.25	1.3%	10,870	0.25	1.3%	Yes	
5	Mrn	101	N2	273+00	to	N2	274+90	Lt	24.16	24.20	572	0.01	43,219	0.99	1.3%	43,219	0.99	1.3%	Yes	
6	Mrn	101	N2	293+40	to	N2	275+15	Lt	24.55	24.20	7,279	0.17	105,696	2.43	6.9%	105,696	2.43	6.9%		
7	Mrn	101	N2	296+25	to	N2	293+75	Lt	24.60	24.56	698	0.02	16,450	0.38	4.2%	16,450	0.38	4.2%		
8	Mrn	101	N2	296+25	to	N2	304+85	Lt	24.60	24.77	2,571	0.06	49,496	1.14	5.2%	49,496	1.14	5.2%		
9	Mrn	101	N2	334+50	to	N2	332+05	Lt	25.33	25.28	982	0.02	14,593	0.34	6.7%	14,593	0.34	6.7%		
10	Mrn	101	N2	363+00	to	N2	358+50	Lt	25.87	25.78	712	0.02	32,494	0.75	2.2%	32,494	0.75	2.2%	Yes	
11	Mrn	101	N2	379+38	to	N2	378+62	Lt	26.18	26.16	152	0.00	4,584	0.11	3.3%	4,584	0.11	3.3%	Yes	
12	Mrn	101	N2	384+17	to	N2	379+46	Lt	26.27	26.18	941	0.02	30,356	0.70	3.1%	30,356	0.70	3.1%	Yes	
13	Mrn	101	N2	393+85	to	N2	384+75	Lt	26.45	26.28	1,815	0.04	52,171	1.20	3.5%	52,171	1.20	3.5%	Yes	
14	Mrn	101	N2	396+50	to	N2	393+91	Lt	26.50	26.45	513	0.01	15,000	0.34	3.4%	15,000	0.34	3.4%	Yes	
15	Mrn	101	N2	400+65	to	N2	396+56	Lt	26.58	26.50	815	0.02	23,740	0.54	3.4%	23,740	0.54	3.4%	Yes	
16	Mrn	101	N2	401+50	to	N2	400+71	Lt	26.60	26.58	78	0.00	15,370	0.35	0.5%	8,712	0.20	0.9%	Yes	
17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
18	Mrn	101	N2	411+29	to	N2	414+50	Lt	26.78	26.84	1,604	0.04	18,887	0.43	8.5%	18,887	0.43	8.5%		
											11.51						11.35			
Proposed Southbound			Biofiltration Biostrips																	
19	Mrn	101	R3	338+37	to	N2	340+17	Rt	25.40	25.43	2,774	0.06	5,543	0.13	50.0%	5,543	0.13	50.0%		
											0.13						0.13			
Proposed Northbound			Linear Bioretention Areas																	
20	Mrn	101	N2	266+00	to	N2	267+32	Rt	24.03	24.05	409	0.01	8,176	0.19	5.0%	8,176	0.19	5.0%		
21	Mrn	101	N2	267+51	to	N2	271+24	Rt	24.06	24.13	2,244	0.05	22,491	0.52	10.0%	22,491	0.52	10.0%		
22	Mrn	101	N2	271+43	to	N2	275+08	Rt	24.13	24.20	1,092	0.03	22,427	0.51	4.9%	22,427	0.51	4.9%		
23	Mrn	101	N2	282+96	to	N2	275+32	Rt	24.35	24.21	3,056	0.07	43,949	1.01	7.0%	43,949	1.01	7.0%		
24	Mrn	101	N2	290+94	to	N2	283+03	Rt	24.50	24.35	2,827	0.06	59,221	1.36	4.8%	59,221	1.36	4.8%		
25	Mrn	101	N2	298+00	to	N2	293+73	Rt	24.64	24.55	1,279	0.03	26,375	0.61	4.8%	26,375	0.61	4.8%		
26	Mrn	101	N2	310+03	to	N2	311+35	Rt	24.86	24.89	540	0.01	84,100	1.93	0.6%	37,026	0.85	1.5%	Yes	
27	Mrn	101	N2	315+53	to	N2	316+84	Rt	24.97	24.99	267	0.01	50,543	1.16	0.5%	21,780	0.50	1.2%	Yes	
28	Mrn	101	N2	316+90	to	N2	318+47	Rt	24.99	25.02	160	0.00	64,944	1.49	0.2%	17,424	0.40	0.9%	Yes	
29	Mrn	101	N2	364+27	to	N3	359+49	Rt	25.89	25.80	1,303	0.03	18,897	0.43	6.9%	18,897	0.43	6.9%		
30	Mrn	102	N3	367+93	to	N4	364+32	Rt	25.96	25.89	1,082	0.02	35,454	0.81	3.1%	35,454	0.81	3.1%	Yes	
31	Mrn	101	N2	374+00	to	N2	370+50	Rt	26.08	26.01	1,046	0.02	20,004	0.46	5.2%	20,004	0.46	5.2%		
32	Mrn	101	N2	376+24	to	N2	374+07	Rt	26.12	26.08	641	0.01	53,179	1.22	1.2%	52,272	1.20	1.2%	Yes	
33	Mrn	101	N2	393+00	to	N2	384+00	Rt	26.44	26.26	2,700	0.06	56,291	1.29	4.8%	56,291	1.29	4.8%		
34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
35	Mrn	101	N2	404+00	to	N2	400+73	Rt	26.64	26.58	754	0.02	18,623	0.43	4.0%	18,623	0.43	4.0%		
											13.42						10.57			
Net New Impervious (NNI)								17.13 ac												
Replaced Impervious Surface								27.78 ac		Total Impervious Area To BMPs		25.06	Total Impervious Area Treated by BMPs		22.05	acres				
ATA (1)								-0.75 ac				acres			50%	of goal				
ATA (2)								+ 0.00 ac												
Treatment Required								= 44.16 ac												

**Summary of MSN B7 Mitigation Plan**

**(attachment to MSN B7 Re-Val)**

Impact Type	Agency Jurisdiction	Impact Amount	Requirements	Mitigation Projects	Agreement	Timing
channel	ACOE, CDFW, and RWQCB	1194 linear feet	3582 linear feet (3:1)	Novato Creek Floodplain & Channel Restoration	Deed restriction or conservation easement	Late 2021
riparian channel	CDFW and RWQCB	207 linear feet	621 linear feet (3:1)	Adobe Creek Riparian Enhancement Project	Conservancy through Petaluma State Historic Park	Before Construction
riparian habitat	CDFW and RWQCB	0.47 acre	1.41 acres (3:1)	Adobe Creek Riparian Enhancement Project	Conservancy through Petaluma State Historic Park	Before Construction
trees	CDFW and RWQCB	7 native trees	21 native trees (7 x 3)	Lawndale Oak Woodland Restoration Project	Conservancy through Trione-Annadel State Park	Before Construction
		51 oaks	306 oaks (51 x 6)			
		2 non-native trees	4 non-native trees (2 x 2)			
wetlands	ACOE and RWQCB	0.2580 acre	0.2580 acre (1:1)	Burdell Ranch Conservation Bank	Wetland bank credit purchase	Before Construction



# United States Department of the Interior

FISH AND WILDLIFE SERVICE  
Sacramento Fish And Wildlife Office  
Federal Building  
2800 Cottage Way, Room W-2605  
Sacramento, CA 95825-1846  
Phone: (916) 414-6600 Fax: (916) 414-6713



In Reply Refer To:

September 30, 2020

Consultation Code: 08ESMF00-2017-SLI-2731

Event Code: 08ESMF00-2020-E-09323

Project Name: Marin Sonoma Narrows High Occupancy Vehicle Widening Project (MSN Project)

Subject: Updated list of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, under the jurisdiction of the U.S. Fish and Wildlife Service (Service) that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the Service under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

Please follow the link below to see if your proposed project has the potential to affect other species or their habitats under the jurisdiction of the National Marine Fisheries Service:

[http://www.nwr.noaa.gov/protected\\_species/species\\_list/species\\_lists.html](http://www.nwr.noaa.gov/protected_species/species_list/species_lists.html)

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan ([http://www.fws.gov/windenergy/eagle\\_guidance.html](http://www.fws.gov/windenergy/eagle_guidance.html)). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

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Attachment(s):

- Official Species List

# Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Sacramento Fish And Wildlife Office**

Federal Building

2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

(916) 414-6600

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## Project Summary

Consultation Code: 08ESMF00-2017-SLI-2731

Event Code: 08ESMF00-2020-E-09323

Project Name: Marin Sonoma Narrows High Occupancy Vehicle Widening Project (MSN Project)

Project Type: TRANSPORTATION

Project Description: The MSN Project proposes to add HOV facilities from the junction of U.S. 101/State Route 37 in the City of Novato, Marin County, to just north of the Corona Road Overcrossing in the City of Petaluma, Sonoma County, a distance of approximately 16 miles. The project was approved in 2009 and some construction has been completed or in progress.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/38.171581780752575N122.58727332667888W>



Counties: Marin, CA | Sonoma, CA

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## Endangered Species Act Species

There is a total of 24 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

## Mammals

NAME	STATUS
Salt Marsh Harvest Mouse <i>Reithrodontomys raviventris</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/613">https://ecos.fws.gov/ecp/species/613</a>	Endangered

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## Birds

NAME	STATUS
California Clapper Rail <i>Rallus longirostris obsoletus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/4240">https://ecos.fws.gov/ecp/species/4240</a>	Endangered
California Least Tern <i>Sterna antillarum browni</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/8104">https://ecos.fws.gov/ecp/species/8104</a>	Endangered
Northern Spotted Owl <i>Strix occidentalis caurina</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/1123">https://ecos.fws.gov/ecp/species/1123</a>	Threatened
Western Snowy Plover <i>Charadrius nivosus nivosus</i> Population: Pacific Coast population DPS-U.S.A. (CA, OR, WA), Mexico (within 50 miles of Pacific coast) There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/8035">https://ecos.fws.gov/ecp/species/8035</a>	Threatened
Yellow-billed Cuckoo <i>Coccyzus americanus</i> Population: Western U.S. DPS There is <b>proposed</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/3911">https://ecos.fws.gov/ecp/species/3911</a>	Threatened

## Reptiles

NAME	STATUS
Green Sea Turtle <i>Chelonia mydas</i> Population: East Pacific DPS No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/6199">https://ecos.fws.gov/ecp/species/6199</a>	Threatened

## Amphibians

NAME	STATUS
California Red-legged Frog <i>Rana draytonii</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/2891">https://ecos.fws.gov/ecp/species/2891</a> Species survey guidelines: <a href="https://ecos.fws.gov/ipac/guideline/survey/population/205/office/11420.pdf">https://ecos.fws.gov/ipac/guideline/survey/population/205/office/11420.pdf</a>	Threatened
California Tiger Salamander <i>Ambystoma californiense</i> Population: U.S.A. (CA - Sonoma County) There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/2076">https://ecos.fws.gov/ecp/species/2076</a>	Endangered

## Fishes

NAME	STATUS
<b>Delta Smelt</b> <i>Hypomesus transpacificus</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/321">https://ecos.fws.gov/ecp/species/321</a>	Threatened
<b>Tidewater Goby</b> <i>Eucyclogobius newberryi</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/57">https://ecos.fws.gov/ecp/species/57</a>	Endangered

## Insects

NAME	STATUS
<b>Myrtle's Silverspot Butterfly</b> <i>Speyeria zerene myrtleae</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/6929">https://ecos.fws.gov/ecp/species/6929</a>	Endangered
<b>San Bruno Elfin Butterfly</b> <i>Callophrys mossii bayensis</i> There is <b>proposed</b> critical habitat for this species. The location of the critical habitat is not available. Species profile: <a href="https://ecos.fws.gov/ecp/species/3394">https://ecos.fws.gov/ecp/species/3394</a>	Endangered

## Crustaceans

NAME	STATUS
<b>California Freshwater Shrimp</b> <i>Syncaris pacifica</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/7903">https://ecos.fws.gov/ecp/species/7903</a>	Endangered

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## Flowering Plants

NAME	STATUS
Burke's Goldfields <i>Lasthenia burkei</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/4338">https://ecos.fws.gov/ecp/species/4338</a>	Endangered
Contra Costa Goldfields <i>Lasthenia conjugens</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/7058">https://ecos.fws.gov/ecp/species/7058</a>	Endangered
Marin Dwarf-flax <i>Hesperolinon congestum</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/5363">https://ecos.fws.gov/ecp/species/5363</a>	Threatened
Sebastopol Meadowfoam <i>Limnanthes vinculans</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/404">https://ecos.fws.gov/ecp/species/404</a>	Endangered
Showy Indian Clover <i>Trifolium amoenum</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/6459">https://ecos.fws.gov/ecp/species/6459</a>	Endangered
Soft Bird's-beak <i>Cordylanthus mollis</i> ssp. <i>mollis</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/8541">https://ecos.fws.gov/ecp/species/8541</a>	Endangered
Sonoma Alopecurus <i>Alopecurus aequalis</i> var. <i>sonomensis</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/557">https://ecos.fws.gov/ecp/species/557</a>	Endangered
Sonoma Spineflower <i>Chorizanthe valida</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/7698">https://ecos.fws.gov/ecp/species/7698</a>	Endangered
Sonoma Sunshine <i>Blennosperma bakeri</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/1260">https://ecos.fws.gov/ecp/species/1260</a>	Endangered
Yellow Larkspur <i>Delphinium luteum</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/3578">https://ecos.fws.gov/ecp/species/3578</a>	Endangered

## Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

**From:** [Carson, Rebecca@DOT](mailto:Carson.Rebecca@DOT)  
**To:** [Rivas, Yolanda@DOT](mailto:Rivas.Yolanda@DOT)  
**Subject:** Fw: Caltrans Marin-Sonoma Narrows (MSN) HOV Widening Project  
**Date:** Thursday, October 29, 2020 3:31:53 PM

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Cheers,  
Rebecca Carson, MA  
Branch Chief/Senior Biologist  
Construction Compliance and Mitigation - West Counties  
Caltrans D4  
111 Grand Avenue, MS 8E  
Oakland, CA 94612  
Mobile: 510-715-9112

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**From:** Carson, Rebecca@DOT <Rebecca.Carson@dot.ca.gov>  
**Sent:** Wednesday, September 30, 2020 7:03 PM  
**To:** nmfswcrca.specieslist@noaa.gov <nmfswcrca.specieslist@noaa.gov>  
**Subject:** Caltrans Marin-Sonoma Narrows (MSN) HOV Widening Project

Hello,

I am requesting an official species list for the Marin-Sonoma Narrows (MSN) HOV Widening Project. Thank you!

Quad Name **Novato**  
Quad Number **38122-A5**

**ESA Anadromous Fish**

SONCC Coho ESU (T) -  
CCC Coho ESU (E) - **X**  
CC Chinook Salmon ESU (T) -  
CVSR Chinook Salmon ESU (T) -  
SRWR Chinook Salmon ESU (E) -  
NC Steelhead DPS (T) -  
CCC Steelhead DPS (T) - **X**  
SCCC Steelhead DPS (T) -  
SC Steelhead DPS (E) -  
CCV Steelhead DPS (T) -

Eulachon (T) -

sDPS Green Sturgeon (T) - **X**

### **ESA Anadromous Fish Critical Habitat**

SONCC Coho Critical Habitat -

CCC Coho Critical Habitat - **X**

CC Chinook Salmon Critical Habitat -

CVSR Chinook Salmon Critical Habitat -

SRWR Chinook Salmon Critical Habitat -

NC Steelhead Critical Habitat -

CCC Steelhead Critical Habitat - **X**

SCCC Steelhead Critical Habitat -

SC Steelhead Critical Habitat -

CCV Steelhead Critical Habitat -

Eulachon Critical Habitat -

sDPS Green Sturgeon Critical Habitat - **X**

### **ESA Marine Invertebrates**

Range Black Abalone (E) -

Range White Abalone (E) -

### **ESA Marine Invertebrates Critical Habitat**

Black Abalone Critical Habitat -

### **ESA Sea Turtles**

East Pacific Green Sea Turtle (T) -

Olive Ridley Sea Turtle (T/E) -

Leatherback Sea Turtle (E) -

North Pacific Loggerhead Sea Turtle (E) -

### **ESA Whales**

Blue Whale (E) -

Fin Whale (E) -

Humpback Whale (E) -

Southern Resident Killer Whale (E) -

North Pacific Right Whale (E) -  
Sei Whale (E) -  
Sperm Whale (E) -

### **ESA Pinnipeds**

Guadalupe Fur Seal (T) -  
Steller Sea Lion Critical Habitat -

### **Essential Fish Habitat**

Coho EFH - **X**  
Chinook Salmon EFH - **X**  
Groundfish EFH - **X**  
Coastal Pelagics EFH - **X**  
Highly Migratory Species EFH -

### **MMPA Species (See list at left)**

### **ESA and MMPA Cetaceans/Pinnipeds**

**See list at left and consult the NMFS Long Beach office  
562-980-4000**

MMPA Cetaceans -  
MMPA Pinnipeds -

Quad Name **Petaluma River**  
Quad Number **38122-B5**

### **ESA Anadromous Fish**

SONCC Coho ESU (T) -  
CCC Coho ESU (E) -  
CC Chinook Salmon ESU (T) -  
CVSR Chinook Salmon ESU (T) -  
SRWR Chinook Salmon ESU (E) -  
NC Steelhead DPS (T) -  
CCC Steelhead DPS (T) - **X**  
SCCC Steelhead DPS (T) -  
SC Steelhead DPS (E) -

CCV Steelhead DPS (T) -

Eulachon (T) -

sDPS Green Sturgeon (T) - **X**

### **ESA Anadromous Fish Critical Habitat**

SONCC Coho Critical Habitat -

CCC Coho Critical Habitat -

CC Chinook Salmon Critical Habitat -

CVSR Chinook Salmon Critical Habitat -

SRWR Chinook Salmon Critical Habitat -

NC Steelhead Critical Habitat -

CCC Steelhead Critical Habitat - **X**

SCCC Steelhead Critical Habitat -

SC Steelhead Critical Habitat -

CCV Steelhead Critical Habitat -

Eulachon Critical Habitat -

sDPS Green Sturgeon Critical Habitat - **X**

### **ESA Marine Invertebrates**

Range Black Abalone (E) -

Range White Abalone (E) -

### **ESA Marine Invertebrates Critical Habitat**

Black Abalone Critical Habitat -

### **ESA Sea Turtles**

East Pacific Green Sea Turtle (T) -

Olive Ridley Sea Turtle (T/E) -

Leatherback Sea Turtle (E) -

North Pacific Loggerhead Sea Turtle (E) -

### **ESA Whales**

Blue Whale (E) -

Fin Whale (E) -

Humpback Whale (E) -



Southern Resident Killer Whale (E) -  
North Pacific Right Whale (E) -  
Sei Whale (E) -  
Sperm Whale (E) -

### **ESA Pinnipeds**

Guadalupe Fur Seal (T) -  
Steller Sea Lion Critical Habitat -

### **Essential Fish Habitat**

Coho EFH - **X**  
Chinook Salmon EFH - **X**  
Groundfish EFH - **X**  
Coastal Pelagics EFH - **X**  
Highly Migratory Species EFH -

### **MMPA Species (See list at left)**

#### **ESA and MMPA Cetaceans/Pinnipeds**

**See list at left and consult the NMFS Long Beach office  
562-980-4000**

MMPA Cetaceans -  
MMPA Pinnipeds -

Quad Name **Cotati**  
Quad Number **38122-C6**

### **ESA Anadromous Fish**

SONCC Coho ESU (T) -  
CCC Coho ESU (E) - **X**  
CC Chinook Salmon ESU (T) - **X**  
CVSR Chinook Salmon ESU (T) -  
SRWR Chinook Salmon ESU (E) -  
NC Steelhead DPS (T) -  
CCC Steelhead DPS (T) - **X**

SCCC Steelhead DPS (T) -  
SC Steelhead DPS (E) -  
CCV Steelhead DPS (T) -  
Eulachon (T) -  
sDPS Green Sturgeon (T) -

### **ESA Anadromous Fish Critical Habitat**

SONCC Coho Critical Habitat -  
CCC Coho Critical Habitat - **X**  
CC Chinook Salmon Critical Habitat -  
CVSR Chinook Salmon Critical Habitat -  
SRWR Chinook Salmon Critical Habitat -  
NC Steelhead Critical Habitat -  
CCC Steelhead Critical Habitat - **X**  
SCCC Steelhead Critical Habitat -  
SC Steelhead Critical Habitat -  
CCV Steelhead Critical Habitat -  
Eulachon Critical Habitat -  
sDPS Green Sturgeon Critical Habitat -

### **ESA Marine Invertebrates**

Range Black Abalone (E) -  
Range White Abalone (E) -

### **ESA Marine Invertebrates Critical Habitat**

Black Abalone Critical Habitat -

### **ESA Sea Turtles**

East Pacific Green Sea Turtle (T) -  
Olive Ridley Sea Turtle (T/E) -  
Leatherback Sea Turtle (E) -  
North Pacific Loggerhead Sea Turtle (E) -

### **ESA Whales**

Blue Whale (E) -  
Fin Whale (E) -

Humpback Whale (E) -  
Southern Resident Killer Whale (E) -  
North Pacific Right Whale (E) -  
Sei Whale (E) -  
Sperm Whale (E) -

**ESA Pinnipeds**

Guadalupe Fur Seal (T) -  
Steller Sea Lion Critical Habitat -

**Essential Fish Habitat**

Coho EFH - **X**  
Chinook Salmon EFH - **X**  
Groundfish EFH -  
Coastal Pelagics EFH -  
Highly Migratory Species EFH -

**MMPA Species (See list at left)**

**ESA and MMPA Cetaceans/Pinnipeds**

**See list at left and consult the NMFS Long Beach office  
562-980-4000**

MMPA Cetaceans -  
MMPA Pinnipeds -

Cheers,  
Rebecca Carson, MA  
Branch Chief/Senior Biologist  
Construction Compliance and Mitigation - West Counties  
Caltrans D4  
111 Grand Avenue, MS 8E  
Oakland, CA 94612  
Mobile: 510-715-9112

**ATTACHMENT F**

**EXECUTED COOPERATIVE AGREEMENT**

## **COOPERATIVE AGREEMENT**

This AGREEMENT, effective on December 20, 2019, is between the State of California, acting through its Department of Transportation, referred to as CALTRANS, and:

Transportation Authority of Marin, a public corporation/entity, referred to hereinafter as TAM.

An individual signatory agency in this AGREEMENT is referred to as a PARTY. Collectively, the signatory agencies in this AGREEMENT are referred to as PARTIES.

### **RECITALS**

1. PARTIES are authorized to enter into a cooperative agreement for improvements to the State Highway System per the California Streets and Highways Code, Sections 114 and 130.
2. For the purpose of this AGREEMENT, *constructing a SB HOV lane on U.S. 101 from 0.30 miles south of the Marin/Sonoma County line to just south of Franklin Ave. Overhead (6.5 miles), and a NB HOV lane from 1.7 miles north of Atherton Ave Overcrossing to 0.30 miles south of the Marin/Sonoma County line (3.6 miles)/Roadway and bridge widening and Redwood landfill interchange modification for HOV lanes and standard shoulders, and correct the horizontal and vertical roadway alignment*, will be referred to hereinafter as PROJECT. The PROJECT scope of work is defined in the project initiation and approval documents (e.g. Project Study Report, Permit Engineering Evaluation Report, or Project Report).
3. All obligations and responsibilities assigned in this AGREEMENT to complete the following PROJECT COMPONENTS will be referred to hereinafter as WORK:
  - PLANS, SPECIFICATIONS, AND ESTIMATE (PS&E)
  - RIGHT-OF-WAY

Each PROJECT COMPONENT is defined in the CALTRANS Workplan Standards Guide as a distinct group of activities/products in the project planning and development process.

4. The term AGREEMENT, as used herein, includes this document and any attachments, exhibits, and amendments.

This AGREEMENT is separate from and does not modify or replace any other cooperative agreement or memorandum of understanding between the PARTIES regarding the PROJECT.

PARTIES intend this AGREEMENT to be their final expression that supersedes any oral understanding or writings pertaining to the WORK. The requirements of this AGREEMENT will preside over any conflicting requirements in any documents that are made an express part of this AGREEMENT.

If any provisions in this AGREEMENT are found by a court of competent jurisdiction to be, or are in fact, illegal, inoperative, or unenforceable, those provisions do not render any or all other AGREEMENT provisions invalid, inoperative, or unenforceable, and those provisions will be automatically severed from this AGREEMENT.

Except as otherwise provided in the AGREEMENT, PARTIES will execute a written amendment if there are any changes to the terms of this AGREEMENT.

PARTIES agree to sign a CLOSURE STATEMENT to terminate this AGREEMENT. However, all indemnification, document retention, audit, claims, environmental commitment, legal challenge, maintenance and ownership articles will remain in effect until terminated or modified in writing by mutual agreement or expire by the statute of limitations.

5. The following work associated with this PROJECT has been completed or is in progress:
  - CALTRANS approved the Environmental Impact Report on July 21, 2009.
  - CALTRANS approved the Environmental Impact Statement on July 21, 2009.
  - CALTRANS completed the Project Initiation Document on January 29, 1999.
  - CALTRANS completed the Project Report on July 21, 2009.
6. In this AGREEMENT capitalized words represent defined terms, initialisms, or acronyms.
7. PARTIES hereby set forth the terms, covenants, and conditions of this AGREEMENT.

## **RESPONSIBILITIES**

### **Sponsorship**

8. A SPONSOR is responsible for establishing the scope of the PROJECT and securing the financial resources to fund the WORK. A SPONSOR is responsible for securing additional funds when necessary or implementing PROJECT changes to ensure the WORK can be completed with the funds obligated in this AGREEMENT.

PROJECT changes, as described in the CALTRANS Project Development Procedures Manual, will be approved by CALTRANS as the owner/operator of the State Highway System.

9. TAM is the SPONSOR for the WORK in this AGREEMENT.

### **Implementing Agency**

10. The IMPLEMENTING AGENCY is the PARTY responsible for managing the scope, cost, schedule, and quality of the work activities and products of a PROJECT COMPONENT.

- TAM is the Plans, Specifications, and Estimate (PS&E) IMPLEMENTING AGENCY.

PS&E includes the development of the plans, specifications, and estimate; obtaining any resource agency permits; and the advertisement/award of the construction contract.

- CALTRANS is the RIGHT OF WAY IMPLEMENTING AGENCY

RIGHT OF WAY includes coordination with utility owners for the protection, removal, or relocation of utilities; coordination with railroad companies for work within or near their facilities; the acquisition of right-of-way interests; and post-construction work such as right-of-way monumentation/recordation, relinquishments/vacations, and excess land transactions. The RIGHT OF WAY component budget identifies the cost of phase 9 capital costs including but not limited to costs of right-of-way acquisition, title and escrow fees, railroad costs and environmental permit fees (if required) (RIGHT-OF-WAY CAPITAL) and the cost of the staff work in support of the right of way activities (RIGHT-OF-WAY SUPPORT). RIGHT-OF-WAY CAPITAL cost for purchase of off-site mitigation will be paid by TAM and it is not shown in Funding Summary No.1, nor is it part of this AGREEMENT.

11. The IMPLEMENTING AGENCY for a PROJECT COMPONENT will provide a Quality Management Plan (QMP) for the WORK in that component. The QMP describes the IMPLEMENTING AGENCY's quality policy and how it will be used. The QMP will include a process for resolving disputes between the PARTIES at the team level.

12. Any PARTY responsible for completing WORK will make its personnel and consultants that prepare WORK available to help resolve WORK-related problems and changes for the entire duration of the PROJECT including PROJECT work that may occur under separate agreements.

### **Funding**

13. Funding sources, PARTIES committing funds, funding amounts, and invoicing/payment details are documented in the Funding Summary section of this AGREEMENT.

PARTIES will amend this AGREEMENT by updating and replacing the Funding Summary, in its entirety, each time the funding details change. Funding Summary replacements will be executed by a legally authorized representative of the respective PARTIES. The most current fully executed Funding Summary supersedes any previous Funding Summary created for this AGREEMENT.

14. PARTIES will not be reimbursed for costs beyond the funds obligated in this AGREEMENT.

If an IMPLEMENTING AGENCY anticipates that funding for the WORK will be insufficient to complete the WORK, the IMPLEMENTING AGENCY will promptly notify the SPONSOR.

15. Unless otherwise documented in the Funding Summary, overall liability for project costs within a PROJECT COMPONENT will be in proportion to the amount contributed to that PROJECT COMPONENT by each fund type.
16. Unless otherwise documented in the Funding Summary, any savings recognized within a PROJECT COMPONENT will be credited or reimbursed, when allowed by policy or law, in proportion to the amount contributed to that PROJECT COMPONENT by each fund type.
17. WORK costs, except those that are specifically excluded in this AGREEMENT, are to be paid from the funds obligated in the Funding Summary. Costs that are specifically excluded from the funds obligated in this AGREEMENT are to be paid by the PARTY incurring the costs from funds that are independent of this AGREEMENT.



### **CALTRANS' Quality Management**

18. CALTRANS, as the owner/operator of the State Highway System (SHS), will perform quality management work including Independent Quality Assurance (IQA) and owner/operator approvals for the portions of WORK within the existing and proposed SHS right-of-way.
19. CALTRANS' Independent Quality Assurance (IQA) efforts are to ensure that TAM's quality assurance results in WORK that is in accordance with the applicable standards and the PROJECT's quality management plan (QMP). An IQA does not include any efforts necessary to develop or deliver WORK or any validation by verifying or rechecking WORK.

When CALTRANS performs IQA it does so for its own benefit. No one can assign liability to CALTRANS due to its IQA.

20. CALTRANS, as the owner/operator of the State Highway System, will approve WORK products in accordance with CALTRANS policies and guidance and as indicated in this AGREEMENT.
21. TAM will provide WORK-related products and supporting documentation upon CALTRANS' request for the purpose of CALTRANS' quality management work.

### **CEQA/NEPA Lead Agency**

22. CALTRANS is the CEQA Lead Agency for the PROJECT.
23. CALTRANS is the NEPA Lead Agency for the PROJECT.

### **Environmental Permits, Approvals and Agreements**

24. PARTIES will comply with the commitments and conditions set forth in the environmental documentation, environmental permits, approvals, and applicable agreements as those commitments and conditions apply to each PARTIES responsibilities in this AGREEMENT.
25. Unless otherwise assigned in this AGREEMENT, the IMPLEMENTING AGENCY for a PROJECT COMPONENT is responsible for all PROJECT COMPONENT WORK associated with coordinating, obtaining, implementing, renewing, and amending the PROJECT permits, agreements, and approvals whether they are identified in the planned project scope of work or become necessary in the course of completing the PROJECT.

26. The PROJECT requires the following environmental permits/approvals:

ENVIRONMENTAL PERMITS/REQUIREMENTS
404, US Army Corps Of Engineers
401, Regional Water Quality Control Board
State Waste Discharge Requirements (Porter Cologne), Regional Water Quality Control Board
BO Section 7 U.S. Fish & Wildlife Service
1600, California Department of Fish and Wildlife

**Plans, Specifications, and Estimate (PS&E)**

27. As the PS&E IMPLEMENTING AGENCY, TAM is responsible for all PS&E WORK except those activities and responsibilities that are assigned to another PARTY and those activities that are excluded under this AGREEMENT.
28. CALTRANS will be responsible for completing the following PS&E activities:

CALTRANS Work Breakdown Structure Identifier (If Applicable)	AGREEMENT Funded Cost
100.15.10.xx IQA	No
205.10.xx PLACs (Review and Approval)	No
205.55 NEPA Assignment	No
235.05.xx Environmental Mitigation (Review and Approval)	No
235.45 NEPA Assignment	No
255.05 Circulated and Reviewed Draft District PS&E Package	No
255.15 Environmental Revalidation (Review and Approval)	No
255.20 Final PS&E Package	Yes
255.45 NEPA Assignment	No
260 Contract Bid Documents Ready to List	Yes
260.75 Environmental Certification at RTL	No
265 Awarded and Approved Construction Contract	Yes

29. TAM will prepare Utility Conflict Maps identifying the accommodation, protection, relocation, or removal of any existing utility facilities that conflict with construction of the PROJECT or that violate CALTRANS' encroachment policy.

TAM will provide CALTRANS a copy of Utility Conflict Maps for CALTRANS' concurrence prior to issuing the Notices to Owner and executing the utility agreement. All utility conflicts will be addressed in the PROJECT plans, specifications, and estimate.

30. TAM will determine the cost to positively identify and locate, accommodate, protect, relocate, or remove any utility facilities whether inside or outside the State Highway System right-of-way in accordance with federal and California laws and regulations, and CALTRANS' policies, procedures, standards, practices, and applicable agreements including but not limited to Freeway Master Contracts.
31. PARTIES acknowledge that the activities Final District PS&E Package (255.20) and Contract Bid Documents "Ready to List" (260) will be performed by CALTRANS. Because CALTRANS is anticipated to perform the advertisement, award, and administration (AAA) of the construction contract, the PS&E package must be reviewed and approved by CALTRANS District and HQ Office Engineers prior to advertisement.

TAM will ensure that any consultant involved in the preparation of the PS&E package will remain available to address all comments generated during the performance of the Final District PS&E Package and Contract Bid Documents "Ready to List" activities.

## **RIGHT-OF-WAY**

32. As the RIGHT-OF-WAY IMPLEMENTING AGENCY, CALTRANS is responsible for all RIGHT-OF-WAY WORK except those activities and responsibilities that are assigned to another PARTY and those activities that are excluded under this AGREEMENT, as shown as follows:

CALTRANS Work Breakdown Structure Identifier excluded under this AGREEMENT	Lead Agency
195 Right of Way Property Management and Excess Lands	N/A
200 Utility Relocation	N/A
220 Perform Right of Way Engineering	N/A
300 Final Right of Way Engineering	N/A

33. The California Transportation Commission is responsible for hearing and adopting Resolutions of Necessity.
34. CALTRANS will provide Right-of-Way Certification prior to PROJECT advertisement.
35. Physical and legal possession of the right-of-way must be completed prior to advertising the construction contract, unless PARTIES mutually agree to other arrangements in writing.
36. Right-of-way conveyances must be completed prior to WORK completion unless PARTIES mutually agree to other arrangements in writing.

### **Schedule**

37. PARTIES will manage the WORK schedule to ensure the timely use of obligated funds and to ensure compliance with any environmental permits, right-of-way agreements, construction contracts, and any other commitments. PARTIES will communicate schedule risks or changes as soon as they are identified and will actively manage and mitigate schedule risks.

## **Additional Provisions**

### **Standards**

38. PARTIES will perform all WORK in accordance with federal and California laws, regulations, and standards; Federal Highway Administration (FHWA) standards; and CALTRANS standards. CALTRANS standards include, but are not limited to, the guidance provided in the:
- CADD Users Manual
  - CALTRANS policies and directives
  - Plans Preparation Manual
  - Project Development Procedures Manual (PDPM)
  - Workplan Standards Guide
  - Standard Environmental Reference
  - Highway Design Manual
  - Right of Way Manual

### **Noncompliant Work**

39. CALTRANS retains the right to reject noncompliant WORK. TAM agrees to suspend WORK upon request by CALTRANS for the purpose of protecting public safety, preserving property rights, and ensuring that all WORK is in the best interest of the State Highway System.

### **Qualifications**

40. Each PARTY will ensure that personnel participating in WORK are appropriately qualified or licensed to perform the tasks assigned to them.

### **Consultant Selection**

41. TAM will invite CALTRANS to participate in the selection of any consultants that participate in the WORK.

### Encroachment Permits

42. CALTRANS will issue, upon proper application, the encroachment permits required for WORK within State Highway System (SHS) right-of-way. TAM, their contractors, consultants, agents and utility owners will not work within the SHS right-of-way without an encroachment permit issued in their name. CALTRANS will provide encroachment permits to TAM, their contractors, consultants, and agents at no cost. CALTRANS will provide encroachment permits to utility owners at no cost. If the encroachment permit and this AGREEMENT conflict, the requirements of this AGREEMENT will prevail.
43. The IMPLEMENTING AGENCY for a PROJECT COMPONENT will coordinate, prepare, obtain, implement, renew, and amend any encroachment permits needed to complete the WORK.

### Protected Resources

44. If any PARTY discovers unanticipated cultural, archaeological, paleontological, or other protected resources during WORK, all WORK in that area will stop and that PARTY will notify all PARTIES within 24 hours of discovery. WORK may only resume after a qualified professional has evaluated the nature and significance of the discovery and CALTRANS approves a plan for its removal or protection.

### Disclosures

45. PARTIES will hold all administrative drafts and administrative final reports, studies, materials, and documentation relied upon, produced, created, or utilized for the WORK in confidence to the extent permitted by law and where applicable, the provisions of California Government Code, Section 6254.5(e) will protect the confidentiality of such documents in the event that said documents are shared between PARTIES.

PARTIES will not distribute, release, or share said documents with anyone other than employees, agents, and consultants who require access to complete the WORK without the written consent of the PARTY authorized to release them, unless required or authorized to do so by law.

46. If a PARTY receives a public records request pertaining to the WORK, that PARTY will notify PARTIES within five (5) working days of receipt and make PARTIES aware of any disclosed public documents. PARTIES will consult with each other prior to the release of any public documents related to the WORK.

Hazardous Materials

47. HM-1 is hazardous material (including, but not limited to, hazardous waste) that may require removal and disposal pursuant to federal or state law, irrespective of whether it is disturbed by the PROJECT or not.

HM-2 is hazardous material (including, but not limited to, hazardous waste) that may require removal and disposal pursuant to federal or state law only if disturbed by the PROJECT.

The management activities related to HM-1 and HM-2, including and without limitation, any necessary manifest requirements and disposal facility designations are referred to herein as HM-1 MANAGEMENT and HM-2 MANAGEMENT respectively.

48. If HM-1 or HM-2 is found the discovering PARTY will immediately notify all other PARTIES.
49. CALTRANS, independent of the PROJECT, is responsible for any HM-1 found within the existing State Highway System right-of-way. CALTRANS will undertake, or cause to be undertaken, HM-1 MANAGEMENT with minimum impact to the PROJECT schedule.

CALTRANS will pay, or cause to be paid, the cost of HM-1 MANAGEMENT for HM-1 found within the existing State Highway System right-of-way with funds that are independent of the funds obligated in this AGREEMENT.

50. If HM-1 is found within the PROJECT limits and outside the existing State Highway System right-of-way, responsibility for such HM-1 rests with the owner(s) of the parcel(s) on which the HM-1 is found. TAM, in concert with the local agency having land use jurisdiction, will ensure that HM-1 MANAGEMENT is undertaken with minimum impact to PROJECT schedule.

The cost of HM-1 MANAGEMENT for HM-1 found within the PROJECT limits and outside the existing State Highway System right-of-way will be paid from funds that are independent of the funds obligated in this AGREEMENT and will be the responsibility of the owner(s) of the parcel(s) where the HM-1 is located.

51. The CONSTRUCTION IMPLEMENTING AGENCY is responsible for HM-2 MANAGEMENT within the PROJECT limits.

TAM and CALTRANS will comply with the Soil Management Agreement for Aerially Deposited Lead Contaminated Soils (Soil Management Agreement) executed between CALTRANS and the California Department of Toxic Substances Control (DTSC). Under Section 3.2 of the Soil Management Agreement, CALTRANS and TAM each retain joint and severable liability for noncompliance with the provisions of the Soil Management Agreement. TAM will assume all responsibilities assigned to CALTRANS in the Soil Management Agreement during PROJECT COMPONENTS for which they are the IMPLEMENTING AGENCY except for final placement and burial of soil within the State right-of-way, per Section 4.5 of the Soil Management Agreement, which is subject to CALTRANS concurrence and reporting to DTSC which will be performed by CALTRANS.

52. CALTRANS' acquisition or acceptance of title to any property on which any HM-1 or HM-2 is found will proceed in accordance with CALTRANS' policy on such acquisition.

#### Claims

53. Any PARTY that is responsible for completing WORK may accept, reject, compromise, settle, or litigate claims arising from the WORK without concurrence from the other PARTY.
54. PARTIES will confer on any claim that may affect the WORK or PARTIES' liability or responsibility under this AGREEMENT in order to retain resolution possibilities for potential future claims. No PARTY will prejudice the rights of another PARTY until after PARTIES confer on the claim.
55. If the WORK expends state or federal funds, each PARTY will comply with the Federal Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards of 2 CFR, Part 200. PARTIES will ensure that any for-profit consultant hired to participate in the WORK will comply with the requirements in 48 CFR, Chapter 1, Part 31. When state or federal funds are expended on the WORK these principles and requirements apply to all funding types included in this AGREEMENT.

#### Accounting and Audits

56. PARTIES will maintain, and will ensure that any consultant hired by PARTIES to participate in WORK will maintain, a financial management system that conforms to Generally Accepted Accounting Principles (GAAP), and that can properly accumulate and segregate incurred PROJECT costs and billings.



57. PARTIES will maintain and make available to each other all WORK-related documents, including financial data, during the term of this AGREEMENT.

PARTIES will retain all WORK-related records for three (3) years after the final voucher.

PARTIES will require that any consultants hired to participate in the WORK will comply with this Article.

58. PARTIES have the right to audit each other in accordance with generally accepted governmental audit standards.

CALTRANS, the State Auditor, FHWA (if the PROJECT utilizes federal funds), and TAM will have access to all WORK -related records of each PARTY, and any consultant hired by a PARTY to participate in WORK, for audit, examination, excerpt, or transcription.

The examination of any records will take place in the offices and locations where said records are generated and/or stored and will be accomplished during reasonable hours of operation. The auditing PARTY will be permitted to make copies of any WORK-related records needed for the audit.

The audited PARTY will review the draft audit, findings, and recommendations, and provide written comments within thirty (30) calendar days of receipt.

Upon completion of the final audit, PARTIES have forty-five (45) calendar days to refund or invoice as necessary in order to satisfy the obligation of the audit.

Any audit dispute not resolved by PARTIES is subject to mediation. Mediation will follow the process described in the General Conditions section of this AGREEMENT.

59. If the WORK expends state or federal funds, each PARTY will undergo an annual audit in accordance with the Single Audit Act in the Federal Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards as defined in 2 CFR, Part 200.
60. When a PARTY reimburses a consultant for WORK with state or federal funds, the procurement of the consultant and the consultant overhead costs will be in accordance with the Local Assistance Procedures Manual, Chapter 10.

#### Interruption of Work

61. If WORK stops for any reason, IMPLEMENTING AGENCY will place the PROJECT right-of-way in a safe and operable condition acceptable to CALTRANS.

62. If WORK stops for any reason, each PARTY will continue with environmental commitments included in the environmental documentation, permits, agreements, or approvals that are in effect at the time that WORK stops, and will keep the PROJECT in environmental compliance until WORK resumes.

Penalties, Judgements and Settlements

63. The cost of awards, judgements, or settlements generated by the WORK are to be paid from the funds obligated in this AGREEMENT.
64. The cost of legal challenges to the environmental process or documentation may be paid from the funds obligated in this AGREEMENT.
65. Any PARTY whose action or lack of action causes the levy of fines, interest, or penalties will indemnify and hold all other PARTIES harmless per the terms of this AGREEMENT.

Project Files

66. TAM will furnish CALTRANS with the Project History Files related to the PROJECT facilities on State Highway System within sixty (60) days following the completion of each PROJECT COMPONENT. TAM will prepare the Project History File in accordance with the Project Development Procedures Manual, Chapter 7. All material will be submitted neatly in a three-ring binder and on a CD ROM in PDF format.

Environmental Compliance

67. If during performance of WORK additional activities or environmental documentation is necessary to keep the PROJECT in environmental compliance, PARTIES will amend this AGREEMENT to include completion of those additional tasks.

**ROAD REPAIR AND ACCOUNTABILITY ACT OF 2017 (SB 1)**

68. As the IMPLEMENTING AGENCY, TAM will prepare and submit to CALTRANS a Completion Report, in accordance with to the California Transportation Commission (CTC) Resolution G-18-09: SB1 Accountability and Transparency Guidelines.

TAM must submit a Completion Report for a pre-construction component to CALTRANS for approval within four (4) months of acceptance of that pre-construction component. Thereafter, CALTRANS will have two (2) months to review and approve the report prior to submission to the CTC.

69. In those instances where PARTIES have signed a PROJECT scope, cost, and schedule and benefit baseline data agreement (BASELINE AGREEMENT), PARTIES agree to abide by the terms and conditions of that PROJECT BASELINE AGREEMENT. The PROJECT BASELINE AGREEMENT is attached to and made a part of this AGREEMENT, by reference.
70. Notwithstanding anything to the contrary in this AGREEMENT, PARTIES are not permitted to make changes to the scope, cost, schedule or benefits of the PROJECT, unless approved by CTC.
71. PARTIES will meet the requirements of The Road Repair and Accountability Act of 2017 (SB 1), Chapter 5, Statutes of 2017, California Transportation Commission (CTC) Resolution G-18-09: SB1 Accountability and Transparency Guidelines and the CTC's Local Partnership Program (LPP) Guidelines Resolution G-18-30.

PARTIES agree that contributed funds originating from the LPP can be expended on any item identified in the PROJECT. LPP Competitive Grant Program funds and funds in the initial cycle of the LPP Formulaic Program shall not supplant other committed funds and are not available to fund cost increases, except as noted in the CTC's LPP Guidelines Resolution G-18-30.

## **GENERAL CONDITIONS**

### **Venue**

72. PARTIES understand that this AGREEMENT is in accordance with and governed by the Constitution and laws of the State of California. This AGREEMENT will be enforceable in the State of California. Any PARTY initiating legal action arising from this AGREEMENT will file and maintain that legal action in the Superior Court of the county in which the CALTRANS district office that is signatory to this AGREEMENT resides, or in the Superior Court of the county in which the PROJECT is physically located.

### **Exemptions**

73. All CALTRANS' obligations under this AGREEMENT are subject to the appropriation of resources by the Legislature, the State Budget Act authority, programming and allocation of funds by the California Transportation Commission (CTC).

### **Indemnification**

74. Neither CALTRANS nor any of their officers and employees, are responsible for any injury, damage, or liability occurring by reason of anything done or omitted to be done by TAM, its contractors, sub-contractors, and/or its agents under or in connection with any work, authority, or jurisdiction conferred upon TAM under this AGREEMENT. It is understood and agreed that TAM, to the extent permitted by law, will defend, indemnify, and save harmless CALTRANS and all of their officers and employees from all claims, suits, or actions of every name, kind, and description brought forth under, but not limited to, tortious, contractual, inverse condemnation, or other theories and assertions of liability occurring by reason of anything done or omitted to be done by TAM, its contractors, sub-contractors, and/or its agents under this AGREEMENT.
75. Neither TAM nor any of their officers and employees, are responsible for any injury, damage, or liability occurring by reason of anything done or omitted to be done by CALTRANS, its contractors, sub-contractors, and/or its agents under or in connection with any work, authority, or jurisdiction conferred upon CALTRANS under this AGREEMENT. It is understood and agreed that CALTRANS, to the extent permitted by law, will defend, indemnify, and save harmless TAM and all of their officers and employees from all claims, suits, or actions of every name, kind, and description brought forth under, but not limited to, tortious, contractual, inverse condemnation, or other theories and assertions of liability occurring by reason of anything done or omitted to be done by CALTRANS, its contractors, sub-contractors, and/or its agents under this AGREEMENT.

### **Non-parties**

76. PARTIES do not intend this AGREEMENT to create a third party beneficiary or define duties, obligations, or rights for entities not signatory to this AGREEMENT. PARTIES do not intend this AGREEMENT to affect their legal liability by imposing any standard of care for fulfilling the WORK different from the standards imposed by law.
77. PARTIES will not assign or attempt to assign obligations to entities not signatory to this AGREEMENT without an amendment to this AGREEMENT.

### **Ambiguity and Performance**

78. PARTIES will not interpret any ambiguity contained in this AGREEMENT against each other. PARTIES waive the provisions of California Civil Code, Section 1654.

A waiver of a PARTY's performance under this AGREEMENT will not constitute a continuous waiver of any other provision.

79. A delay or omission to exercise a right or power due to a default does not negate the use of that right or power in the future when deemed necessary.

### **Defaults**

80. If any PARTY defaults in its performance of the WORK, a non-defaulting PARTY will request in writing that the default be remedied within thirty (30) calendar days. If the defaulting PARTY fails to do so, the non-defaulting PARTY may initiate dispute resolution.

### **Dispute Resolution**

81. PARTIES will first attempt to resolve AGREEMENT disputes at the PROJECT team level as described in the Quality Management Plan. If they cannot resolve the dispute themselves, the CALTRANS District Director and the Executive Officer of TAM will attempt to negotiate a resolution. If PARTIES do not reach a resolution, PARTIES' legal counsel will initiate mediation. PARTIES agree to participate in mediation in good faith and will share equally in its costs.

Neither the dispute nor the mediation process relieves PARTIES from full and timely performance of the WORK in accordance with the terms of this AGREEMENT. However, if any PARTY stops fulfilling its obligations, any other PARTY may seek equitable relief to ensure that the WORK continues.

Except for equitable relief, no PARTY may file a civil complaint until after mediation, or forty-five (45) calendar days after filing the written mediation request, whichever occurs first.

PARTIES will file any civil complaints in the Superior Court of the county in which the CALTRANS District Office signatory to this AGREEMENT resides or in the Superior Court of the county in which the PROJECT is physically located.

82. PARTIES maintain the ability to pursue alternative or additional dispute remedies if a previously selected remedy does not achieve resolution.

### **Prevailing Wage**

83. When WORK falls within the Labor Code § 1720(a)(1) definition of "public works" in that it is construction, alteration, demolition, installation, or repair; or maintenance work under Labor Code § 1771, PARTIES will conform to the provisions of Labor Code §§ 1720-1815, and all applicable provisions of California Code of Regulations, Title 8, Division 1, Chapter 8, Subchapter 3, Articles 1-7. PARTIES will include prevailing wage requirements in contracts for public work and require contractors to include the same prevailing wage requirements in all subcontracts.

Work performed by a PARTY's own employees is exempt from the Labor Code's Prevailing Wage requirements.

If WORK is paid for, in whole or part, with federal funds and is of the type of work subject to federal prevailing wage requirements, PARTIES will conform to the provisions of the Davis-Bacon and Related Acts, 40 U.S.C. §§ 3141-3148.

When applicable, PARTIES will include federal prevailing wage requirements in contracts for public works. WORK performed by a PARTY's employees is exempt from federal prevailing wage requirements.

### **Contact Information**

#### **CALTRANS**

Wajahat Nyaz, Regional Project Manager  
111 Grand Avenue  
Oakland, CA 94612  
Office Phone: (510) 286-5119  
Email: wajahat.nyaz@dot.ca.gov

#### **TRANSPORTATION AUTHORITY OF MARIN**

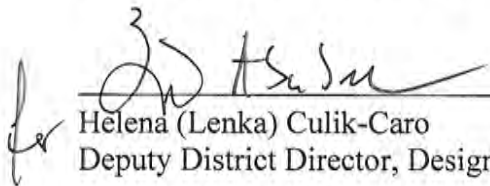
Nicholas T. Nguyen, Principal Project Manager  
900 Fifth Avenue, Suite 100  
San Rafael, CA 94901  
Office Phone: (415) 226-0831  
Email: NNguyen@tam.ca.gov

## SIGNATURES


PARTIES are empowered by California Streets and Highways Code to enter into this AGREEMENT and have delegated to the undersigned the authority to execute this AGREEMENT on behalf of the respective agencies and covenants to have followed all the necessary legal requirements to validly execute this AGREEMENT.

Signatories may execute this AGREEMENT through individual signature pages provided that each signature is an original. This AGREEMENT is not fully executed until all original signatures are attached.


### STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

  
for Helena (Lenka) Culik-Caro  
Deputy District Director, Design

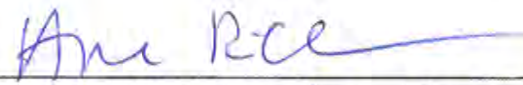
### VERIFICATION OF FUNDS AND AUTHORITY:

  
Jeffrey Armstrong  
District Budget Manager

### CERTIFIED AS TO FINANCIAL TERMS AND POLICIES:

  
Accounting Administrator I


### TRANSPORTATION AUTHORITY OF MARIN

  
~~Dianne Steinhauser~~ ANNE RICHMAN  
Executive Director

### Attest:

  
Denise Merleno  
Administrative Associate

### Approved as to form and procedure:

  
Brian Case  
Marin County Deputy Counsel

### FUNDING SUMMARY NO. 01

<u>FUNDING TABLE</u>						
<u>IMPLEMENTING AGENCY →</u>			<u>TAM</u>	<u>CALTRANS</u>		
Source	Party	Fund Type	PS&E	R/W SUPPORT	R/W CAPITAL	Totals
STATE	CALTRANS	SB1 LLP	500,000	0	0	500,000
FEDERAL	CALTRANS	STP	2,000,000	0	0	2,000,000
LOCAL	TAM	Local	4,800,000	50,000	50,000	4,900,000
Totals			7,300,000	50,000	50,000	7,400,000

<u>SPENDING SUMMARY</u>						
<u>PS&amp;E</u>			<u>R/W Support</u>		<u>R/W CAPITAL</u>	
Fund Type	CALTRANS	TAM	CALTRANS	TAM	CALTRANS	Totals
SB1 LLP	0	500,000	0	0	0	500,000
STP	0	2,000,000	0	0	0	2,000,000
Local	150,000	4,650,000	50,000	0	50,000	4,900,000
Totals	150,000	7,150,000	50,000	0	50,000	7,400,000



**Funding**

1. If there are insufficient funds available in this AGREEMENT to place the PROJECT right-of-way in a safe and operable condition, the appropriate IMPLEMENTING AGENCY will fund these activities until such time as PARTIES amend this AGREEMENT.

That IMPLEMENTING AGENCY may request reimbursement for these costs during the amendment process.

2. If there are insufficient funds in this AGREEMENT to implement the obligations and responsibilities of this AGREEMENT, including the applicable commitments and conditions included in the PROJECT environmental documentation, permits, agreements, and/or approvals that are in effect at a time that WORK stops, each PARTY accepts responsibility to fund their respective WORK until such time as PARTIES amend this AGREEMENT.

Each PARTY may request reimbursement for these costs during the amendment process.

**ICRP Rate**

3. The cost of any engineering support performed by CALTRANS includes all direct and applicable indirect costs. CALTRANS calculates indirect costs based solely on the type of funds used to pay support costs. State and federal funds administered by CALTRANS are subject to the current Program Functional Rate. All other funds are subject to the current Program Functional Rate and the current Administration Rate. The Program Functional Rate and Administration Rate are adjusted periodically.

In accordance with California Senate Bill 848, the Administration Rate is capped at 10 percent until July 1, 2021, for Self-Help Counties with a countywide sales tax measure dedicated to transportation improvements.

4. If the WORK is funded with state or federal funds, any PARTY seeking CALTRANS reimbursement of indirect costs must submit an indirect cost rate proposal and central service cost allocation plan (if any) in accordance with Local Assistance Procedures Manual, 2 CFR, Part 200 and Chapter 5. These documents are to be submitted annually to CALTRANS' Audits and Investigations for review and acceptance prior to CALTRANS' reimbursement of indirect costs.

5. Travel, per diem, and third-party contract reimbursements for WORK are to be paid from the funds in this AGREEMENT only after the contractor performs the work and incurs said costs.

Payments for travel and per diem will not exceed the rates paid rank and file state employees under current California Department of Human Resources (CalHR) rules current at the effective date of this AGREEMENT.

If TAM invoices for rates in excess of CalHR rates, TAM will fund the cost difference and reimburse CALTRANS for any overpayment.

6. In accordance with the CALTRANS Federal-Aid Project Funding Guidelines, PARTIES must obtain approval from the Federal Highway Administration prior to any PROJECT funding changes that that will change the federal share of funds.

### **Invoicing and Payment**

7. PARTIES will invoice for funds where the SPENDING SUMMARY shows that one PARTY provides funds for use by another PARTY. PARTIES will pay invoices within forty-five (45) calendar days of receipt of invoice when not paying with Electronic Funds Transfer (EFT). When paying with EFT, TAM will pay invoices within forty-five (45) calendar days of receipt of invoice.
8. If TAM has received EFT certification from CALTRANS then TAM will use the EFT mechanism and follow all EFT procedures to pay all invoices issued from CALTRANS.
9. When a PARTY is reimbursed for actual cost, invoices will be submitted each month for the prior month's expenditures. After all PROJECT COMPONENT WORK is complete, PARTIES will submit a final accounting of all PROJECT COMPONENT costs. Based on the final accounting, PARTIES will invoice or refund as necessary to satisfy the financial commitments of this AGREEMENT.
10. If an executed Program Supplement Agreement (PSA) or STIP Planning, Programming, and Monitoring Program Fund Transfer Agreement (PPM) exists for this PROJECT then TAM will abide by the billing and payment conditions detailed for the fund types identified in the PSA or PPM.
11. If CALTRANS reimburses TAM for any costs later determined to be unallowable, TAM will reimburse those funds.

Plans, Specifications, and Estimate (PS&E)

12. TAM will invoice and CALTRANS will reimburse for actual costs incurred and paid

CALTRANS will invoice TAM for a \$20,000 initial deposit after execution of this AGREEMENT and forty-five (45) working days prior to the commencement of PS&E support expenditures. This deposit represents two (2) months' estimated costs.

Thereafter, CALTRANS will invoice and TAM will reimburse for actual costs incurred and paid up to a maximum of \$150,000 total.

RIGHT-OF-WAY Support

13. CALTRANS will invoice TAM for a \$20,000 initial deposit after execution of this AGREEMENT and forty-five (45) working days prior to the commencement of R/W SUPPORT expenditures.

Thereafter, CALTRANS will invoice and TAM will reimburse for actual costs incurred and paid up to a maximum of \$50,000 total.

RIGHT-OF-WAY Capital

14. CALTRANS will invoice TAM for a \$40,000 initial deposit after execution of this AGREEMENT and forty-five (45) working days prior to the commencement of R/W CAPITAL expenditures.

Thereafter, CALTRANS will invoice and TAM will reimburse for actual costs incurred and paid.

**TAM RESOLUTION NO. 2019-14**

**RESOLUTION OF THE TRANSPORTATION AUTHORITY OF MARIN  
AUTHORIZING THE EXECUTIVE DIRECTOR TO NEGOTIATE AND ENTER INTO  
SEPARATE COOPERATIVE AGREEMENTS WITH THE CALIFORNIA  
DEPARTMENT OF TRANSPORTATION ASSOCIATED WITH DESIGN AND RIGHT-  
OF-WAY ACTIVITIES FOR THE MSN B7 AND B8 PROJECTS**

WHEREAS, The Transportation Authority of Marin (TAM) has been a partner with the California Department of Transportation (Caltrans) during the implementation of the Phase 1 and 2 of Marin-Sonoma Narrows (MSN) High Occupancy Vehicle (HOV) Widening Project in Marin County; and,

WHEREAS, Partners are authorized to enter into a cooperative agreement for improvements to the state highway system (SHS) per the California Streets and Highways Code sections 114 and 130; and,

WHEREAS, the MSN B7 and B8 (formerly B1-Phase 2 and A4) projects (PROJECT) will complete the construction of High Occupancy Vehicle (HOV) lanes on U.S. 101 through Marin County; and,

WHEREAS, In order for an agency other than Caltrans to perform work on or for a state highway system, the State requires that the agency enter into a cooperative agreement which defines the work, establishes the responsibilities and financial commitments of each partner; and,

WHEREAS, TAM is a funding partner contributing funds required to prepare final designs and right of way (ROW) acquisitions for the PROJECT; and,

WHEREAS, Caltrans is responsible for overseeing all work and ROW engineering for the PROJECT; and,


WHEREAS, TAM staff will negotiate a Cooperative Agreement with fair terms to both parties that protects the interests of TAM; and,

WHEREAS, County Counsel will review the agreement to verify that there is nothing of significant concern; now, therefore, be it

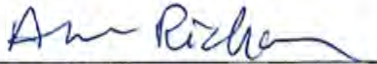
RESOLVED, That the Executive Director is hereby authorized to negotiate and enter into separate Cooperative Agreements for the MSN B7 and B8 projects and any necessary amendments with Caltrans to provide design and ROW support activities.

PASSED AND ADOPTED at a regular meeting of the Transportation Authority of Marin held on the 26<sup>th</sup> day of September 2019, by the following vote:

AYES:	Commissioners:	Campbell, Cleveland-Knowles, Colbert, Connolly, Fredericks, Hillmer, Kuhl, Moulton-Peters, Reed, Rice, Rodoni, Sears
NOES:	Commissioners:	None
ABSENT:	Commissioners:	Arnold, Kunhardt, Lucan, Phillips

  
Judy Arnold, Chair  
Transportation Authority of Marin

ATTEST:

  
Dianne Steinhauser Anne Richman  
Executive Director

Transportation Authority of Marin	
<b>APPROVED</b>	
 Clerk to the Board	 Date

ATTACHMENT G

EXECUTABLE DRAFT CONSTRUCTION COOPERATIVE  
AGREEMENT

## **COOPERATIVE AGREEMENT**

This AGREEMENT, effective on \_\_\_\_\_, is between the State of California, acting through its Department of Transportation, referred to as CALTRANS, and:

Transportation Authority of Marin, a public corporation/entity, referred to hereinafter as TAM.

An individual signatory agency in this AGREEMENT is referred to as a PARTY. Collectively, the signatory agencies in this AGREEMENT are referred to as PARTIES.

### **RECITALS**

1. PARTIES are authorized to enter into a cooperative agreement for improvements to the State Highway System per the California Streets and Highways Code, Sections 114 and 130.
2. For the purpose of this AGREEMENT, *construction of HOV lanes and mainline safety improvements on Route 101, in Marin County, in and near city of Novato, from just south of the Franklin Avenue Overhead to 0.3 miles south of the Marin/ Sonoma County line* will be referred to hereinafter as PROJECT. The PROJECT scope of work is defined in the project initiation and approval documents (e.g. Project Study Report, Permit Engineering Evaluation Report, or Project Report).
3. All obligations and responsibilities assigned in this AGREEMENT to complete the following PROJECT COMPONENT will be referred to hereinafter as WORK:

- CONSTRUCTION

Each PROJECT COMPONENT is defined in the CALTRANS Workplan Standards Guide as a distinct group of activities/products in the project planning and development process.

4. AGREEMENT shall have no force or effect until TAM's local (RM3) funds have been allocated and the CTC has allocated the SB-1 SCCP funds for PROJECT. The CONSTRUCTION contract will not be advertised until both SB1 and RM3 funds have been allocated.

5. The term AGREEMENT, as used herein, includes this document and any attachments, exhibits, and amendments.

This AGREEMENT is separate from and does not modify or replace any other cooperative agreement or memorandum of understanding between the PARTIES regarding the PROJECT.

PARTIES intend this AGREEMENT to be their final expression that supersedes any oral understanding or writings pertaining to the WORK. The requirements of this AGREEMENT will preside over any conflicting requirements in any documents that are made an express part of this AGREEMENT.

If any provisions in this AGREEMENT are found by a court of competent jurisdiction to be, or are in fact, illegal, inoperative, or unenforceable, those provisions do not render any or all other AGREEMENT provisions invalid, inoperative, or unenforceable, and those provisions will be automatically severed from this AGREEMENT.

Except as otherwise provided in the AGREEMENT, PARTIES will execute a written amendment if there are any changes to the terms of this AGREEMENT.

PARTIES agree to sign a CLOSURE STATEMENT to terminate this AGREEMENT. However, all indemnification, document retention, audit, claims, environmental commitment, legal challenge, maintenance and ownership articles will remain in effect until terminated or modified in writing by mutual agreement or expire by the statute of limitations.

6. The following work associated with this PROJECT has been completed or is in progress:
  - CALTRANS approved the Environmental Impact Report/ Environmental Impact Statement on October 29, 2009.
  - CALTRANS is developing the R/W Certification (Cooperative Agreement No. 04-2742-A1).
  - TAM will complete the Plans, Specifications and Estimate on October 30, 2020 (Cooperative Agreement No. 04-2742-A1).
7. In this AGREEMENT capitalized words represent defined terms, initialisms, or acronyms.
8. PARTIES hereby set forth the terms, covenants, and conditions of this AGREEMENT.



## **RESPONSIBILITIES**

### **Sponsorship**

9. A SPONSOR is responsible for establishing the scope of the PROJECT and securing the financial resources to fund the WORK. A SPONSOR is responsible for securing additional funds when necessary or implementing PROJECT changes to ensure the WORK can be completed with the funds obligated in this AGREEMENT.

PROJECT changes, as described in the CALTRANS Project Development Procedures Manual, will be approved by CALTRANS as the owner/operator of the State Highway System.

10. CALTRANS and TAM will co-sponsor the WORK included in this AGREEMENT in the following percentages:

PROJECT COMPONENT	CALTRANS	TAM
CONSTRUCTION	50%	50%

### **Implementing Agency**

11. The IMPLEMENTING AGENCY is the PARTY responsible for managing the scope, cost, schedule, and quality of the work activities and products of a PROJECT COMPONENT.

- CALTRANS is the CONSTRUCTION IMPLEMENTING AGENCY.

CONSTRUCTION includes construction contract administration, surveying/staking, inspection, quality assurance, and assuring regulatory compliance and contract acceptance. The CONSTRUCTION component budget identifies the capital costs of the construction contract/furnished materials (CONSTRUCTION CAPITAL) and the cost of the staff work in support of the construction contract administration (CONSTRUCTION SUPPORT).

12. Any PARTY responsible for completing WORK will make its personnel and consultants that prepare WORK available to help resolve WORK-related problems and changes for the entire duration of the PROJECT including PROJECT work that may occur under separate agreements.

### **Funding**

13. Funding sources, PARTIES committing funds, funding amounts, and invoicing/payment details are documented in the Funding Summary section of this AGREEMENT.

PARTIES will amend this AGREEMENT by updating and replacing the Funding Summary, in its entirety, each time the funding details change. Funding Summary replacements will be executed by a legally authorized representative of the respective PARTIES. The most current fully executed Funding Summary supersedes any previous Funding Summary created for this AGREEMENT.

14. PARTIES will not be reimbursed for costs beyond the funds obligated in this AGREEMENT.

If an IMPLEMENTING AGENCY anticipates that funding for the WORK will be insufficient to complete the WORK, the IMPLEMENTING AGENCY will promptly notify the SPONSOR.

15. Unless otherwise documented in the Funding Summary, overall liability for project costs within a PROJECT COMPONENT will be in proportion to the amount contributed to that PROJECT COMPONENT by each fund type.
16. Unless otherwise documented in the Funding Summary, any savings recognized within a PROJECT COMPONENT will be credited or reimbursed, when allowed by policy or law, in proportion to the amount contributed to that PROJECT COMPONENT by each fund type.
17. WORK costs, except those that are specifically excluded in this AGREEMENT, are to be paid from the funds obligated in the Funding Summary. Costs that are specifically excluded from the funds obligated in this AGREEMENT are to be paid by the PARTY incurring the costs from funds that are independent of this AGREEMENT.

### **CEQA/NEPA Lead Agency**

18. CALTRANS is the CEQA Lead Agency for the PROJECT.
19. CALTRANS is the NEPA Lead Agency for the PROJECT.

### **Environmental Permits, Approvals and Agreements**

20. PARTIES will comply with the commitments and conditions set forth in the environmental documentation, environmental permits, approvals, and applicable agreements as those commitments and conditions apply to each PARTIES' responsibilities in this AGREEMENT.

21. Unless otherwise assigned in this AGREEMENT, the IMPLEMENTING AGENCY for a PROJECT COMPONENT is responsible for all PROJECT COMPONENT WORK associated with coordinating, obtaining, implementing, renewing, and amending the PROJECT permits, agreements, and approvals whether they are identified in the planned project scope of work or become necessary in the course of completing the PROJECT.
22. The PROJECT requires the following environmental permits/approvals:

ENVIRONMENTAL PERMITS/REQUIREMENTS
National Pollutant Discharge Elimination System (NPDES), State Water Resources Control Board
BO Section 7 USFWS
BO Section 7 NOAA/NMFS
404, US Army Corps Of Engineers
401, Regional Water Quality Control Board
1602 California Department of Fish and Wildlife

## **CONSTRUCTION**

23. As the CONSTRUCTION IMPLEMENTING AGENCY, CALTRANS is responsible for all CONSTRUCTION WORK except those activities and responsibilities that are assigned to another PARTY and those activities that are excluded under this AGREEMENT.
24. Physical and legal possession of the right-of-way must be completed prior to advertising the construction contract, unless PARTIES mutually agree to other arrangements in writing.
25. Right-of-way conveyances must be completed prior to WORK completion, unless PARTIES mutually agree to other arrangements in writing.
26. CALTRANS will advertise, open bids, award, and approve the construction contract in accordance with the California Public Contract Code and the California Labor Code. By accepting responsibility to advertise and award the construction contract, CALTRANS also accepts responsibility to administer the construction contract.
27. If the lowest responsible construction contract bid is greater than the funding commitment to CONSTRUCTION CAPITAL, PARTIES must agree in writing on a course of action within fifteen (15) working days. If no agreement is reached within fifteen (15) work days the IMPLEMENTING AGENCY will not award the construction contract.
28. TAM can attend weekly meetings to review construction schedule and on-going activities.

29. CALTRANS will implement changes to the construction contract through Change Orders. PARTIES will review and concur on all Change Orders over \$50,000.
30. PARTIES confirm that upon WORK completion, no maintenance agreement will be necessary.
31. Upon WORK completion, ownership or title to all materials and equipment constructed or installed for the operations and/or maintenance of the State Highway System (SHS) within SHS right-of-way as part of WORK become the property of CALTRANS.

CALTRANS will not accept ownership or title to any materials or equipment constructed or installed outside SHS right-of-way.

### **Schedule**

32. PARTIES will manage the WORK schedule to ensure the timely use of obligated funds and to ensure compliance with any environmental permits, right-of-way agreements, construction contracts, and any other commitments. PARTIES will communicate schedule risks or changes as soon as they are identified and will actively manage and mitigate schedule risks.
33. The IMPLEMENTING AGENCY for each PROJECT COMPONENT will furnish PARTIES with a final report of the WORK completed.

## **Additional Provisions**

### **Standards**

34. PARTIES will perform all WORK in accordance with federal and California laws, regulations, and standards; Federal Highway Administration (FHWA) standards; and CALTRANS standards. CALTRANS standards include, but are not limited to, the guidance provided in the:
- CADD Users' Manual
  - CALTRANS policies and directives
  - Plans Preparation Manual
  - Project Development Procedures Manual (PDPM)
  - Workplan Standards Guide
  - Construction Manual

### **Qualifications**

35. Each PARTY will ensure that personnel participating in WORK are appropriately qualified or licensed to perform the tasks assigned to them.
36. The IMPLEMENTING AGENCY for a PROJECT COMPONENT will coordinate, prepare, obtain, implement, renew, and amend any encroachment permits needed to complete the WORK.

### **Protected Resources**

37. If any PARTY discovers unanticipated cultural, archaeological, paleontological, or other protected resources during WORK, all WORK in that area will stop and that PARTY will notify all PARTIES within 24 hours of discovery. WORK may only resume after a qualified professional has evaluated the nature and significance of the discovery and CALTRANS approves a plan for its removal or protection.

### **Disclosures**

38. PARTIES will hold all administrative drafts and administrative final reports, studies, materials, and documentation relied upon, produced, created, or utilized for the WORK in confidence to the extent permitted by law and where applicable, the provisions of California Government Code, Section 6254.5(e) will protect the confidentiality of such documents in the event that said documents are shared between PARTIES.

PARTIES will not distribute, release, or share said documents with anyone other than employees, agents, and consultants who require access to complete the WORK without the written consent of the PARTY authorized to release them, unless required or authorized to do so by law.

39. If a PARTY receives a public records request pertaining to the WORK, that PARTY will notify PARTIES within five (5) working days of receipt and make PARTIES aware of any disclosed public records.

### Hazardous Materials

40. HM-1 is hazardous material (including, but not limited to, hazardous waste) that may require removal and disposal pursuant to federal or state law, irrespective of whether it is disturbed by the PROJECT or not.

HM-2 is hazardous material (including, but not limited to, hazardous waste) that may require removal and disposal pursuant to federal or state law only if disturbed by the PROJECT.

The management activities related to HM-1 and HM-2, including and without limitation, any necessary manifest requirements and disposal facility designations are referred to herein as HM-1 MANAGEMENT and HM-2 MANAGEMENT respectively.

41. If HM-1 or HM-2 is found, the discovering PARTY will immediately notify all other PARTIES.
42. CALTRANS, independent of the PROJECT, is responsible for any HM-1 found within the existing State Highway System right-of-way. CALTRANS will undertake, or cause to be undertaken, HM-1 MANAGEMENT with minimum impact to the PROJECT schedule.

CALTRANS will pay, or cause to be paid, the cost of HM-1 MANAGEMENT for HM-1 found within the existing State Highway System right-of-way with funds that are independent of the funds obligated in this AGREEMENT.

43. If HM-1 is found within the PROJECT limits and outside the existing State Highway System right-of-way, responsibility for such HM-1 rests with the owner(s) of the parcel(s) on which the HM-1 is found. TAM, in concert with the local agency having land use jurisdiction, will ensure that HM-1 MANAGEMENT is undertaken with minimum impact to PROJECT schedule.

The cost of HM-1 MANAGEMENT for HM-1 found within the PROJECT limits and outside the existing State Highway System right-of-way will be paid from funds that are independent of the funds obligated in this AGREEMENT and will be the responsibility of the owner(s) of the parcel(s) where the HM-1 is located.

44. The CONSTRUCTION IMPLEMENTING AGENCY is responsible for HM-2 MANAGEMENT within the PROJECT limits.

TAM and CALTRANS will comply with the Soil Management Agreement for Aerially Deposited Lead Contaminated Soils (Soil Management Agreement) executed between CALTRANS and the California Department of Toxic Substances Control (DTSC). Under Section 3.2 of the Soil Management Agreement, CALTRANS and TAM each retain joint and severable liability for noncompliance with the provisions of the Soil Management Agreement. TAM will assume all responsibilities assigned to CALTRANS in the Soil Management Agreement during PROJECT COMPONENTS for which they are the IMPLEMENTING AGENCY except for final placement and burial of soil within the State right-of-way, per Section 4.5 of the Soil Management Agreement, which is subject to CALTRANS concurrence and reporting to DTSC which will be performed by CALTRANS.

45. CALTRANS' acquisition or acceptance of title to any property on which any HM-1 or HM-2 is found will proceed in accordance with CALTRANS' policy on such acquisition.

#### Claims

46. Any PARTY that is responsible for completing WORK may accept, reject, compromise, settle, or litigate claims arising from the WORK without concurrence from the other PARTY.
47. PARTIES will confer on any claim that may affect the WORK or PARTIES' liability or responsibility under this AGREEMENT in order to retain resolution possibilities for potential future claims. No PARTY will prejudice the rights of another PARTY until after PARTIES confer on the claim.
48. If the WORK expends state or federal funds, each PARTY will comply with the Federal Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards of 2 CFR, Part 200. PARTIES will ensure that any for-profit consultant hired to participate in the WORK will comply with the requirements in 48 CFR, Chapter 1, Part 31. When state or federal funds are expended on the WORK these principles and requirements apply to all funding types included in this AGREEMENT.

#### Accounting and Audits

49. PARTIES will maintain, and will ensure that any consultant hired by PARTIES to participate in WORK will maintain, a financial management system that conforms to Generally Accepted Accounting Principles (GAAP), and that can properly accumulate and segregate incurred PROJECT costs and billings.

50. PARTIES will maintain and make available to each other all WORK-related documents, including financial data, during the term of this AGREEMENT.

PARTIES will retain all WORK-related records for three (3) years after the final voucher.

PARTIES will require that any consultants hired to participate in the WORK will comply with this Article.

51. PARTIES have the right to audit each other in accordance with generally accepted governmental audit standards.

CALTRANS, the State Auditor, FHWA (if the PROJECT utilizes federal funds), and TAM will have access to all WORK -related records of each PARTY, and any consultant hired by a PARTY to participate in WORK, for audit, examination, excerpt, or transcription.

The examination of any records will take place in the offices and locations where said records are generated and/or stored and will be accomplished during reasonable hours of operation. The auditing PARTY will be permitted to make copies of any WORK-related records needed for the audit.

The audited PARTY will review the draft audit, findings, and recommendations, and provide written comments within thirty (30) calendar days of receipt.

Upon completion of the final audit, PARTIES have forty-five (45) calendar days to refund or invoice as necessary in order to satisfy the obligation of the audit.

Any audit dispute not resolved by PARTIES is subject to mediation. Mediation will follow the process described in the General Conditions section of this AGREEMENT.

52. If the WORK expends state or federal funds, each PARTY will undergo an annual audit in accordance with the Single Audit Act in the Federal Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards as defined in 2 CFR, Part 200.
53. When a PARTY reimburses a consultant for WORK with state or federal funds, the procurement of the consultant and the consultant overhead costs will be in accordance with the Local Assistance Procedures Manual, Chapter 10.

#### Interruption of Work

54. If WORK stops for any reason, each PARTY will continue with environmental commitments included in the environmental documentation, permits, agreements, or approvals that are in effect at the time that WORK stops, and will keep the PROJECT in environmental compliance until WORK resumes.



Penalties, Judgements and Settlements

55. The cost of awards, judgements, or settlements generated by the WORK are to be paid from the funds obligated in this AGREEMENT.
56. The cost of legal challenges to the environmental process or documentation may be paid from the funds obligated in this AGREEMENT.
57. Any PARTY whose action or lack of action causes the levy of fines, interest, or penalties will indemnify and hold all other PARTIES harmless per the terms of this AGREEMENT.

Environmental Compliance

58. If during performance of WORK additional activities or environmental documentation is necessary to keep the PROJECT in environmental compliance, PARTIES will amend this AGREEMENT to include completion of those additional tasks.

**ROAD REPAIR AND ACCOUNTABILITY ACT OF 2017 (SB 1)**

59. In those instances where PARTIES have signed a PROJECT scope, cost, and schedule and benefit baseline data agreement (BASELINE AGREEMENT), PARTIES agree to abide by the terms and conditions of that PROJECT BASELINE AGREEMENT. The PROJECT BASELINE AGREEMENT will be made a part of this AGREEMENT by reference before the construction contract is advertised.
60. Notwithstanding anything to the contrary in this AGREEMENT, PARTIES are not permitted to make changes to the scope, cost, schedule or benefits of the PROJECT, unless approved by CTC.
61. PARTIES will meet the requirements of The Road Repair and Accountability Act of 2017 (SB 1), Chapter 5, Statutes of 2017, California Transportation Commission (CTC) SB1 Accountability and Transparency Guidelines and the CTC's Solutions for Congestion Corridors Program (SCCP) guidelines.

PARTIES agree that contributed funds originating from the SCCP can be expended on any item identified in the PROJECT. Should a TAM-nominated project encounter a cost over-run, SCCP will not fund the cost increase. Any cost increases should be funded from other fund sources.

## **GENERAL CONDITIONS**

62. All portions of this AGREEMENT, including the Recitals Section, are enforceable.

### **Venue**

63. PARTIES understand that this AGREEMENT is in accordance with and governed by the Constitution and laws of the State of California. This AGREEMENT will be enforceable in the State of California. Any PARTY initiating legal action arising from this AGREEMENT will file and maintain that legal action in the Superior Court of the county in which the CALTRANS district office that is signatory to this AGREEMENT resides, or in the Superior Court of the county in which the PROJECT is physically located.

### **Exemptions**

64. All CALTRANS' obligations under this AGREEMENT are subject to the appropriation of resources by the Legislature, the State Budget Act authority, programming and allocation of funds by the California Transportation Commission (CTC).

### **Indemnification**

65. Neither CALTRANS nor any of their officers and employees, are responsible for any injury, damage, or liability occurring by reason of anything done or omitted to be done by TAM, its contractors, sub-contractors, and/or its agents under or in connection with any work, authority, or jurisdiction conferred upon TAM under this AGREEMENT. It is understood and agreed that TAM, to the extent permitted by law, will defend, indemnify, and save harmless CALTRANS and all of their officers and employees from all claims, suits, or actions of every name, kind, and description brought forth under, but not limited to, tortious, contractual, inverse condemnation, or other theories and assertions of liability occurring by reason of anything done or omitted to be done by TAM, its contractors, sub-contractors, and/or its agents under this AGREEMENT.

66. Neither TAM nor any of their officers and employees, are responsible for any injury, damage, or liability occurring by reason of anything done or omitted to be done by CALTRANS, its contractors, sub-contractors, and/or its agents under or in connection with any work, authority, or jurisdiction conferred upon CALTRANS under this AGREEMENT. It is understood and agreed that CALTRANS, to the extent permitted by law, will defend, indemnify, and save harmless TAM and all of their officers and employees from all claims, suits, or actions of every name, kind, and description brought forth under, but not limited to, tortious, contractual, inverse condemnation, or other theories and assertions of liability occurring by reason of anything done or omitted to be done by CALTRANS, its contractors, sub-contractors, and/or its agents under this AGREEMENT.

### **Non-parties**

67. PARTIES do not intend this AGREEMENT to create a third-party beneficiary or define duties, obligations, or rights for entities not signatory to this AGREEMENT. PARTIES do not intend this AGREEMENT to affect their legal liability by imposing any standard of care for fulfilling the WORK different from the standards imposed by law.
68. PARTIES will not assign or attempt to assign obligations to entities not signatory to this AGREEMENT without an amendment to this AGREEMENT.

### **Ambiguity and Performance**

69. Neither PARTY will interpret any ambiguity contained in this AGREEMENT against the other PARTY. PARTIES waive the provisions of California Civil Code, Section 1654.

A waiver of a PARTY's performance under this AGREEMENT will not constitute a continuous waiver of any other provision.

70. A delay or omission to exercise a right or power due to a default does not negate the use of that right or power in the future when deemed necessary.

### **Defaults**

71. If any PARTY defaults in its performance of the WORK, a non-defaulting PARTY will request in writing that the default be remedied within thirty (30) calendar days. If the defaulting PARTY fails to do so, the non-defaulting PARTY may initiate dispute resolution.

## **Dispute Resolution**

72. PARTIES will first attempt to resolve AGREEMENT disputes at the PROJECT team level as described in the Quality Management Plan. If they cannot resolve the dispute themselves, the CALTRANS District Director and the Executive Officer of TAM will attempt to negotiate a resolution. If PARTIES do not reach a resolution, PARTIES' legal counsel will initiate mediation. PARTIES agree to participate in mediation in good faith and will share equally in its costs.

Neither the dispute nor the mediation process relieves PARTIES from full and timely performance of the WORK in accordance with the terms of this AGREEMENT. However, if any PARTY stops fulfilling its obligations, any other PARTY may seek equitable relief to ensure that the WORK continues.

Except for equitable relief, no PARTY may file a civil complaint until after mediation, or forty-five (45) calendar days after filing the written mediation request, whichever occurs first.

PARTIES will file any civil complaints in the Superior Court of the county in which the CALTRANS District Office signatory to this AGREEMENT resides or in the Superior Court of the county in which the PROJECT is physically located.

73. PARTIES maintain the ability to pursue alternative or additional dispute remedies if a previously selected remedy does not achieve resolution.

## **Prevailing Wage**

74. When WORK falls within the Labor Code § 1720(a)(1) definition of "public works" in that it is construction, alteration, demolition, installation, or repair; or maintenance work under Labor Code § 1771, PARTIES will conform to the provisions of Labor Code §§ 1720-1815, and all applicable provisions of California Code of Regulations, Title 8, Division 1, Chapter 8, Subchapter 3, Articles 1-7. PARTIES will include prevailing wage requirements in contracts for public work and require contractors to include the same prevailing wage requirements in all subcontracts.

Work performed by a PARTY's own employees is exempt from the Labor Code's Prevailing Wage requirements.

If WORK is paid for, in whole or part, with federal funds and is of the type of work subject to federal prevailing wage requirements, PARTIES will conform to the provisions of the Davis-Bacon and Related Acts, 40 U.S.C. §§ 3141-3148.

When applicable, PARTIES will include federal prevailing wage requirements in contracts for public works. WORK performed by a PARTY's employees is exempt from federal prevailing wage requirements.

### **Contact Information**

#### **CALTRANS**

Wajahat Nyaz, Regional Project Manager

111 Grand Avenue

Oakland, CA 94612

Office Phone: (510) 286-5119

Mobile Phone: (510) 715-6450

Email: wajahat.nyaz@dot.ca.gov

#### **TRANSPORTATION AUTHORITY OF MARIN**

Nicholas Nguyen, Project Delivery Manager

900 5th Avenue, Suite 100

San Rafael, CA 94910

Office Phone: (415) 226-0831

Email: NNguyen@tam.ca.gov

## **SIGNATURES**

PARTIES are empowered by the law to enter into this AGREEMENT and have delegated to the undersigned the authority to execute this AGREEMENT on behalf of the respective agencies and covenants to have followed all the necessary legal requirements to validly execute this AGREEMENT.

This AGREEMENT may be executed and delivered in counterparts, and by each PARTY in a separate counterpart, each of which when so executed and delivered shall constitute an original and all of which taken together shall constitute one and the same instrument.

The PARTIES acknowledge that executed copies of this AGREEMENT may be exchanged by facsimile or email, and that such copies shall be deemed to be effective as originals.

**STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION**

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Helena (Lenka) Culik-Caro  
Deputy District Director, Design

**VERIFICATION OF FUNDS AND  
AUTHORITY:**

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Jeff Armstrong  
District Budget Manager

**TRANSPORTATION AUTHORITY OF  
MARIN**

---

Anne Richman  
Executive Director

Attest:

---

Denise Merleno  
Executive Assistant

Approved as to form and procedure:

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Brian Case  
County Counsel

**FUNDING SUMMARY NO. 01**

<b><u>FUNDING TABLE</u></b>					
<b><u>IMPLEMENTING AGENCY →</u></b>			<b><u>CALTRANS</u></b>		<b>Totals</b>
<b>Source</b>	<b>Party</b>	<b>Fund Type</b>	<b>CONST. SUPPORT</b>	<b>CONST. CAPITAL</b>	
STATE	CALTRANS	SB-1 SCCP	14,850,000	25,268,000	40,118,000
LOCAL	TAM	Local (RM3)	2,500,000	78,378,000	80,878,000
<b>Totals</b>			17,350,000	103,646,000	120,996,000

<b><u>SPENDING SUMMARY</u></b>				
<b>Fund Type</b>	<b>CONST. SUPPORT</b>		<b>CONST. CAPITAL</b>	<b>Totals</b>
	<b><u>CALTRANS</u></b>	<b>TAM</b>	<b><u>CALTRANS</u></b>	
SB-1 SCCP	14,850,000	0	25,268,000	40,118,000
Local (RM3)	0	2,500,000	78,378,000	80,878,000
<b>Totals</b>	14,850,000	2,500,000	103,646,000	120,996,000

## **Funding**

1. If there are insufficient funds available in this AGREEMENT to place the PROJECT right-of-way in a safe and operable condition, the appropriate PROJECT SPONSOR will fund these activities until such time as PARTIES amend this AGREEMENT.

That IMPLEMENTING AGENCY may request reimbursement for these costs during the amendment process.

2. If there are insufficient funds in this AGREEMENT to implement the obligations and responsibilities of this AGREEMENT, including the applicable commitments and conditions included in the PROJECT environmental documentation, permits, agreements, and/or approvals that are in effect at a time that WORK stops, each PARTY accepts responsibility to fund their respective WORK until such time as PARTIES amend this AGREEMENT.

Each PARTY may request reimbursement for these costs during the amendment process.

## **ICRP Rate**

3. The cost of any engineering support performed by CALTRANS includes all direct and applicable indirect costs. CALTRANS calculates indirect costs based solely on the type of funds used to pay support costs. State and federal funds administered by CALTRANS are subject to the current Program Functional Rate. All other funds are subject to the current Program Functional Rate and the current Administration Rate. The Program Functional Rate and Administration Rate are adjusted periodically.

In accordance with California Senate Bill 848, the Administration Rate is capped at 10 percent until July 1, 2021, for Self-Help Counties with a countywide sales tax measure dedicated to transportation improvements.

## **Invoicing and Payment**

4. PARTIES will invoice for funds where the SPENDING SUMMARY shows that one PARTY provides funds for use by another PARTY. PARTIES will pay invoices within forty-five (45) calendar days of receipt of invoice.
5. CALTRANS will draw from state and federal funds that are provided by TAM without invoicing TAM when CALTRANS administers those funds and CALTRANS has been allocated those funds by the CTC and whenever else possible.



6. If TAM has received EFT certification from CALTRANS, then TAM will use the EFT mechanism and follow all EFT procedures to pay all invoices issued from CALTRANS.
7. When a PARTY is reimbursed for actual cost, invoices will be submitted each month for the prior month's expenditures. After all PROJECT COMPONENT WORK is complete, PARTIES will submit a final accounting of all PROJECT COMPONENT costs. Based on the final accounting, PARTIES will invoice or refund as necessary to satisfy the financial commitments of this AGREEMENT.

CONSTRUCTION Support

8. No invoicing or reimbursement will occur for the CONSTRUCTION SUPPORT PROJECT COMPONENT.

CONSTRUCTION Capital

9. CALTRANS will invoice TAM for a \$300,000 initial deposit after execution of this AGREEMENT and forty-five (45) working days prior to the commencement of CONSTRUCTION CAPITAL expenditures.

Thereafter, PARTIES will invoice and reimburse for actual costs incurred and paid.

ATTACHMENT H

TRANSPORTATION MANAGEMENT PLAN  
REPORT

# **TRANSPORTATION MANAGEMENT PLAN**

## **US 101 MARIN/SONOMA NARROWS - SEGMENT B7 HOV WIDENING PROJECT FROM PM R20.9 TO PM 27.0**

Prepared for

**California Department of Transportation, District 4**

Prepared by

**BKF ENGINEERS  
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**June, 2020**

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TBD

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## 1. PROJECT DESCRIPTION

The California Department of Transportation (Caltrans), in cooperation with Federal Highway Administration (FHWA) and the Transportation Authority of Marin (TAM) propose to make improvements on United States Highway (US) 101 through the Marin/Sonoma Narrows (MSN) between just south of the Franklin Avenue Overhead Structure in the City of Novato to just south of the Sonoma County Line for a total of 6.1 miles. The project limits are divided into three segments; generally speaking, the locations include Segment A (Novato), Segment B (Novato to Petaluma), and Segment C (Petaluma).

The three project segments are further divided into sub segments (e.g. A1 and B1). The project segments are to be completed in two primary construction phases. Phase 1 is fully funded and includes segments A1, B1, B2/B4, B3 and C1. Phase 2 will include remaining work within or between these segments, including this project known as Marin Sonoma Narrows – Phase 2, referred to as “MSN B7” or “Project” in this report. The Phase 2 projects, including this Project, were originally programmed in the RTIP and securing funding for the remaining MSN corridor work, is a high priority for Caltrans and TAM. The Project will be funded by Regional Measure 3. The project schedule is to complete final design and ready to list (RTL) by December 2019.

MSN B7 will include transportation improvements on Route 101 in Marin County, in Novato, from Franklin Avenue Overhead to 1.5 mile north of Redwood Landfill Overcrossing.

The Project will modify existing US 101 to accommodate three 12-foot single occupancy vehicle (SOV) lanes, a 12-foot occupancy vehicle (HOV) lane, and 10-foot inside and outside shoulders, in the southbound direction. The majority of southbound US 101 will be widened within the median to accommodate the new HOV lanes. The Project will also widen the Franklin Avenue Overhead Bridge (Bridge No. 27-0090L) and Olive Avenue Undercrossing (Bridge No. 27-0092L) in the southbound direction to accommodate the new HOV lanes.

In the northbound direction, US 101 will be widened within the median, from the City of Novato/Marin County limit to the northern Project limit to accommodate three 12-foot single occupancy vehicle (SOV) lanes, a 12-foot occupancy vehicle (HOV) lane, and 10-foot inside and outside shoulders. This will require the removal of existing double thrie-beam barriers within the median. A new concrete barrier will be constructed to separate the northbound and southbound lanes along this stretch.

Reconstruction of the diagonal on- and off-ramps at the Redwood Landfill Overcrossing interchange in both the northbound and southbound directions will also be required as part of the Project improvements.

For the northbound US101 segment, the Project will connect the existing HOV lane terminus from the northerly limits of the constructed MSN A3 project to the southerly limits of the MSN B3 and B2/P2 project south of San Antonio Creek (approximately 6.1 miles). For the southbound segment, the Project connects the southerly limits of the MSN B3 (and B2/P2) project to the northerly limits of the constructed MSN A2 project south of the Franklin Avenue Overhead (3.4 miles).

The Project is the final MSN segment slated for completion, and is essentially a high occupancy vehicle (HOV) gap closure project providing HOV continuity from Novato through Petaluma.

## **1.1. EXISTING FACILITIES**

Within the Segment MSN B7 project limits, US 101 is a freeway with access-controlled right of way in the City of Novato to the Sonoma County Line. From the southern limits of the Project limits, northbound US 101 accommodates two 12-foot HOV lane and three 12-foot SOV lanes. North of the North Novato Overhead, the freeway is reduced from four lanes to three lanes. Approximately 0.5 mile further north, northbound US 101 is reduced from three lanes to two lanes. From the northern limits, southbound US 101 provides two 12-foot SOV lanes. Approximately 1.1 miles north of the Atherton Avenue Interchange, southbound US 101 widens from a two lanes to three 12-foot SOV lanes. After the Franklin Avenue Overhead, the US 101 freeway widens to provide on 12-foot HOV lane and three 12-foot SOV lanes. The outside shoulders vary between 8 to 10 feet wide and inside shoulders vary between 4 to 10 feet wide, in both directions. The median varies between 22 and 54 feet wide and contains a double thrie-beam barrier or concrete barrier. The posted maximum speed is 65 miles per hour (mph) and the design speed is 65 mph for both directions.

The Project limits contains six existing structures:

- Franklin Avenue Overhead (Bridge No. 27-0090L/R)
- De Long Avenue Overcrossing (Bridge No. 27-0091)
- Olive Avenue Undercrossing (Bridge No. 20-27-0092L/R)
- Atherton Avenue Overcrossing (Bridge No. 27-0093)
- North Novato Overhead (Bridge No. 27-0094L/R)
- Redwood Landfill Overcrossing (Bridge No. 27-0115)

## **2. TRANSPORTATION MANAGEMENT PLAN SUMMARY**

The Transportation Management Plan (TMP) is a specialized program tailored to prevent and mitigate the impacts of the construction project by applying a variety of techniques including *Motorist Information, Incident Management, Construction Strategies and Public Awareness Strategies*. The major objectives of the TMP are to maintain efficient and safe movement of vehicles through the construction zone; and provide intensive public awareness of potential impacts on US 101.

The TMP proposes a program of public information, motorist information and an incident management and response. The public information program would consist of media notification, telephone hotline, press release and traveler information system (Internet). The driver information program would notify drivers of freeway closures and detours using variable messages. The incident management will alert the California Highway Patrol to accidents under COZEEP program.

### **3. TRANSPORTATION MANAGEMENT PLAN STRATEGIES**

This section describes possible TMP strategies to mitigate construction-related traffic delays. The TMP strategies are of a general nature and mitigate the overall level of congestion. The strategies are grouped into five broad transportation management strategies:

- Public information
- Motorist Information Strategies
- Incident Management
- Construction Strategies
- Demand Management

Transportation management strategies that require action by the construction contractor are described briefly in the TMP and presented in detail in the project Technical Specifications. Transportation management strategies that are to be implemented by Caltrans appear only in the TMP and are not included in the contract Technical Specifications.

#### **3.1. Public Information**

Public awareness activities will be provided specifically for this project. These activities are as follows, but not limited to:

##### **3.1.1. Telephone Hotlines**

As appropriate, the contractor shall provide information regarding upcoming and current construction stages, lane closures, and detours for inclusion on 511 and other telephone hotlines as applicable. At a minimum, public hotline recordings should include a brief description of imminent construction activity, hours of impact, and detours. Caltrans in partnership with other local agencies will administrate the procedure. The contractor shall coordinate all hotline messages through the Resident Engineer (RE).

##### **3.1.2. Traveler Information System (Internet)**

As appropriate, the contractor shall provide the same messages provided through telephone hotlines to be posted on the Caltrans (<http://www.dot.ca.gov/dist4/projects.htm>) and any other websites per direction of the Transportation Authority of Marin (TAM). In addition, real time traffic information should be provided. The websites post project specific information, construction updates, and meeting information.



### **3.1.3. Media and Press Releases**

Press releases shall also be provided for inclusion on websites as mentioned previously. Press releases along with lane closure schedules should be provided for public awareness through media notification, which may include newspapers, television, radio, etc. Construction information, including notices of closures and other events affecting the traveling public, will be released to the press through the Caltrans Public Information Office.

### **3.1.4. Other Public Awareness Strategies**

The contractor shall provide the RE with detailed information concerning project schedule, including proposed times when a highway lane closure will be required in advance of the activity. Timely project status reports will be forwarded by the RE to TAM, police departments of Novato and Petaluma, the California Highway Patrol (CHP); and a designated Caltrans representative.

### **3.1.5. Authority Community Outreach**

The Caltrans Project Construction Manager (PCM), shall provide community outreach for this project through various methods such as construction updates on their websites, maintaining a hotline and/or approving hotline messages, and producing brochures and fliers, all as deemed necessary by Caltrans and TAM .

## **3.2. Motorist Information Strategies**

Motorist information system provides advance information regarding potential delays and/or available detours during construction zone throughout the project. The contractor will be required to comply with construction signing standards for all work that occurs in the State right of way, including connectors and ramps. The strategies include two measures: Changeable Message Signs (CMS), and Ground Mounted Signs.

### **3.2.1. Portable Changeable Message Signs (PCMS)**

The function of Portable Changeable Message Signs is to alert drivers to changing travel conditions in the construction zone such as congestion and detours and improve their opportunity to change routes or adjust travel plans. PCMSs can also be used to announce upcoming freeway or ramp closures. Messages should conform to Caltrans Guidelines and PCMS should be limited to real-time conditions such as an ongoing freeway lane closure, lane shifts, or short term advance notice of changing conditions such as lane closure within the week. For advance notice of lane closures and other events, it is recommended that a standard sign package to be used. The RE is responsible for monitoring message content and PCMS deployment. At least one portable PCMS should be utilized for every lane closure or ramp closure. When traffic is detoured, additional PCMSs shall be provided.

### **3.2.2. Ground Mounted (Stationary) Signs**

Ground mounted construction and warning signs provide information about immediate road hazards to motorists and announce upcoming freeway or ramp closures. The RE may provide input regarding numbers of signs needed.

Additionally, construction notice signing shall be installed two weeks in advance of the start of construction and notices of construction activities should be submitted to local police departments and transit agencies. Signing showing the estimated dates for the beginning and end of construction should be posted in advance of the project limits in each direction and shall be maintained throughout the duration of construction.

### **3.2.3. Commercial Traffic Radio, Television and Other Media**

Caltrans will include all major local media resources; including local commercial traffic, radio, and television stations in the standard distribution of Media and Press Releases. Real-time traffic information shall be distributed to commercial traffic radio stations. Content for press releases will be provided by the PCM.

## **3.3. Incident Management**

Incident management strategies are designed to increase safety in the construction zone by quickly identifying and removing disabled vehicles or accidents and notifying appropriate emergency services.

Incident detection and response system include Construction Zone Enhanced Enforcement Program (COZEEP).

### **3.3.1. Construction Zone Enhanced Enforcement Program (COZEEP)**

The program involves continuous presence of the California Highway Patrol (CHP) in the construction zone, which provides enforcement of speed restriction and faster incident response. It is highly recommended that a COZEEP be established for the duration of construction. During local street and freeway closure, CHP officers and local police officers should be stationed at the beginnings of detours, at key intersections on the detour routes, and provide traffic control when traffic signals at intersections in the construction zones are not operating. Enhanced enforcement would most likely be used during local street and freeway closures but could be established at others at the discretion of the CM or RE.

The CHP bills their actual hours to the Caltrans District 4 Construction Office and are paid for as State Furnished Materials. The estimated COZEEP unit cost for lane closures is as follows.

- One officer per six hour weekday shift for \$750
- One officer per eight hour weekday shift for \$1000
- Two officers per eight hour weekday night shift for \$2000
- Two officers per ten hour weekend night shift for \$2500

COZEER usage shall be at the discretion of the RE. The contractor shall also coordinate all construction activities with the Caltrans Transportation Management Center (TMC), as appropriate.

### **3.3.2. Maintain Traffic Supplemental Work**

The program involves flagging, additional unforeseen lane closures, temporary signs, etc, for maintaining traffic over the duration of the entire construction.

## **3.4. Construction Strategies**

Construction strategies are being considered for the construction of this project. Construction will be divided and completed in several stages. The key features of stage construction are to schedule work to minimize traffic impacts. This will be accomplished by scheduling all work requiring lane and/or ramp closures to non-peak hours only, typically in the late night/early morning hours, and weekend. The lane closure charts and damage clauses of this project will be prepared and included in the Special Provision during the PS&E phase of the project. Detailed stage construction, traffic handling, and detour plans will be provided at PS&E level.

### **3.4.1. Stage Construction and Traffic Handling**

Construction strategies will be developed by the contractor in conjunction with Caltrans. In addition to the stage construction and traffic handling plans in the PS&E, the contractor shall prepare any necessary stage construction and traffic handling plans to be approved by Caltrans in order to minimize lane closures, traveler delay, and inconvenience.

Temporary pavement delineation will be used to shift traffic if necessary on the US 101 mainline, ramps, and local streets. Temporary signs, concrete railing (Type K), and crash cushions will be provided for public and contractor safety.

#### **3.4.1.1. Stage 1**

Stage 1A consists of construction of the temporary pavement on the outside needed for Stage 1B. This will be done with narrowing of the right shoulder in the NB direction. Also, bridge construction will be being during stage 1A.

Stage 1B will consist of construction of the inside widening, continuation of widening of the bridge, and construction of the barrier along the median. During this stage lanes will be shifted towards the outside. Shoulders will be either closed or narrowed.

#### **3.4.1.2. Stage 2**

During Stage 2, the remaining of the roadway construction will be done. Lanes will be shifted towards the inside as necessary to maintain two or 3 northbound lanes open.

The estimated number of working days requiring traffic control for all stages is approximately 25 days.

### **3.4.1.3. Temporary Traffic Control Devices**

Two types of control devices are typical used on this type of projects:

- Channelizing devices - Cones, barricades, and other portable barriers maybe be used in different configurations for short term temporary traffic handling.
- Portable barriers – Conventional temporary barriers, such as K-rail, can be used for traffic handling configuration to be used for long term periods.

Both of these types of devices will be used for this project. These items will be incorporated to the detail traffic handling plans at PS&E level.

### **3.5. Demand Management**

Due to the significant levels of construction throughout the corridor, a reduction in traffic demand during peak periods will help reduce the levels of congestion in the working zones. Caltrans will coordinate with other transit agencies to encourage the public to use public transportation during the construction period. In addition, through public outreach and public information process, Caltrans, and other local agencies may encourage other demand reduction strategies such as ride sharing and alternate work hour schedules.

## **4. CONTINGENCY PLAN**

The contractor shall be required to submit a traffic control plan at least one week prior to any lane closure, freeway closure, stage change, intersection or ramp closure, or any critical operation identified by the RE. The traffic control plan shall contain a detailed contingency plan to ensure opening of the roadway by the designated time. During construction activities requiring roadway, ramp, or lane closure, the contractor shall provide appropriate personnel to monitor activities and make decisions regarding activation of contingency plans. As soon as it becomes evident during any construction activity that it will not be possible to complete such activity and remove the closure at the designated time, that activity shall be halted and postponed until a later date.

The contingency plan shall identify key operational decision points with a timeline listing the expected completion time of each critical path activity. Clearly defined trigger points shall be identified with each critical path activity to be established when the contingency plan will be activated. The plan will list and describe any and all standby equipment and secondary material suppliers, to be available to complete the operations in the event of equipment failure, unexpected loss of material, or unexpected uselessness of material.

In cases where it will not be possible to open the roadway by the designated time, the contingency plan shall also outline the steps that shall be taken to safely and efficiently direct traffic, such as the implementation of traffic control officers and additional advance warning until the roadway can be safely reopened.

A decision tree with clearly defined lines of communication and authority shall be provided in the contingency plan. The names, telephone numbers and pager numbers of the Contractor's Project Manager, the RE, Caltrans Permit and/or Construction Inspector, District 4 Traffic Management Centers, CHP Area Commander, Emergency Services, and other applicable personnel shall be provided.

## **5. COORDINATION**

### **5.1.1. Weekly Schedule Meeting**

The contractor shall have the current three week look-ahead schedule available at routine weekly meetings with the RE. The contractor shall also be responsible for coordinating with other contractors, agencies or their authorized personnel or representatives performing work within their contract limits.

### **5.2. Weekly Schedule Meeting**

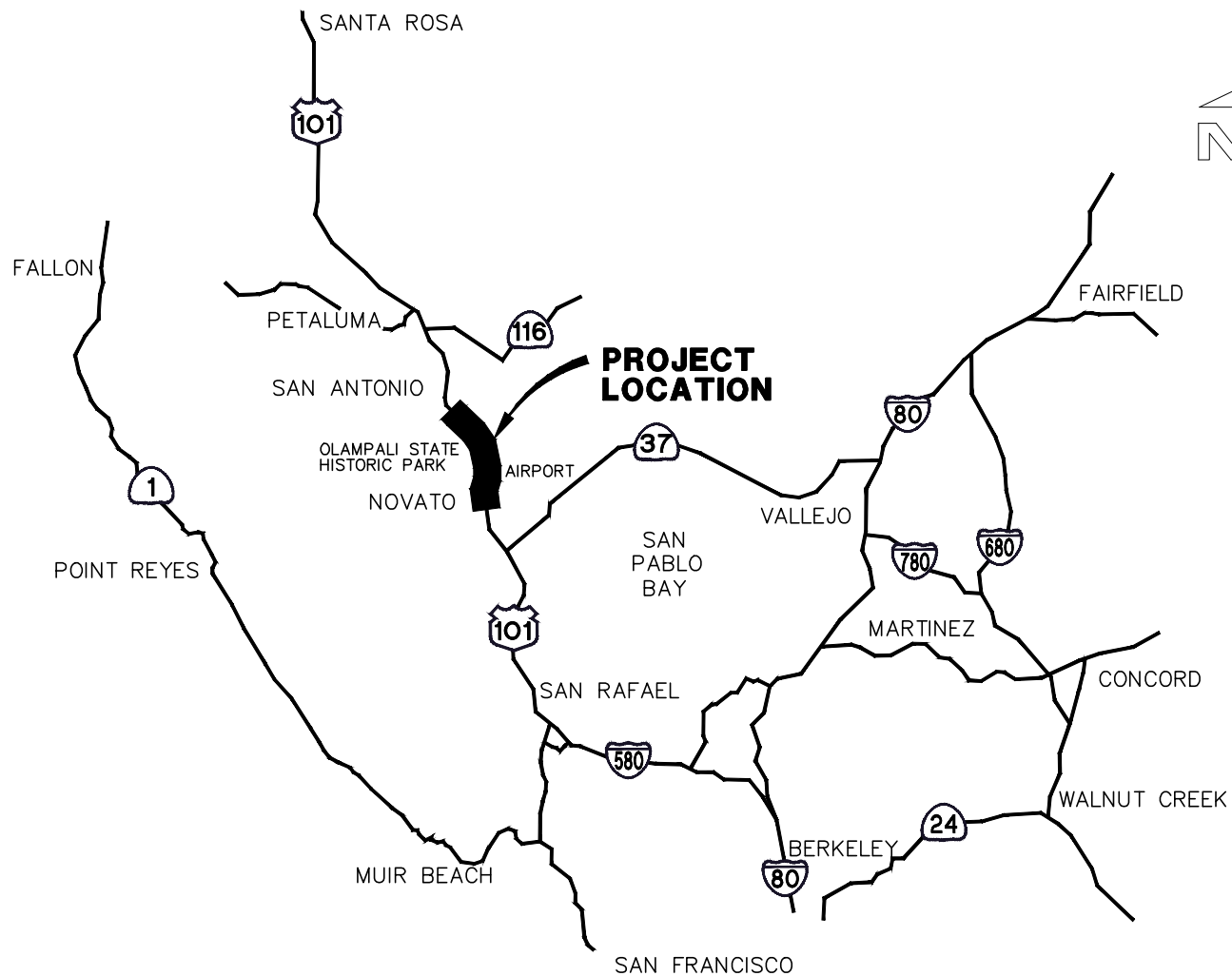
Advance notice of any closures or changes to traffic patterns shall be provided to the various stakeholders affected. Table 2 is the Contact Personnel Matrix listing known stakeholders. The Project Construction Manager shall update this list as needed during the project.

## **6. CORRESPONDENCE WITH LOCAL AUTHORITIES**

The City of Novato and County of Marin have been active partners of the PDT team and have concurred on the TMP Strategies, including detours as shown in Attachment E by commenting on the plans.

# **FIGURE 1**

Vicinity Map



## MARIN/SONOMA NARROWS - SEGMENT A4 & B1 PHASE 2 HOV WIDENING PROJECT

IN MARIN COUNTY

FROM 0.1 MILES SOUTH OF FRANKLIN OVERHEAD  
TO 0.2 MILES SOUTH OF THE SONOMA COUNTY LINE

04-Mrn-101, PM R20.9/27.0

### PROJECT VICINITY MAP

NOT TO SCALE

# TABLE 1

Roles and Responsibilities/Cost Estimate



**Table 1: Roles and Responsibilities / Cost Estimate**

	<b>Traffic Management Measure</b>	<b>Responsible Agency</b>	<b>Action Required</b>	<b>Cost</b>	<b>Comments</b>
1	COZEEP	California Highway Patrol, Caltrans	Increase CHP presence during lane and ramp closure	\$450,000	Included in PS&E/BEES
2	Ground Mounted Signs	Contractor	Install ground mounted signs to provide information regarding any road hazards to motorists	\$60,000	Included in PS&E/BEES
3	Portable Changeable Message Signs	Contractor	Install portable CMSs announcing delays, detours, and upcoming construction. Message content and deployment supervised by RE.	See Comment	Included in PS&E/BEES under "Traffic Control System"
4	Staging & Detours	Contractor	Establish detour routes, signing and flagging through the construction zone.	See comment	Various items included in the PS&E/BEES
5	Press releases	Caltrans	Provide project and construction information through media	\$20,000	Included in PS&E/BEES under "TMP-Public Information"
6	Telephone Hotline	Caltrans	Provide construction information to public by TRAVINFO operated by Caltrans and the Authority.	\$15,000	Included in PS&E/BEES under "TMP-Public Information"
7	Traveler Information System	Caltrans	Provide real time traffic information on Caltrans web site	\$15,000	Included in PS&E/BEES under "TMP-Public Information"
8	Public Information	Caltrans	Provide up-to-date project information on the Caltrans website ( <a href="http://www.dot.ca.gov/dist44/projects.htm">http://www.dot.ca.gov/dist44/projects.htm</a> ) and organize meetings and provide speakers as needed.	\$ 100,000	Included in PS&E/BEES under "TMP-Public Information"
Total				\$660,000	

## **TABLE 2**

Contact List

**Table 2: Contact List**

Organization	Organization	Contact	Title	Telephone	Email Address
California Highway Patrol	Transportation Management Center	John Carman	Sergeant	510-286-6909	<a href="mailto:jcarman@chp.ca.gov">jcarman@chp.ca.gov</a>
Caltrans District 4	Construction	Farhad Farazmand	Construction Manager	415-257-3626	<a href="mailto:Farhad_farazmand@dot.ca.gov">Farhad_farazmand@dot.ca.gov</a>
	Project Management	Betcy Joseph	Project Manager	510-286-5097	<a href="mailto:betcy_joseph@dot.ca.gov">betcy_joseph@dot.ca.gov</a>
	Design	Shawn Enjily	Supervising Engineer	510-622-0747	<a href="mailto:shawn_enjily@dot.ca.gov">shawn_enjily@dot.ca.gov</a>
	Highway Operations	Evelyn Gestuvo	Senior Transportation Engineer	510-286-4939	<a href="mailto:Evelyn_gestuvo@dot.ca.gov">Evelyn_gestuvo@dot.ca.gov</a>
	Public Information	Robert Haus	Public Affairs	510-286-5576	<a href="mailto:robert_haus@dot.ca.gov">robert_haus@dot.ca.gov</a>
	District Traffic Management	Raoul Maltez	District 4 Traffic Manager	510-286-6910	<a href="mailto:raoul.maltez@dot.ca.gov">raoul.maltez@dot.ca.gov</a>
		Ramin Bolourchian	TMT Supervisor	510-286-4767	<a href="mailto:ramin_bolourchian@dot.ca.gov">ramin_bolourchian@dot.ca.gov</a>
		Seyed Noorbaksh	DTM TMP Coordinator	510-286-5517	<a href="mailto:seyed.noorbkhsh@dot.ca.gov">seyed.noorbkhsh@dot.ca.gov</a>
	Transportation Management Center	Raoul Maltez	District 4 Traffic Manager	510-286-6910	<a href="mailto:raoul.maltez@dot.ca.gov">raoul.maltez@dot.ca.gov</a>
	Transit Coordination	Becky Frank	Associate Planner	510-286-5536	<a href="mailto:becky_frank@dot.ca.gov">becky_frank@dot.ca.gov</a>
	FSP	Kane Wong	PSP Program Coordinator	510-286-5917	<a href="mailto:kane_wong@dot.ca.gov">kane_wong@dot.ca.gov</a>
	Public Information	Mark Wagner	Public Affairs Officer	510-622-8758	<a href="mailto:mark_wagner@dot.ca.gov">mark_wagner@dot.ca.gov</a>
Transportation Authority of Marin		Connie Fremier	Project Manager	510-867-7529	<a href="mailto:connie@valicooper.com">connie@valicooper.com</a>
TravelInfo (511)		Joan Ravier	Operations Manager	510-286-6845	<a href="mailto:joan_river@telvent.abengoa.com">joan_river@telvent.abengoa.com</a>

# **APPENDIX A**

## Lane Closures Charts

Chart No. <b>G1</b> <b>Freeway Lane Requirements</b>																									
County: <u>Marin</u>										Route/Direction: <u>101/NB</u>										Post Mile: <u>R20.9/27.0</u>					
Closure limits: <u>From Franklin Ave Overhead to 0.2 Miles South of the Sonoma/Marin County Line</u>																									
Hour	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mon–Thu	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>																			<u>1</u>
Fri	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>																			
Sat	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>																		
Sun	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>																	<u>1</u>
Legend: <div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="border: 1px solid black; width: 20px; height: 15px; margin-right: 5px;"></div> <div>1 Provide at least 1 through <u>freeway</u> lane open in the direction of travel.</div> </div> <div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="border: 1px solid black; width: 20px; height: 15px; margin-right: 5px;"></div> <div>Work is allowed within the highway where a shoulder or lane closure is not required.</div> </div>																									
REMARKS:																									

Chart No. <b>G2</b> <b>Freeway Lane Requirements</b>																									
County: <u>Marin</u>										Route/Direction: <u>101/SB</u>										Post Mile: <u>R20.9/27.0</u>					
Closure limits: <u>From 0.2 Miles South of the Sonoma/Marin County Line to Franklin Ave Overhead</u>																									
Hour	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mon–Thu	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>																					<u>1</u>
Fri	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>																					<u>1</u>
Sat	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>																			
Sun	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>																		<u>1</u>
Legend: <div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="border: 1px solid black; width: 20px; height: 15px; margin-right: 5px;"></div> <div>1 Provide at least 1 through <u>freeway</u> lane open in the direction of travel.</div> </div> <div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="border: 1px solid black; width: 20px; height: 15px; margin-right: 5px;"></div> <div>Work is allowed within the highway where a shoulder or lane closure is not required.</div> </div>																									
REMARKS:																									

<b>Chart No. <u>J1</u></b> <b><u>Complete Ramp Closure Hours</u></b>																											
County: <u>Marin</u>														Route/Direction: <u>101/NB</u>							Post Mile: <u>25.7</u>						
Closure limits: <u>At On-ramp from San Antonio Rd</u>																											
Hour	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
Mon–Thu	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>																		<u>C</u>	<u>C</u>		
Fri	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>																		<u>C</u>	<u>C</u>		
Sat	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>																		<u>C</u>	<u>C</u>		
Sun	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>																		<u>C</u>	<u>C</u>		
Legend: <div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="border: 1px solid black; width: 20px; height: 15px; display: flex; align-items: center; justify-content: center; margin-right: 5px;">C</div> Ramp may be closed completely. </div> <div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="border: 1px solid black; width: 20px; height: 15px; display: flex; align-items: center; justify-content: center; margin-right: 5px;"></div> Work is allowed within the highway where a shoulder or lane closure is not required. </div>																											
REMARKS: See Detour Plan No.2 on CS-Sheets for Traffic Detour																											

<b>Chart No. <u>J2</u></b> <b><u>Complete Ramp Closure Hours</u></b>																											
County: <u>Marin</u>														Route/Direction: <u>101/NB</u>							Post Mile: <u>25.4</u>						
Closure limits: <u>At Off-ramp to San Antonio Rd</u>																											
Hour	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
Mon–Thu	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>																		<u>C</u>	<u>C</u>		
Fri	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>																		<u>C</u>	<u>C</u>		
Sat	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>																		<u>C</u>	<u>C</u>		
Sun	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>																		<u>C</u>	<u>C</u>		
Legend: <div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="border: 1px solid black; width: 20px; height: 15px; display: flex; align-items: center; justify-content: center; margin-right: 5px;">C</div> Ramp may be closed completely. </div> <div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="border: 1px solid black; width: 20px; height: 15px; display: flex; align-items: center; justify-content: center; margin-right: 5px;"></div> Work is allowed within the highway where a shoulder or lane closure is not required. </div>																											
REMARKS:																											

<b>Chart No. <u>J3</u></b> <b><u>Complete Ramp Closure Hours</u></b>																									
County: <u>Marin</u>													Route/Direction: <u>101/SB</u>							Post Mile: <u>25.5</u>					
Closure limits: <u>At On-ramp from San Antonio Rd</u>																									
Hour	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mon–Thu	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>																		<u>C</u>	<u>C</u>
Fri	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>																		<u>C</u>	<u>C</u>
Sat	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>																		<u>C</u>	<u>C</u>
Sun	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>																		<u>C</u>	<u>C</u>
Legend: <div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="border: 1px solid black; width: 20px; height: 15px; display: inline-block; margin-right: 5px;"></div> <div>C Ramp may be closed completely.</div> </div> <div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="border: 1px solid black; width: 20px; height: 15px; display: inline-block; margin-right: 5px;"></div> <div>Work is allowed within the highway where a shoulder or lane closure is not required.</div> </div>																									
REMARKS: See Detour Plan No.1 on CS-Sheets for Traffic Detour																									

<b>Chart No. <u>J4</u></b> <b><u>Complete Ramp Closure Hours</u></b>																									
County: <u>Marin</u>													Route/Direction: <u>101/SB</u>							Post Mile: <u>25.7</u>					
Closure limits: <u>At Off-ramp to San Antonio Rd</u>																									
Hour	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mon–Thu	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>																		<u>C</u>	<u>C</u>
Fri	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>																		<u>C</u>	<u>C</u>
Sat	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>																		<u>C</u>	<u>C</u>
Sun	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>																		<u>C</u>	<u>C</u>
Legend: <div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="border: 1px solid black; width: 20px; height: 15px; display: inline-block; margin-right: 5px;"></div> <div>C Ramp may be closed completely.</div> </div> <div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="border: 1px solid black; width: 20px; height: 15px; display: inline-block; margin-right: 5px;"></div> <div>Work is allowed within the highway where a shoulder or lane closure is not required.</div> </div>																									
REMARKS:																									

<b>Chart No. <u>M1</u></b> <b><u>Complete City Street Closure Hours</u></b>																											
Location: <u>Olive Ave</u>														Direction: <u>EB/WB</u>													
Closure limits: <u>Between Kenwood Ct and Elmwood Ct</u>																											
Hour	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
Mon– Thu	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>		
Fri	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>		
Sat	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>		
Sun	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>		
Legend:																											
<u>C</u>	Street may be closed.																										
<u>N</u>	No work is allowed.																										
REMARKS: The number of through traffic lanes in each direction of travel is <u>1</u> . See Detour Plan No.3 on CS-Sheets for Traffic Detour																											

<b>Chart No. <u>M2</u></b> <b><u>Complete City Street Closure Hours</u></b>																											
Location: <u>Redwood Blvd</u>														Direction: <u>NB/SB</u>													
Closure limits: <u>Between Atherton Ave and Buck Center Dr</u>																											
Hour	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
Mon– Thu	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>																						
Fri	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>																						
Sat	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>																						
Sun	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>																						
Legend:																											
<u>1</u>	Provide at least 1 city street lane open in the direction of travel.																										
REMARKS:																											



# **APPENDIX B**

Damages for Late Lane Reopening

Route :

**US 101**

Location

**From Frankling Ave OH to 0.2 miles south of the Sonoma County line**

Traffic Date

**Apr-19**

Closure

Mainline Lane Closure (Close one Lane in the northbound direction to 6 am)

Adjusted Capacity

**1200** VPH

Hour of Day	Demand*	Capacity	Cum Demand	Cum Capacity	Cum Queue	Average Queue	Time interval	Delay interval	unit delay cost	total delay cost
	a	b	c	d	e	f	g	h	i	j
	a	b	a1+a2+...	b1+b2+...	c-d	(e1+e2)/2		fxg	C	hxi
	VPH	VPH	VPH	VPH	VPH	VPH	min	Vphxmin	\$	\$
06-07AM	1309	1200	1309	1200	109	55	60	3270	\$0.273	\$893
07-08AM	1962	1200	3271	2400	871	490	60	32670	\$0.273	\$8,919
08-9AM	2108	1200	5379	3600	1779	1325	60	112170	\$0.273	\$30,622

Truck % = **0.05**

Unit delay cost, C = \$0.273 [C= 0.26 (1-T%)+0.52xT%]

(Based on \$.26 for VEH and \$.52 for truck.

**Cumulative delay at the end of 2nd hour = \$8,919**

**Delay Cost for 10 min = 8919 /12 = **\$743****

**Negative value means no delay cost**

\*Note: All data are from PeMS

PeMS Station VDS 412392, PM 25.66

Route :

**US 101**

Location

**From Frankling Ave OH to 0.2 miles south of the Sonoma County line**

Traffic Date

**Apr-19**

Closure

Mainline Lane Closure (Close one Lane in the southbound direction to 4 am)

Adjusted Capacity

**1200** VPH

Hour of Day	Demand*	Capacity	Cum Demand	Cum Capacity	Cum Queue	Average Queue	Time interval	Delay interval	unit delay cost	total delay cost
	a	b	c	d	e	f	g	h	i	j
	a	b	a1+a2+...	b1+b2+...	c-d	(e1+e2)/2		fxg	C	hxi
	VPH	VPH	VPH	VPH	VPH	VPH	min	Vphxmin	\$	\$
04-05AM	1290	1200	1290	1200	90	45	60	2700	\$0.273	\$737
05-06AM	2963	1200	4253	2400	1853	972	60	60990	\$0.273	\$16,650
06-07AM	3335	1200	7588	3600	3988	2921	60	236220	\$0.273	\$64,488

Truck % = **0.05**

Unit delay cost, C = \$0.273 [C= 0.26 (1-T%)+0.52xT%]

(Based on \$.26 for VEH and \$.52 for truck.

**Cumulative delay at the end of 2nd hour = \$16,650**

**Delay Cost for 10 min = 16650 /12 = **\$1,388****

\*Note: All data are from PeMS

PeMS Station VDS 412439, PM 25.54

# **APPENDIX C**

## **Traffic Volumes**

## Counts

Dist	Cnty	Rte	Prefix	PM	Leg	Dir	Description	Date	Day	2024																								24hr total
										0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	
4	Mnn	101		25.66	A	N	NB Mainline	Feb-20	M-Th	339	183	146	137	209	558	1309	1962	2108	1960	1996	2114	2298	2637	2981	3245	3332	3160	2690	1975	1593	1274	926	594	39723
4	Mnn	101		25.66	A	N	NB Mainline	Feb-20	Fri	440	254	161	173	225	499	1340	1879	2097	1952	2386	2574	2768	2893	3024	3170	3389	3174	2925	2384	1965	1636	1428	924	43660
4	Mnn	101		25.66	A	N	NB Mainline	Feb-20	Sat	558	313	202	167	139	302	691	1190	1750	2290	2661	2992	2911	2849	2830	2903	2747	2789	2377	1937	1652	1528	1392	983	40153
4	Mnn	101		25.66	A	N	NB Mainline	Feb-20	Sun	651	354	248	186	112	201	376	771	1242	1811	2242	2463	2435	2581	2565	2486	2365	2196	2098	1696	1450	1209	853	625	33216

PeMS Station VDS 412392, PM 25.66

## Counts

Dist	Cnty	Rte	Prefix	PM	Leg	Dir	Description	Date	Day	2024																								24hr total
										0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	
4	mrn	101	25.54	A	S	SB	Mainline	Feb-20	M-Th	199	182	200	511	1290	2963	3335	2664	2954	2827	2368	2087	2019	2035	2086	2125	2212	2181	1794	1217	904	716	537	333	39734
4	mrn	101	25.54	A	S	SB	Mainline	Feb-20	Fri	243	184	246	518	1206	2690	3333	2832	2810	2769	2610	2227	2424	2300	2268	2301	2579	2285	2078	1487	1170	945	813	502	42720
4	mrn	101	25.54	A	S	SB	Mainline	Feb-20	Sat	381	325	298	381	547	848	1210	1590	2233	2525	2543	2630	2470	2418	2583	2773	2825	2687	2380	1676	1342	1253	1051	700	39819
4	mrn	101	25.54	A	S	SB	Mainline	Feb-20	Sun	495	342	331	272	344	505	751	838	1389	2019	2504	2702	2670	2714	2750	2776	2867	2573	1980	1722	1497	1158	761	405	36365

PeMS Station VDS 412439, PM 25.54

Traffic Volumes  
Counts

**SB San Antonio Rd on-ramp**

Traffic Volumes										24 hour Period Hourly Counts																								
SB San Antonio Rd on-ramp																																		
Counts																																		
Dist	Cnty	Rte	Prefix	PM	Leg	Dir	Description	Date	Day	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24hr total
4	Mmn	101		25.50	S		San Antonio Rd onramp	Nov-19	M-Th	5	3	4	7	16	44	128	101	65	63	60	50	51	46	42	45	39	41	19	15	5	8	7	3	866
4	Mmn	101		25.50	S		San Antonio Rd onramp	Nov-19	Fri	3	7	8	8	15	34	86	82	72	55	58	43	40	38	49	40	39	42	21	24	10	15	16	8	813
4	Mmn	101		25.50	S		San Antonio Rd onramp	Nov-19	Sat	9	6	3	4	3	8	13	15	42	52	40	39	43	53	47	41	63	87	56	24	10	7	7	8	680
4	Mmn	101		25.50	S		San Antonio Rd onramp	Nov-19	Sun	2	1	2	1	1	2	5	11	9	39	40	51	44	52	57	57	46	79	85	15	11	8	7	4	629

PeMS Station VDS 412440, PM 25.5

Traffic Volumes  
Counts

**SB San Antonio Rd off-ramp**

Traffic Volumes										24 hour Period Hourly Counts																								
SB San Antonio Rd off-ramp																																		
Dist	Cnty	Rte	Prefix	PM	Leg	Dir	Description	Date	Day	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24hr total
4	mm	101		25.68	S		San Antonio Rd offramp	Nov-19	M-Th	4	1	2	3	5	12	11	21	20	20	20	18	19	22	17	9	8	7	6	5	4	4	4	4	241
4	mm	101		25.68	S		San Antonio Rd offramp	Nov-19	Fri	4	11	4	4	6	14	15	33	20	25	20	25	19	19	17	10	8	6	10	3	7	7	4	3	294
4	mm	101		25.68	S		San Antonio Rd offramp	Nov-19	Sat	4	3	1	0	2	9	9	10	18	10	9	6	11	13	13	9	5	7	13	1	2	4	4	3	166
4	mm	101		25.68	S		San Antonio Rd offramp	Nov-19	Sun	2	3	1	0	0	0	2	3	5	10	19	12	13	8	8	6	4	8	9	5	5	2	3	3	131

PeMS Station VDS 412441, PM 25.68

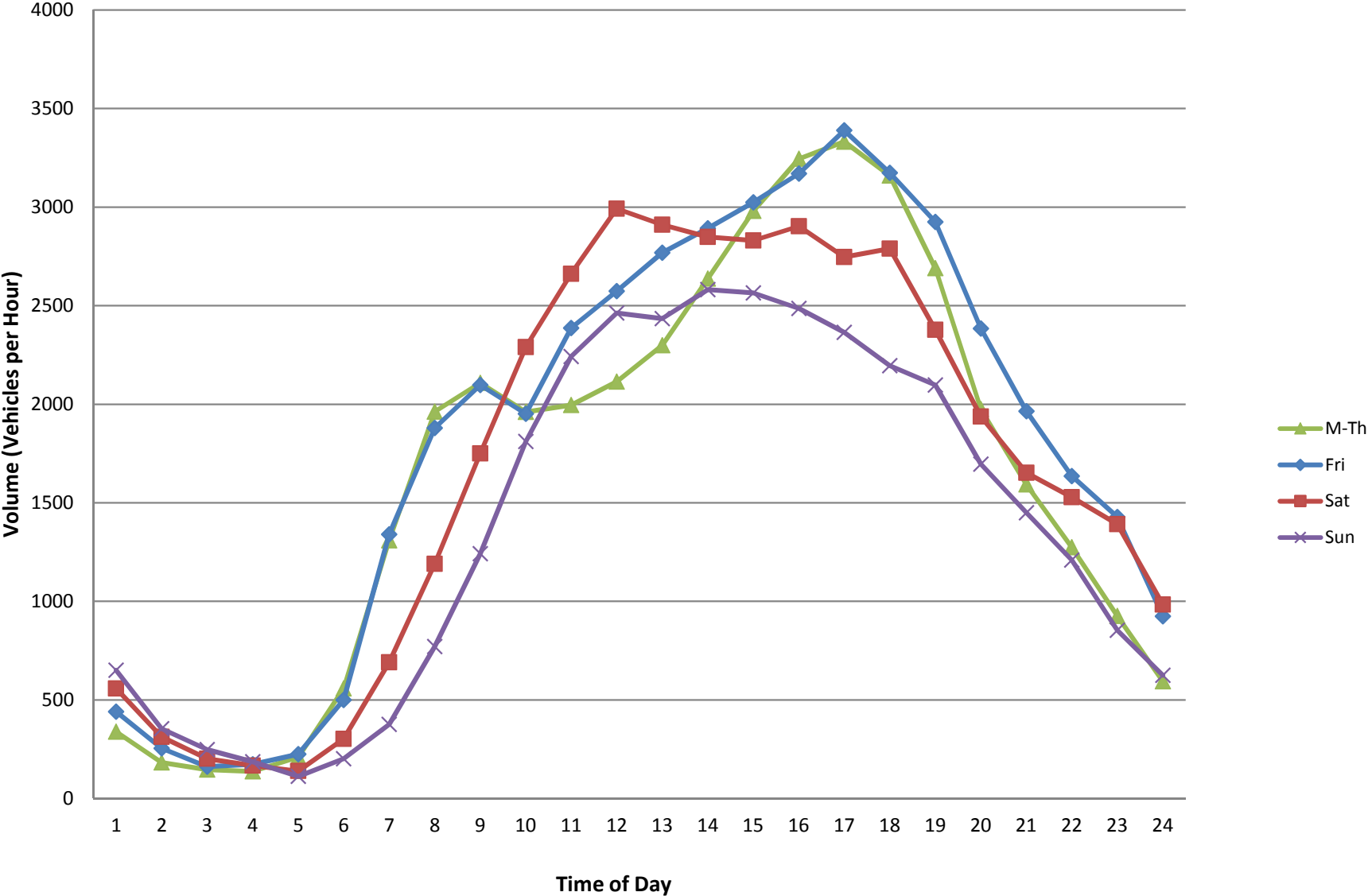
Traffic Volumes  
Counts

**NB San Antonio Rd on-ramp**

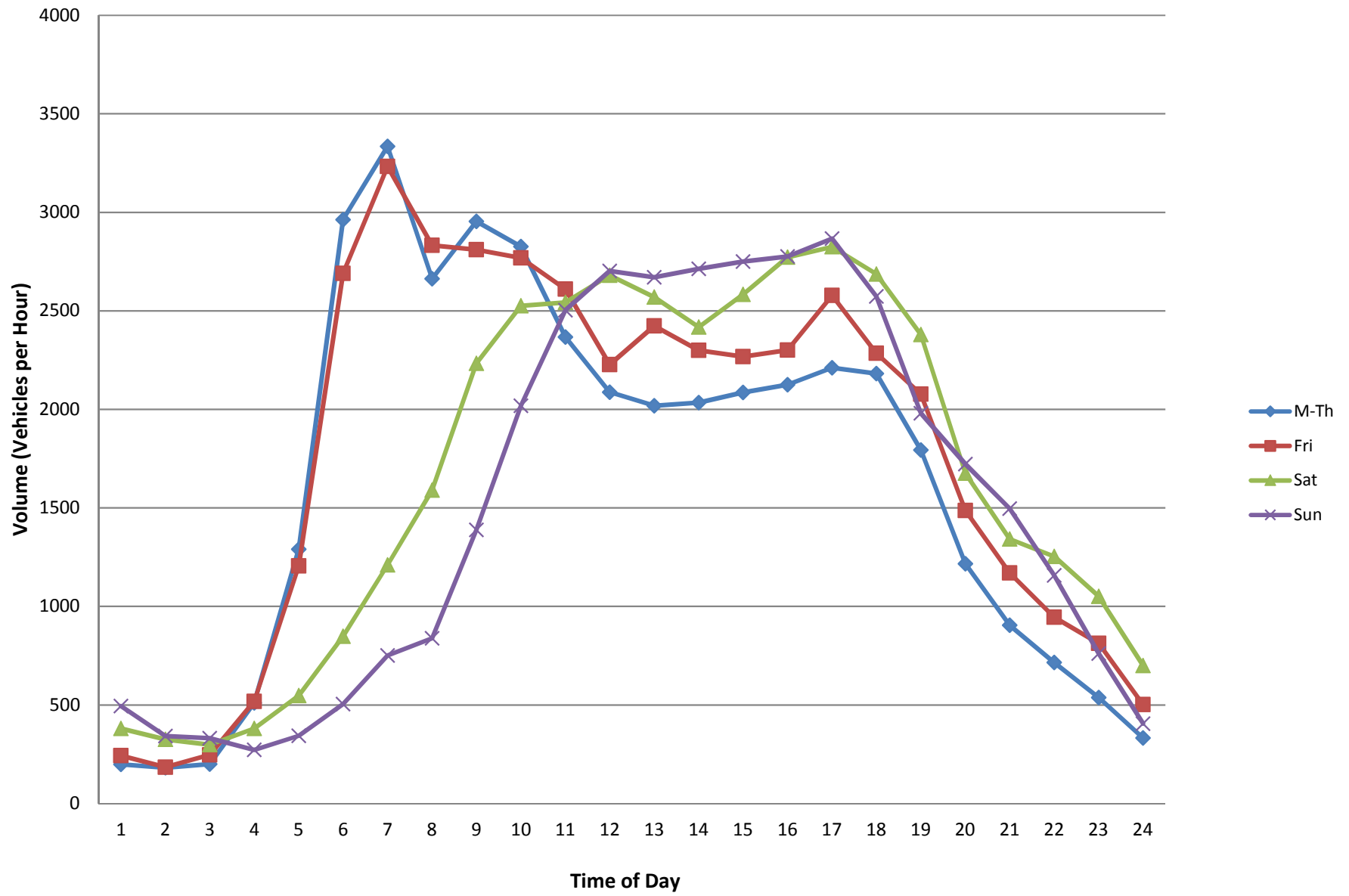
Traffic Volumes										24 hour Period Hourly Counts																								
Counts																																		
Dist	Cnty	Rte	Prefix	PM	Leg	Dir	Description	Date	Day	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24hr total
4	Mm	101		25.66	N		San Antonio Rd onramp	Nov-19	M-Th	4	3	2	3	6	8	12	20	24	28	30	34	30	32	51	82	81	62	35	16	7	9	6	3	586
4	Mm	101		25.66	N		San Antonio Rd onramp	Nov-19	Fri	3	12	7	6	4	7	15	20	35	21	32	30	45	49	64	82	85	73	26	5	9	8	5	6	649
4	Mm	101		25.66	N		San Antonio Rd onramp	Nov-19	Sat	5	5	4	2	0	3	10	14	9	14	12	25	5	24	16	16	14	18	15	6	6	7	2	2	234
4	Mm	101		25.66	N		San Antonio Rd onramp	Nov-19	Sun	2	6	2	0	1	0	0	2	4	9	8	10	10	15	13	9	15	12	5	7	12	0	1	0	143

PeMS Station VDS 412393, PM 25.66

Average US 101 Northbound Mainline

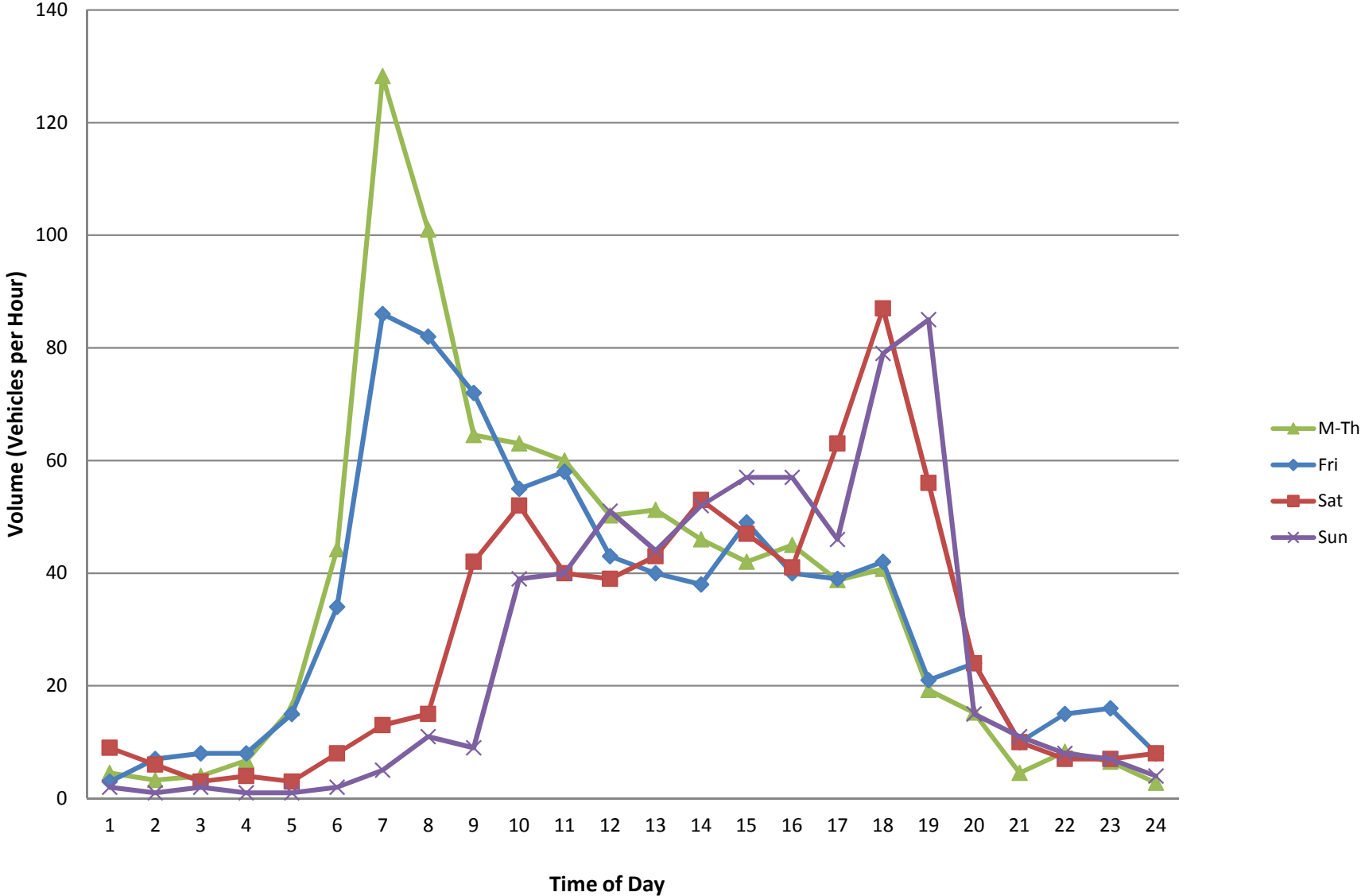


# Average US 101 Southbound Mainline

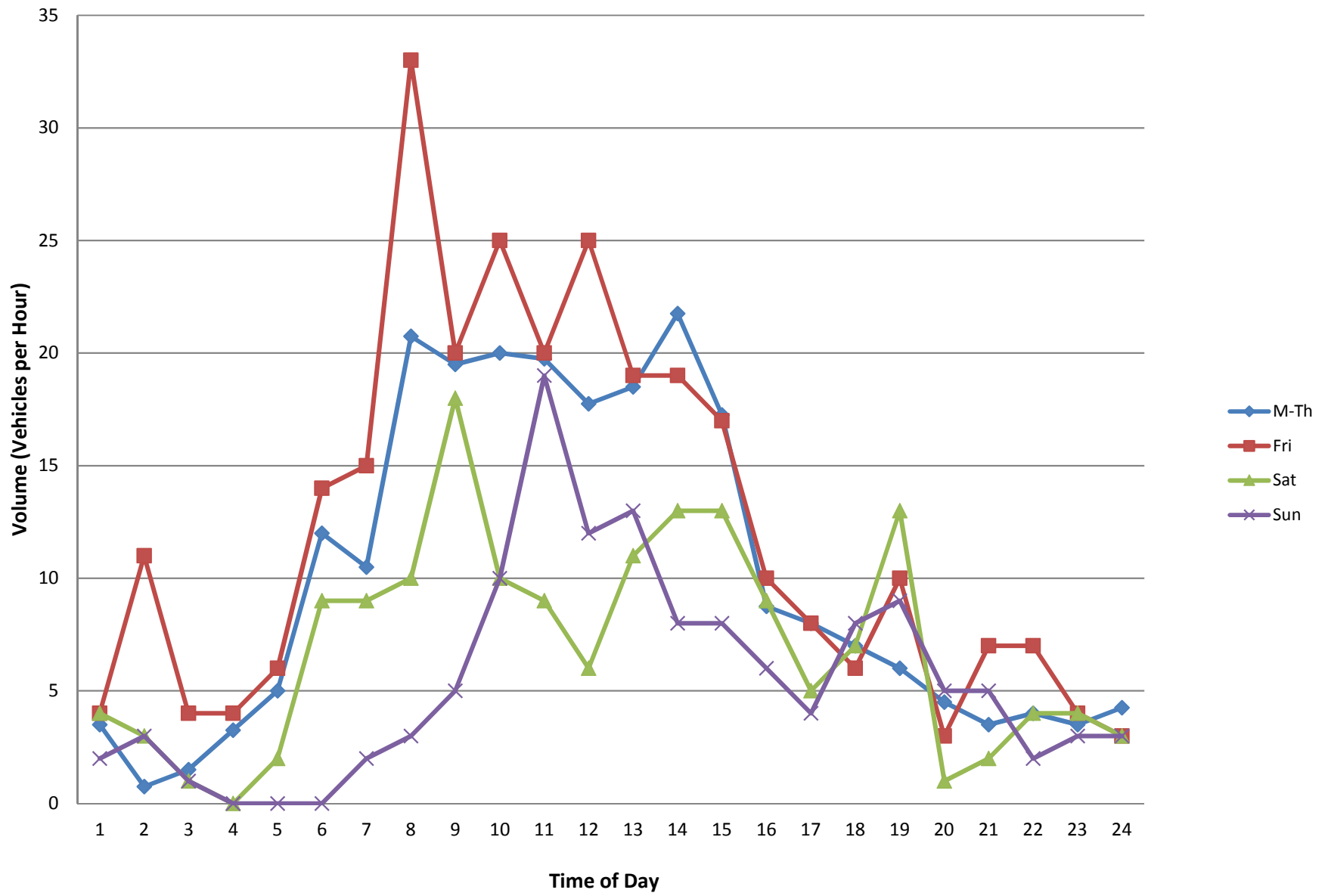




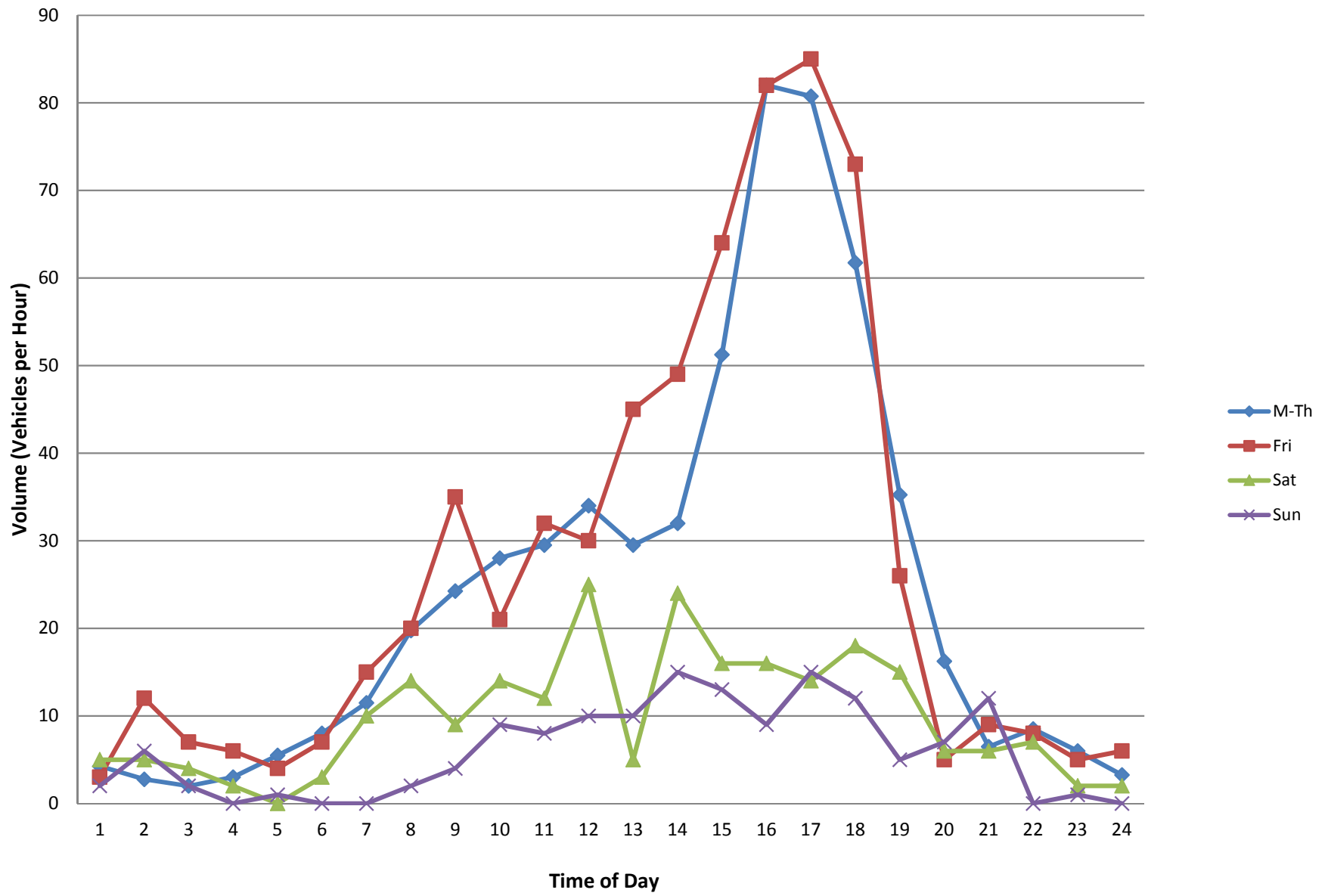
Average SB 101 San Antonio Rd On-ramp



**Average SB 101 San Antonio Rd Off-ramp**



**Average NB 101 San Antonio Rd On-ramp**



# **APPENDIX D**

## **TMP Checklist**

# DISTRICT 4

## TRANSPORTATION MANAGEMENT PLAN CHECKLIST (REV 09/01/16)

**\*\* This checklist is to be signed and a copy be included in the Resident Engineer file \*\***

EA/Project ID	<u>04-264724/0419000068</u>	Co-Rte-PM:	<u>04-Mrn-101-PM R20.9/27.0</u>
Project Engineer:	<u>G. Sweet (BKF)</u>	Description:	<u>MSN B7-HOV Widening Project</u>
Date Prepared:	<u>6/22/20</u>	Construction Cost:	<u>103.2 Million</u> Working Days: <u>743</u>

**Check each box and reference your attachments to the item(s) number(s) shown on the list.**

Required	Not required	Not Applicable	COMMENTS
----------	--------------	----------------	----------

### 1.0 Public Information

- 1.1 Public Awareness Campaign
- 1.2 Other Strategies

X			\$150,000 in BEES
	X		

### 2.0 Motorist Information Strategies

- 2.1 Changeable Message Signs
- 2.2 Construction Area Signs
- 2.3 Highway Advisory Radio (fixed and mobile)
- 2.4 Planned Lane Closure Web Site
- 2.5 Caltrans Highway Information Network (CHIN)

X			\$100,000 in BEES
X			\$60,000 in BEES
	X		
X			Construction to provide info to TMC/DTM
X			Construction to provide info to TMC

### 3.0 Incident Management

- 3.1 COZEED
- 3.2 Tow Truck/Freeway Service Patrol

X			\$450,000 in BEES
X			\$225,000 in BEES

### 4.0 Construction Strategies

- 4.1 Lane/Ramp Closures Charts
  - 4.1.1 Constructability Review
  - 4.1.2 Detour through local street
- 4.2 Full Facility Closure
- 4.3 Coordination with adjacent construction
- 4.4 Contingency Plan
  - 4.4.1 Contractor Cont. Plan
  - 4.4.2 Emergency Detour Plan
  - 4.4.3 Emergency Notification Plan
- 4.5 SSP 12-4.02 and Others
- 4.6 A+B Bidding Provisions
- 4.7 Other Strategies:
  - One way traffic control (flagger/signal)

X			Included in TMP and project's specifications
X			9/20/2019
	X		
	X		
X			
X			Construction to provide upon engineer's request
X			Construction/Contractor to provide
X			Construction/Contractor to provide
X			Damage Clause Recommendation. See attachment
	X		
	X		
	X		

### 5.0 Anticipate Delays

- 5.1 Lane Closure Review Committee  
(for anticipated delays over 15 minutes)
- 5.2 Full (directional) freeway closures

	X		
	X		

### 5.3 Minimal delay anticipated -

- 5.4 For detailed discussion, see TMP report
- 5.5 TMP categories

☒ yes    ☐ no    If no, explain additional measures on attached sheet.  
☒ yes    ☐ no  
☐ Blanket TMP    ☒ Minor TMP    ☐ Major TMP

\_\_\_\_\_  
TMP Manager, Juliana Gum

\_\_\_\_\_  
Project Manager

\_\_\_\_\_  
Date:

# **APPENDIX E**

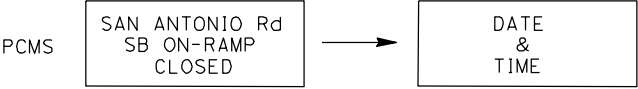
## Detour Plans

CONSTRUCTION AREA SIGNS

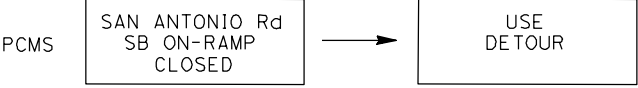
SIGN No. (X)	SIGN DESIGNATION	PANEL SIZE	SIGN MESSAGE	NUMBER OF POSTS AND SIZE	NUMBER OF SIGNS	PCMS	REMARKS
						(EA)	
A	PCMS	-	-	-	-	2	FOR SIGN MESSAGE, SEE NOTE 1 AND 2.
B	W20-2 G26-2(101) M3-3	36" x 36" 30" x 25" 30" x 15"	DETOUR AHEAD ROUTE SHIELD 101 SOUTH	1 - 6" x 6"	2		
C	SC6-4 (CA)	48" x 60"	RAMP CLOSED THRU __AM TO __AM	1 - 6" x 6"	1		
D	M4-8 M3-3 G26-2(101) M6-3(↑)	30" x 15" 30" x 15" 30" x 25" 21" x 15"	DETOUR SOUTH ROUTE SHIELD 101 UP ARROW	1 - 4" x 6"	3		
E	M4-8 M3-3 G26-2(101) M6-2(↗)	30" x 15" 30" x 15" 30" x 25" 21" x 15"	DETOUR SOUTH ROUTE SHIELD 101 DIAGONAL ARROW	1 - 4" x 6"	2		
F	M4-8 M3-3 G26-2(101) M6-1(←)	30" x 15" 30" x 15" 30" x 25" 21" x 15"	DETOUR SOUTH ROUTE SHIELD 101 LEFT ARROW	1 - 4" x 6"	3		
G	M4-8a	24" x 18"	END DETOUR	1 - 4" x 4"	1		

NOTES:

1. THE PCSM SHALL BE INSTALLED SEVEN (7) DAYS PRIOR TO THE RAMP CLOSURE OR AS DIRECTED BY THE ENGINEER. THE PCSM MESSAGES SHOULD READ:



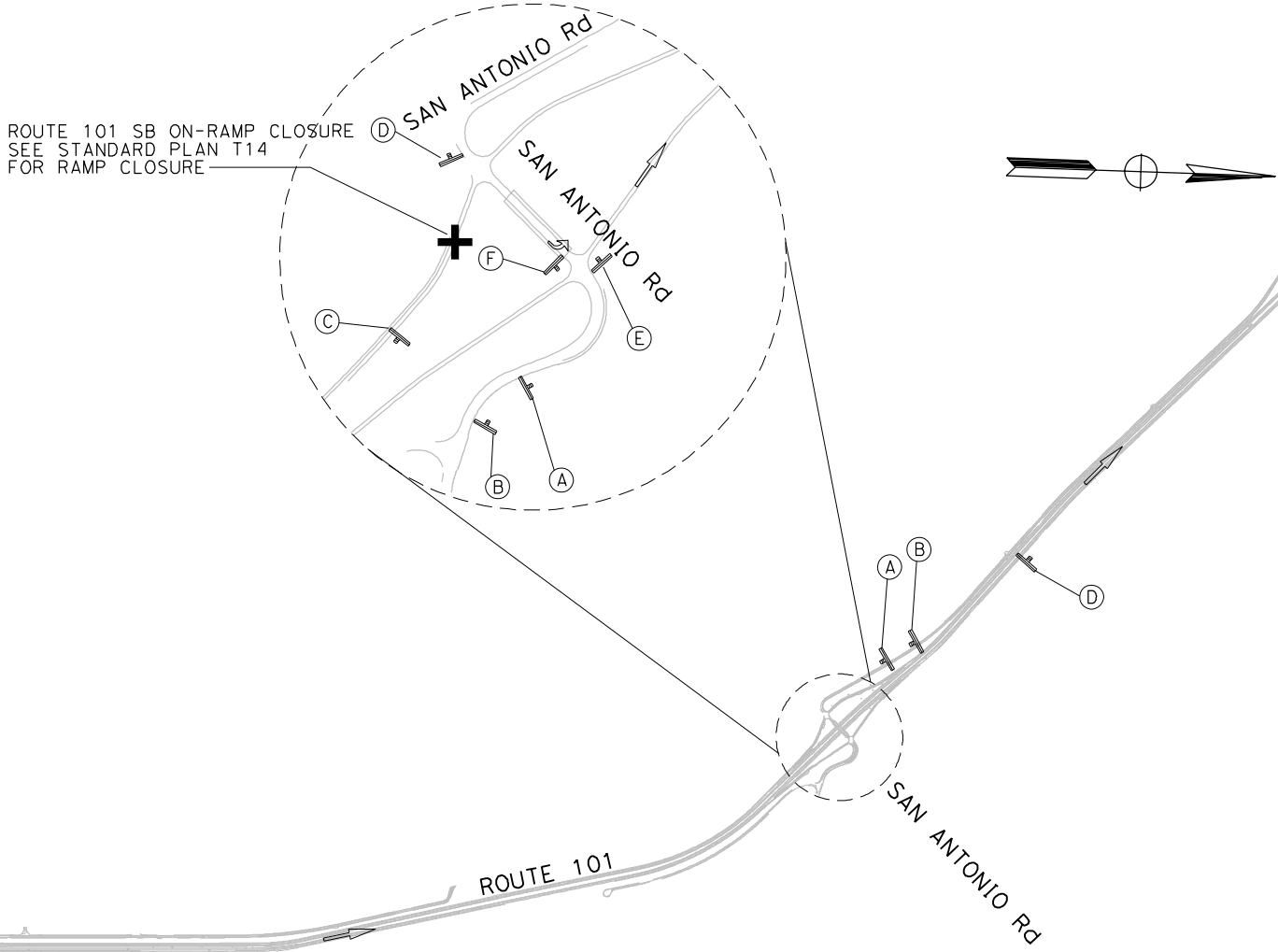
2. DURING SAN ANTONIO Rd SB OFF-RAMP CLOSURE, THE PCSM MESSAGE SHOULD READ:



3. ALL SIGNS SHALL BE BLACK ON ORANGE BACKGROUND.

LEGEND:

RAMP CLOSURE



DETOUR PLAN No. 1

FROM SB SAN ANTONIO RD  
TO SB ROUTE 101

- SB SAN ANTONIO RD
- ON-RAMP FROM SB SAN ANTONIO RD TO NB ROUTE 101
- OFF-RAMP TO WB KASTANIA RD
- ON-RAMP TO SB ROUTE 101



CONSTRUCTION AREA SIGNS

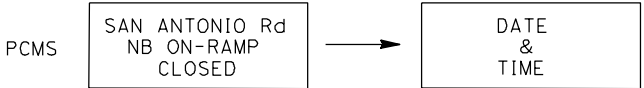
NO SCALE

CS-2

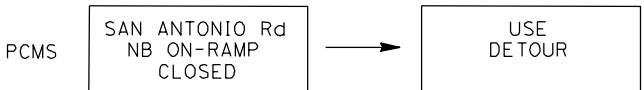
SIGN No. (X)	SIGN DESIGNATION	PANEL SIZE	SIGN MESSAGE	NUMBER OF POSTS AND SIZE	NUMBER OF SIGNS	PCMS	REMARKS
						(EA)	
A	PCMS	-	-	-	-	2	FOR SIGN MESSAGE, SEE NOTE 1 AND 2.
B	W20-2 G26-2(101) M3-3	36" x 36" 30" x 25" 30" x 15"	DETOUR AHEAD ROUTE SHIELD 101 SOUTH	1 - 6" x 6"	2		
C	SC6-4 (CA)	48" x 60"	RAMP CLOSED --- THRU --- --AM TO --AM	1 - 6" x 6"	1		
D	M4-8 M3-3 G26-2(101) M6-3(↑)	30" x 15" 30" x 15" 30" x 25" 21" x 15"	DETOUR SOUTH ROUTE SHIELD 101 UP ARROW	1 - 4" x 6"	2		
E	M4-8 M3-3 G26-2(101) M6-2(↗)	30" x 15" 30" x 15" 30" x 25" 21" x 15"	DETOUR SOUTH ROUTE SHIELD 101 DIAGONAL ARROW	1 - 4" x 6"	2		
F	M4-8 M3-3 G26-2(101) M6-1(←)	30" x 15" 30" x 15" 30" x 25" 21" x 15"	DETOUR SOUTH ROUTE SHIELD 101 LEFT ARROW	1 - 4" x 6"	3		
G	M4-8a	24" x 18"	END DETOUR	1 - 4" x 4"	1		

NOTES:

1. THE PCSM SHALL BE INSTALLED SEVEN (7) DAYS PRIOR TO THE RAMP CLOSURE OR AS DIRECTED BY THE ENGINEER. THE PCMS MESSAGES SHOULD READ:



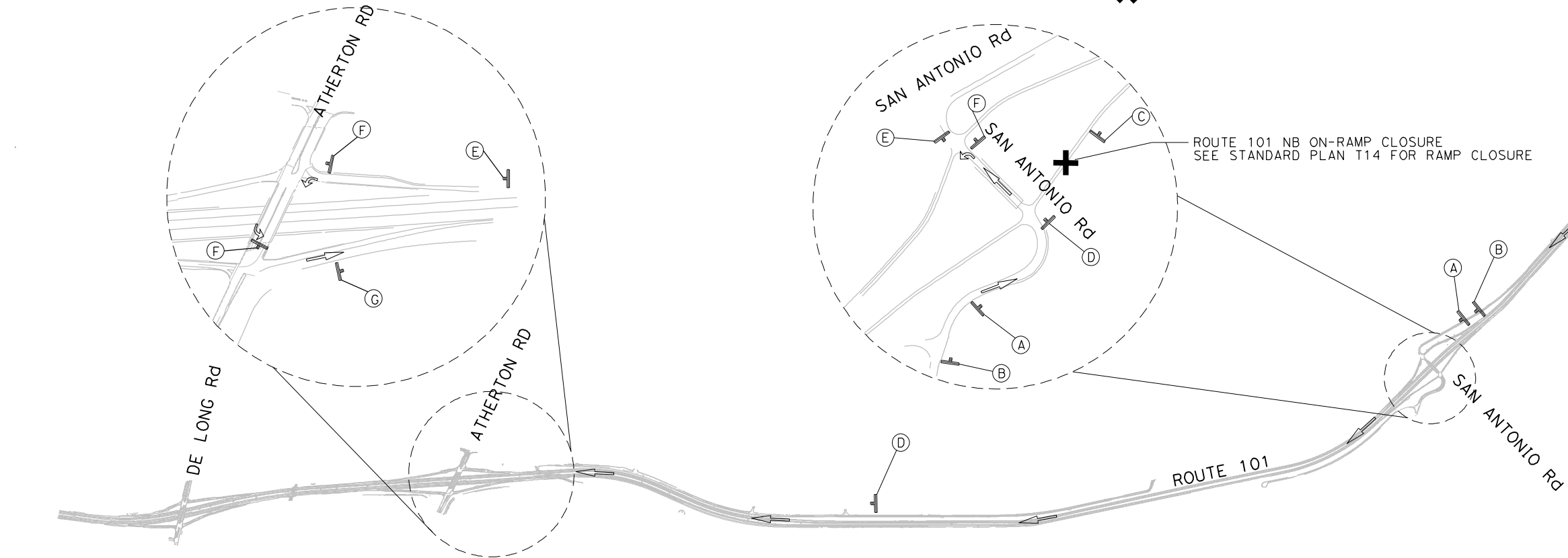
2. DURING SAN ANTONIO Rd SB OFF-RAMP CLOSURE,  
THE PCMS MESSAGE SHOULD READ:



3. ALL SIGNS SHALL BE BLACK ON ORANGE BACKGROUND.

LEGEND:

**X** RAMP CLOSURE



## DETOUR PLAN No. 2

FROM NB SAN ANTONIO RD  
TO NB ROUTE 101

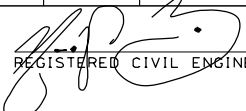
- NB SAN ANTONIO RD
- ON-RAMP FROM NB SAN ANTONIO ROAD TO SB ROUTE 101
- OFF-RAMP TO EB ATHERTON RD
- ON-RAMP TO NB ROUTE 101

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

## CONSTRUCTION AREA SIGNS

NO SCALE

# CS - 3

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Mtn	101	R20.8/27.1		
			6-15-20		
REGISTERED CIVIL ENGINEER			DATE		
PLANS APPROVAL DATE					
<p>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</p>					
BKF ENGINEERS 4670 WILLOW ROAD, SUITE 250 PLEASANTON, CA 94588			TRANSPORTATION AUTHORITY OF MARIN 900 5TH AVENUE, SUITE 100 SAN RAFAEL, CA 94901		



**X**

DATE PLOTTED => 5/21/2020	LAST REVISION
---------------------------	---------------

ATTACHMENT I

PROJECT COST ESTIMATE

**SCHEDULE OF PRICES AND QUANTITIES FOR**  
**04-Mrn-101-R20.8/27.1**  
**Project ID & Phase 0419000068 - (EA 04-264724)**  
**Marin/Sonoma Narrows HOV Widening Project - Segment B7**  
**0.1 Mile South of Franklin Avenue OH to 0.5 Mile South of San Antonio Creek Bridge**  
**2nd RTL PS&E Submittal - October 14, 2020**

Item No.	Item Code	F	Item Description	Unit (Alt)	Quantity	Unit Price	Final Submittal
1	070030		LEAD COMPLIANCE PLAN	LS	1	\$ 5,000.00	\$ 5,000.00
2	080050		PROGRESS SCHEDULE (CRITICAL PATH METHOD)	LS	1	\$ 10,000.00	\$ 10,000.00
3	090105		TIME-RELATED OVERHEAD (LS)	LS	1	\$ 2,000,000.00	\$ 2,000,000.00
4	090205		DISPUTE RESOLUTION BOARD ON-SITE MEETING	EA	17	\$ 10,000.00	\$ 170,000.00
5	090210		HOURLY OFF-SITE DISPUTE-RESOLUTION-BOARD-RELATED TASK	HR	80	\$ 250.00	\$ 20,000.00
6	100100		DEVELOP WATER SUPPLY	LS	1	\$ 50,000.00	\$ 50,000.00
7	120090		CONSTRUCTION AREA SIGNS	LS	1	\$ 60,000.00	\$ 60,000.00
8	120100		TRAFFIC CONTROL SYSTEM	LS	1	\$ 725,000.00	\$ 725,000.00
9	120120		TYPE III BARRICADE	EA	14	\$ 130.00	\$ 1,820.00
10	120149		TEMPORARY PAVEMENT MARKING (PAINT)	SQFT	630	\$ 5.00	\$ 3,150.00
11	120159		TEMPORARY TRAFFIC STRIPE (PAINT)	LF	416000	\$ 0.60	\$ 249,600.00
12	120165		CHANNELIZER (SURFACE MOUNTED)	EA	950	\$ 45.00	\$ 42,750.00
13	120204		PORTABLE RADAR SPEED FEEDBACK SIGN SYSTEM DAY	EA	1500	\$ 130.00	\$ 195,000.00
14	120300		TEMPORARY PAVEMENT MARKER	EA	6370	\$ 5.00	\$ 31,850.00
15	128651		PORTABLE CHANGEABLE MESSAGE SIGN (EA)	EA	8	\$ 8,000.00	\$ 64,000.00
16	129000		TEMPORARY RAILING (TYPE K)	LF	144000	\$ 17.00	\$ 2,448,000.00
17	129100		TEMPORARY CRASH CUSHION MODULE	EA	98	\$ 325.00	\$ 31,850.00
18	129111A		TEMPORARY ALTERNATIVE CRASH CUSHION	EA	26	\$ 4,000.00	\$ 104,000.00
19	129152		TEMPORARY RADAR SPEED FEEDBACK SIGN SYSTEM	EA	6	\$ 12,400.00	\$ 74,400.00
20	130100		JOB SITE MANAGEMENT	LS	1	\$ 200,000.00	\$ 200,000.00
21	130300		PREPARE STORM WATER POLLUTION PREVENTION PLAN	LS	1	\$ 25,000.00	\$ 25,000.00
22	130310		RAIN EVENT ACTION PLAN	EA	130	\$ 500.00	\$ 65,000.00
23	130320		STORM WATER SAMPLING AND ANALYSIS DAY	EA	79	\$ 500.00	\$ 39,500.00

Item No.	Item Code	F	Item Description	Unit (Alt)	Quantity	Unit Price	Final Submittal
24	130330		STORM WATER ANNUAL REPORT	EA	4	\$ 2,000.00	\$ 8,000.00
25	130505		MOVE-IN/MOVE-OUT (TEMPORARY EROSION CONTROL)	EA	21	\$ 600.00	\$ 12,600.00
26	130530		TEMPORARY HYDRAULIC MULCH (BONDED FIBER MATRIX)	SQYD	85500	\$ 0.75	\$ 64,125.00
27	130570		TEMPORARY COVER	SQYD	38700	\$ 4.50	\$ 174,150.00
28	130610		TEMPORARY CHECK DAM	LF	1330	\$ 10.00	\$ 13,300.00
29	130620		TEMPORARY DRAINAGE INLET PROTECTION	EA	340	\$ 250.00	\$ 85,000.00
30	130640		TEMPORARY FIBER ROLL	LF	60300	\$ 3.50	\$ 211,050.00
31	130670		TEMPORARY REINFORCED SILT FENCE	LF	8020	\$ 7.00	\$ 56,140.00
32	130680		TEMPORARY SILT FENCE	LF	63500	\$ 3.50	\$ 222,250.00
33	130710		TEMPORARY CONSTRUCTION ENTRANCE	EA	22	\$ 4,000.00	\$ 88,000.00
34	130730		STREET SWEEPING	LS	1	\$ 40,000.00	\$ 40,000.00
35	130800		TEMPORARY ACTIVE TREATMENT SYSTEM	LS	1	\$ 30,000.00	\$ 30,000.00
36	130900		TEMPORARY CONCRETE WASHOUT	LS	1	\$ 68,000.00	\$ 68,000.00
37	131104		WATER QUALITY MONITORING REPORT	EA	6	\$ 500.00	\$ 3,000.00
38	131201		TEMPORARY CREEK DIVERSION SYSTEMS	LS	1	\$ 390,000.00	\$ 390,000.00
39	140003		ASBESTOS COMPLIANCE PLAN	LS	1	\$ 8,000.00	\$ 8,000.00
40	141001		HEALTH AND SAFETY PLAN	LS	1	\$ 5,000.00	\$ 5,000.00
41	141103		REMOVE YELLOW THERMOPLASTIC TRAFFIC STRIPE (HAZARDOUS WASTE)	LF	28100	\$ 1.00	\$ 28,100.00
42	141109		ADL BURIAL LOCATION REPORT	LS	1	\$ 6,000.00	\$ 6,000.00
43	141120		TREATED WOOD WASTE	LB	437000	\$ 0.10	\$ 43,700.00
44	148005		NOISE MONITORING	LS	1	\$ 5,000.00	\$ 5,000.00
45	153121		REMOVE CONCRETE (CY)	CY	170	\$ 300.00	\$ 51,000.00
46	153124A		REMOVE CONCRETE (DITCH)	LF	320	\$ 20.00	\$ 6,400.00
47	160110		TEMPORARY HIGH-VISIBILITY FENCE	LF	16300	\$ 4.00	\$ 65,200.00
48	170103		CLEARING AND GRUBBING (LS)	LS	1	\$ 400,000.00	\$ 400,000.00
49	190101		ROADWAY EXCAVATION	CY	181000	\$ 35.00	\$ 6,335,000.00
50	190124A		ROADWAY EXCAVATION (AMA)	CY	3180	\$ 50.00	\$ 159,000.00

Item No.	Item Code	F	Item Description	Unit (Alt)	Quantity	Unit Price	Final Submittal
51	190138		ROADWAY EXCAVATION (DETOUR REMOVAL)	CY	856	\$ 80.00	\$ 68,480.00
52	190159		ROADWAY EXCAVATION (TYPE COM) (AERIALY DEPOSITED LEAD)	CY	660	\$ 50.00	\$ 33,000.00
53	190163		ROADWAY EXCAVATION (TYPE R-1)(AERIALY DEPOSITED LEAD)	CY	15700	\$ 45.00	\$ 706,500.00
54	192003	F	STRUCTURE EXCAVATION (BRIDGE)	CY	337	\$ 110.00	\$ 37,070.00
55	192037	F	STRUCTURE EXCAVATION (RETAINING WALL)	CY	15853	\$ 45.00	\$ 713,385.00
56	192039A	F	STRUCTURE EXCAVATION (CRASH WALL)	CY	293	\$ 95.00	\$ 27,835.00
57	192055	F	STRUCTURE EXCAVATION (SOIL NAIL WALL)	CY	1843	\$ 85.00	\$ 156,655.00
58	193003	F	STRUCTURE BACKFILL (BRIDGE)	CY	219	\$ 100.00	\$ 21,900.00
59	193005A	F	STRUCTURE BACKFILL (CRASH WALL)	CY	293	\$ 105.00	\$ 30,765.00
60	193013	F	STRUCTURE BACKFILL (RETAINING WALL)	CY	12376	\$ 50.00	\$ 618,800.00
61	193028	F	STRUCTURE BACKFILL (SOIL NAIL WALL)	CY	159	\$ 125.00	\$ 19,875.00
62	198209		SUBGRADE ENHANCEMENT GEOTEXTILE, CLASS B2	SQYD	221000	\$ 2.00	\$ 442,000.00
63	206560		CONTROL AND NEUTRAL CONDUCTORS	LS	1	\$ 7,000.00	\$ 7,000.00
64	208600	F	3" PLASTIC PIPE (SCHEDULE 40) (SUPPLY LINE)	LF	417	\$ 20.00	\$ 8,340.00
65	208738		8" CORRUGATED HIGH DENSITY POLYETHYLENE PIPE CONDUIT	LF	220	\$ 90.00	\$ 19,800.00
66	208819		8" WELDED STEEL PIPE CONDUIT	LF	160	\$ 340.00	\$ 54,400.00
67	210010		MOVE-IN/MOVE-OUT (EROSION CONTROL)	EA	24	\$ 750.00	\$ 18,000.00
68	210270		ROLLED EROSION CONTROL PRODUCT (NETTING)	SQFT	319000	\$ 0.85	\$ 271,150.00
69	210300		HYDROMULCH	SQFT	1010000	\$ 0.10	\$ 101,000.00
70	210350		FIBER ROLLS	LF	85100	\$ 2.75	\$ 234,025.00
71	210420		STRAW	SQFT	752000	\$ 0.10	\$ 75,200.00
72	210430		HYDROSEED	SQFT	1010000	\$ 0.35	\$ 353,500.00
73	210610		COMPOST (CY)	CY	1260	\$ 85.00	\$ 107,100.00
74	211111		PERMANENT EROSION CONTROL ESTABLISHMENT WORK	LS	1	\$ 150,000.00	\$ 150,000.00
75	250201		CLASS 2 AGGREGATE SUBBASE	CY	35800	\$ 50.00	\$ 1,790,000.00
76	260203		CLASS 2 AGGREGATE BASE (CY)	CY	66100	\$ 55.00	\$ 3,635,500.00
77	374207		CRACK TREATMENT	LNMI	8	\$ 7,500.00	\$ 60,000.00

Item No.	Item Code	F	Item Description	Unit (Alt)	Quantity	Unit Price	Final Submittal
78	378000		MICRO-SURFACING	TON	270	\$ 400.00	\$ 108,000.00
79	390011		PREPAVING INERTIAL PROFILER	LS	1	\$ 15,000.00	\$ 15,000.00
80	390020		PREPAVING GRINDING DAY	EA	45	\$ 10,000.00	\$ 450,000.00
81	390095		REPLACE ASPHALT CONCRETE SURFACING	CY	1050	\$ 750.00	\$ 787,500.00
82	390132		HOT MIX ASPHALT (TYPE A)	TON	140000	\$ 100.00	\$ 14,000,000.00
83	390137		RUBBERIZED HOT MIX ASPHALT (GAP GRADED)	TON	43500	\$ 105.00	\$ 4,567,500.00
84	390402		RUBBERIZED HOT MIX ASPHALT-OPEN GRADED (OPEN GRADED FRICTION COURSE)	TON	21800	\$ 125.00	\$ 2,725,000.00
85	394060		DATA CORE	LS	1	\$ 20,000.00	\$ 20,000.00
86	394074		PLACE HOT MIX ASPHALT DIKE (TYPE C)	LF	460	\$ 8.00	\$ 3,680.00
87	394075		PLACE HOT MIX ASPHALT DIKE (TYPE D)	LF	3240	\$ 3.50	\$ 11,340.00
88	394076		PLACE HOT MIX ASPHALT DIKE (TYPE E)	LF	3910	\$ 3.50	\$ 13,685.00
89	394077		PLACE HOT MIX ASPHALT DIKE (TYPE F)	LF	390	\$ 10.00	\$ 3,900.00
90	394090		PLACE HOT MIX ASPHALT (MISCELLANEOUS AREA)	SQYD	10100	\$ 45.00	\$ 454,500.00
91	397005		TACK COAT	TON	290	\$ 780.00	\$ 226,200.00
92	398100		REMOVE ASPHALT CONCRETE DIKE	LF	3730	\$ 10.00	\$ 37,300.00
93	398200		COLD PLANE ASPHALT CONCRETE PAVEMENT	SQYD	37500	\$ 10.00	\$ 375,000.00
94	398300		REMOVE BASE AND SURFACING	CY	69	\$ 250.00	\$ 17,250.00
95	418006		REMOVE CONCRETE PAVEMENT (CY)	CY	24600	\$ 45.00	\$ 1,107,000.00
96	460300	F	SOIL NAIL	LF	12081	\$ 32.00	\$ 386,592.00
97	477019A		TEMPORARY REINFORCED EMBANKMENT	LS	1	\$ 3,200,000.00	\$ 3,200,000.00
98	490595		108" PERMANENT STEEL CASING	LF	48	\$ 3,500.00	\$ 168,000.00
99	490603	F	24" CAST-IN-DRILLED-HOLE CONCRETE PILING	LF	396	\$ 240.00	\$ 95,040.00
100	490618	F	96" CAST-IN-DRILLED-HOLE CONCRETE PILING	LF	94	\$ 2,100.00	\$ 197,400.00
101	490620	F	108" CAST-IN-DRILLED-HOLE CONCRETE PILING	LF	48	\$ 2,200.00	\$ 105,600.00
102	490752A	F	FURNISH PILING (CLASS 200)(ALTERNATIVE X)	LF	660	\$ 65.00	\$ 42,900.00
103	490753A	F	DRIVE PILE (CLASS 200)(ALTERNATIVE X)	EA	12	\$ 6,000.00	\$ 72,000.00
104	498052		60" CAST-IN-DRILLED-HOLE CONCRETE PILE (SIGN FOUNDATION)	LF	72	\$ 2,750.00	\$ 198,000.00

Item No.	Item Code	F	Item Description	Unit (Alt)	Quantity	Unit Price	Final Submittal
105	500001		PRESTRESSING CAST-IN-PLACE CONCRETE	LS	1	\$ 166,000.00	\$ 166,000.00
106	510051	F	STRUCTURAL CONCRETE, BRIDGE FOOTING	CY	67	\$ 700.00	\$ 46,900.00
107	510053	F	STRUCTURAL CONCRETE, BRIDGE	CY	596	\$ 1,100.00	\$ 655,600.00
108	510054	F	STRUCTURAL CONCRETE, BRIDGE (POLYMER FIBER)	CY	304	\$ 1,000.00	\$ 304,000.00
109	510057A	F	STRUCTURAL CONCRETE, CRASH WALL	CY	351	\$ 1,000.00	\$ 351,000.00
110	510060	F	STRUCTURAL CONCRETE, RETAINING WALL	CY	6086	\$ 600.00	\$ 3,651,600.00
111	510090	F	STRUCTURAL CONCRETE, BOX CULVERT	CY	794	\$ 1,800.00	\$ 1,429,200.00
112	510092	F	STRUCTURAL CONCRETE, HEADWALL	CY	21	\$ 3,000.00	\$ 63,000.00
113	510093A	F	STRUCTURAL CONCRETE, WINGWALL	CY	188	\$ 2,750.00	\$ 517,000.00
114	510094	F	STRUCTURAL CONCRETE, DRAINAGE INLET	CY	679	\$ 2,100.00	\$ 1,425,900.00
115	510095A		G2 MANHOLE	EA	7	\$ 7,000.00	\$ 49,000.00
116	510096A		STRUCTURAL CONCRETE, JUNCTION STRUCTURE	EA	1	\$ 20,000.00	\$ 20,000.00
117	510502	F	MINOR CONCRETE (MINOR STRUCTURE)	CY	345	\$ 2,300.00	\$ 793,500.00
118	511037A	F	CONCRETE SURFACE TEXTURE (DRY STACK ROCK)	SQFT	13091	\$ 12.00	\$ 157,092.00
119	511063	F	FRACTURED FIN TEXTURE	SQFT	27332	\$ 10.00	\$ 273,320.00
120	511106	F	DRILL AND BOND DOWEL	LF	64	\$ 90.00	\$ 5,760.00
121	520101	F	BAR REINFORCING STEEL	LB	1217	\$ 4.00	\$ 4,868.00
122	520102	F	BAR REINFORCING STEEL (BRIDGE)	LB	422539	\$ 1.15	\$ 485,919.85
123	520108A	F	BAR REINFORCING STEEL (CRASH WALL)	LB	36159	\$ 1.40	\$ 50,622.60
124	520103	F	BAR REINFORCING STEEL (RETAINING WALL)	LB	637443	\$ 1.25	\$ 796,803.75
125	520104A	F	BAR REINFORCING STEEL (WINGWALL)	LB	13592	\$ 1.25	\$ 16,990.00
126	520107	F	BAR REINFORCING STEEL (BOX CULVERT)	LB	158030	\$ 1.25	\$ 197,537.50
124	530200	F	STRUCTURAL SHOTCRETE	CY	256	\$ 700.00	\$ 179,200.00
125	540101	F	ASPHALT MEMBRANE WATER PROOFING	SQFT	1567	\$ 15.00	\$ 23,505.00
126	560218	F	FURNISH SIGN STRUCTURE (TRUSS)	LB	54698	\$ 5.25	\$ 287,164.50
127	560219	F	INSTALL SIGN STRUCTURE (TRUSS)	LB	54698	\$ 0.50	\$ 27,349.00
128	600001		PUBLIC SAFETY PLAN	LS	1	\$ 20,000.00	\$ 20,000.00

Item No.	Item Code	F	Item Description	Unit (Alt)	Quantity	Unit Price	Final Submittal
129	600115		BRIDGE REMOVAL (PORTION), LOCATION A	LS	1	\$ 118,000.00	\$ 118,000.00
130	600116		BRIDGE REMOVAL (PORTION), LOCATION B	LS	1	\$ 561,000.00	\$ 561,000.00
131	600152	F	COLUMN CASING	LB	190604	\$ 5.00	\$ 953,020.00
132	610108		18" ALTERNATIVE PIPE CULVERT	LF	3320	\$ 135.00	\$ 448,200.00
133	610112		24" ALTERNATIVE PIPE CULVERT	LF	1960	\$ 145.00	\$ 284,200.00
134	610117		30" ALTERNATIVE PIPE CULVERT	LF	4	\$ 800.00	\$ 3,200.00
135	610121		36" ALTERNATIVE PIPE CULVERT	LF	320	\$ 350.00	\$ 112,000.00
136	610300	F	CONCRETE BACKFILL (PIPE TRENCH)	CY	132	\$ 400.00	\$ 52,800.00
137	610402		15" TEMPORARY CULVERT	LF	170	\$ 250.00	\$ 42,500.00
138	610507A		14" X 23" REINFORCED CONCRETE ARCH CULVERT	LF	49	\$ 500.00	\$ 24,500.00
139	610508A		19" X 30" REINFORCED CONCRETE ARCH CULVERT	LF	120	\$ 500.00	\$ 60,000.00
140	620001A		TRASH NET	EA	7	\$ 8,000.00	\$ 56,000.00
141	62002A		GROSS SOLIDS REMOVAL DEVICE	LS	1	\$ 150,000.00	\$ 150,000.00
142	620110A		IMPORTED BIOFILTRATION SOIL	CY	17000	\$ 55.00	\$ 935,000.00
143	650012		15" REINFORCED CONCRETE PIPE	LF	130	\$ 200.00	\$ 26,000.00
144	650014		18" REINFORCED CONCRETE PIPE	LF	1240	\$ 230.00	\$ 285,200.00
145	650018		24" REINFORCED CONCRETE PIPE	LF	310	\$ 260.00	\$ 80,600.00
146	650026		36" REINFORCED CONCRETE PIPE	LF	140	\$ 310.00	\$ 43,400.00
147	650034		48" REINFORCED CONCRETE PIPE	LF	110	\$ 333.00	\$ 36,630.00
148	650042		60" REINFORCED CONCRETE PIPE	LF	400	\$ 450.00	\$ 180,000.00
149	665018		18" CORRUGATED STEEL PIPE (.109" THICK)	LF	40	\$ 420.00	\$ 16,800.00
150	665077A		24" CORRUGATED STEEL PIPE (.168" THICK)	LF	12	\$ 500.00	\$ 6,000.00
151	680405		8" PERFORATED STEEL PIPE UNDERDRAIN (.064" THICK)	LF	83	\$ 82.00	\$ 6,806.00
152	680902		6" PERFORATED PLASTIC PIPE UNDERDRAIN	LF	7500	\$ 21.50	\$ 161,250.00
153	680905		8" PERFORATED PLASTIC PIPE UNDERDRAIN	LF	9100	\$ 30.00	\$ 273,000.00
154	681132		GEOCOMPOSITE DRAIN	SQFT	1870	\$ 11.00	\$ 20,570.00
155	690105		8" CORRUGATED STEEL PIPE DOWNDRAIN (.064" THICK)	LF	59	\$ 87.00	\$ 5,133.00



Item No.	Item Code	F	Item Description	Unit (Alt)	Quantity	Unit Price	Final Submittal
156	703233		GRATED LINE DRAIN	LF	1460	\$ 200.00	\$ 292,000.00
157	703533		12" WELDED STEEL PIPE (.250" THICK)	LF	16	\$ 300.00	\$ 4,800.00
158	705204		18" CONCRETE FLARED END SECTION	EA	3	\$ 1,500.00	\$ 4,500.00
159	705309		15" ALTERNATIVE FLARED END SECTION	LF	1	\$ 700.00	\$ 700.00
160	705311		18" ALTERNATIVE FLARED END SECTION	EA	4	\$ 1,000.00	\$ 4,000.00
161	705315		24" ALTERNATIVE FLARED END SECTION	EA	2	\$ 1,100.00	\$ 2,200.00
162	705321		36" ALTERNATIVE FLARED END SECTION	EA	1	\$ 1,500.00	\$ 1,500.00
163	707117		36" PRECAST CONCRETE PIPE INLET	LF	41	\$ 700.00	\$ 28,700.00
164	710102		ABANDON CULVERT (LF)	LF	1910	\$ 40.00	\$ 76,400.00
165	710120		REMOVE DRAINAGE FACILITY (EA)	EA	1	\$ 10,000.00	\$ 10,000.00
166	710132		REMOVE CULVERT (LF)	LF	5400	\$ 35.00	\$ 189,000.00
167	710144		REMOVE REINFORCED CONCRETE BOX CULVERT (LF)	LF	290	\$ 200.00	\$ 58,000.00
168	710150		REMOVE INLET	EA	76	\$ 1,200.00	\$ 91,200.00
169	710152		REMOVE HEADWALL	EA	21	\$ 2,000.00	\$ 42,000.00
170	710167		REMOVE FLARED END SECTION (EA)	EA	16	\$ 500.00	\$ 8,000.00
171	710196		ADJUST INLET	EA	28	\$ 3,500.00	\$ 98,000.00
172	710250		MODIFY INLET TO MANHOLE	EA	2	\$ 5,000.00	\$ 10,000.00
173	710262		CAP INLET	EA	10	\$ 3,000.00	\$ 30,000.00
174	710370		SAND BACKFILL	CY	370	\$ 150.00	\$ 55,500.00
175	720110	F	SMALL-ROCK SLOPE PROTECTION	CY	81	\$ 200.00	\$ 16,200.00
176	720801A		GRAVEL FILTER	CY	230	\$ 300.00	\$ 69,000.00
177	721420		CONCRETE (DITCH LINING)	CY	18	\$ 1,500.00	\$ 27,000.00
178	721810	F	SLOPE PAVING (CONCRETE)	CY	255	\$ 1,000.00	\$ 255,000.00
179	721812	F	SLOPE PAVING (CONCRETE PAVERS)	SQFT	778	\$ 80.00	\$ 62,240.00
180	723080	F	ROCK SLOPE PROTECTION (60 lb, CLASS II, METHOD B) (CY)	CY	93	\$ 350.00	\$ 32,550.00
181	723095	F	ROCK SLOPE PROTECTION (20 lb, CLASS I, METHOD B) (CY)	CY	260	\$ 350.00	\$ 91,000.00
182	730040		MINOR CONCRETE (GUTTER) (LF)	LF	4010	\$ 45.00	\$ 180,450.00

Item No.	Item Code	F	Item Description	Unit (Alt)	Quantity	Unit Price	Final Submittal
183	731530		MINOR CONCRETE (TEXTURED PAVING)	CY	120	\$ 800.00	\$ 96,000.00
184	731840		REMOVE CONCRETE (CURB AND GUTTER)	LF	160	\$ 40.00	\$ 6,400.00
185	750001	F	MISCELLANEOUS IRON AND STEEL	LB	58548	\$ 3.00	\$ 175,644.00
186	770090		LIGHTING (CITY STREET)	LS	1	\$ 49,000.00	\$ 49,000.00
187	780460	F	ANTI-GRAFFITI COATING	SQFT	46858	\$ 1.10	\$ 51,543.80
188	782200		OBLITERATE SURFACING	SQYD	12200	\$ 4.00	\$ 48,800.00
189	800360		CHAIN LINK FENCE (TYPE CL-6)	LF	96	\$ 150.00	\$ 14,400.00
190	803020		REMOVE FENCE	LF	190	\$ 30.00	\$ 5,700.00
191	810120		REMOVE PAVEMENT MARKER	EA	2840	\$ 1.45	\$ 4,118.00
192	810170		DELINEATOR (CLASS 1)	EA	27	\$ 55.00	\$ 1,485.00
193	810230		PAVEMENT MARKER (RETROREFLECTIVE)	EA	4300	\$ 4.00	\$ 17,200.00
194	820134		OBJECT MARKER (TYPE P)	EA	1	\$ 78.00	\$ 78.00
195	820135		OBJECT MARKER (TYPE R)	EA	2	\$ 75.00	\$ 150.00
196	820270		REMOVE ROADSIDE SIGN (WOOD POST)	EA	28	\$ 120.00	\$ 3,360.00
197	820310		REMOVE ROADSIDE SIGN PANEL	EA	6	\$ 100.00	\$ 600.00
198	820700	F	FURNISH FORMED PANEL SIGN (OVERHEAD)	SQFT	800	\$ 25.00	\$ 20,000.00
199	820750	F	FURNISH SINGLE SHEET ALUMINUM SIGN (0.063"-UNFRAMED)	SQFT	1410	\$ 15.00	\$ 21,150.00
200	820760	F	FURNISH SINGLE SHEET ALUMINUM SIGN (0.080" - UNFRAMED)	SQFT	120	\$ 15.50	\$ 1,860.00
201	820790	F	FURNISH SINGLE SHEET ALUMINUM SIGN (0.080"-FRAMED)	SQFT	410	\$ 25.00	\$ 10,250.00
202	820820		METAL (BARRIER MOUNTED SIGN)	LB	4240	\$ 10.00	\$ 42,400.00
203	820840		ROADSIDE SIGN - ONE POST	EA	8	\$ 400.00	\$ 3,200.00
204	820850		ROADSIDE SIGN - TWO POST	EA	8	\$ 600.00	\$ 4,800.00
205	820880		INSTALL SIGN (MAST-ARM HANGER METHOD)	EA	1	\$ 475.00	\$ 475.00
206	832007		MIDWEST GUARDRAIL SYSTEM (WOOD POST)	LF	950	\$ 40.00	\$ 38,000.00
207	832070		VEGETATION CONTROL (MINOR CONCRETE)	SQYD	1810	\$ 90.00	\$ 162,900.00
208	833033	F	CHAIN LINK RAILING (TYPE 7 MODIFIED)	LF	120	\$ 180.00	\$ 21,600.00
209	839302		SINGLE THRIE BEAM BARRIER (WOOD POST)	LF	390	\$ 70.00	\$ 27,300.00

Item No.	Item Code	F	Item Description	Unit (Alt)	Quantity	Unit Price	Final Submittal
210	839521	F	CABLE RAILING	LF	4092	\$ 30.00	\$ 122,760.00
211	839540		TRANSITION RAILING (TYPE STB))	EA	2	\$ 5,000.00	\$ 10,000.00
212	839543		TRANSITION RAILING (TYPE WB-31)	EA	26	\$ 4,000.00	\$ 104,000.00
213	839576		END CAP (TYPE A)	EA	2	\$ 800.00	\$ 1,600.00
214	839578		END CAP (TYPE TC)	EA	25	\$ 250.00	\$ 6,250.00
215	839581		END ANCHOR ASSEMBLY (TYPE SFT)	EA	4	\$ 1,200.00	\$ 4,800.00
216	839584		ALTERNATIVE IN-LINE TERMINAL SYSTEM	EA	24	\$ 3,600.00	\$ 86,400.00
217	839640		CONCRETE BARRIER (TYPE 60M)	LF	20400	\$ 100.00	\$ 2,040,000.00
218	839642		CONCRETE BARRIER (TYPE 60MC)	LF	12700	\$ 130.00	\$ 1,651,000.00
219	839644		CONCRETE BARRIER (TYPE 60MF)	LF	360	\$ 550.00	\$ 198,000.00
220	839653		CONCRETE BARRIER (TYPE 60MP)	LF	340	\$ 550.00	\$ 187,000.00
221	839654A		CONCRETE BARRIER (TYPE 60MC MODIFIED)	LF	120	\$ 750.00	\$ 90,000.00
222	839655A	F	CONCRTE BARRIER (TYPE 60MD MODIFIED)	LF	3954	\$ 120.00	\$ 474,480.00
223	839695		CONCRETE BARRIER (TYPE 60PR)	LF	58	\$ 625.00	\$ 36,250.00
224	839741	F	CONCRETE BARRIER (TYPE 836)	LF	604	\$ 120.00	\$ 72,480.00
225	839742	F	CONCRETE BARRIER (TYPE 836A)	LF	3631	\$ 200.00	\$ 726,200.00
226	839752		REMOVE GUARDRAIL	LF	3720	\$ 10.00	\$ 37,200.00
227	839753		REMOVE SINGLE METAL BEAM BARRIER	LF	640	\$ 15.00	\$ 9,600.00
228	839754		REMOVE DOUBLE METAL BEAM BARRIER	LF	21100	\$ 7.50	\$ 158,250.00
229	839774		REMOVE CONCRETE BARRIER	LF	7700	\$ 20.00	\$ 154,000.00
230	840516		THERMOPLASTIC PAVEMENT MARKING (ENHANCED WET NIGHT VISIBILITY)	SQFT	4100	\$ 10.64	\$ 43,624.00
231	840615		6" THERMOPLASTIC TRAFFIC STRIPE (ENHANCED WET NIGHT VISIBILITY) (BROKEN 18-12)	LF	112000	\$ 0.50	\$ 56,000.00
232	840621		6" THERMOPLASTIC TRAFFIC STRIPE (ENHANCED WET NIGHT VISIBILITY) (BROKEN 17-7)	LF	870	\$ 2.98	\$ 2,592.60
233	840655		PAINT TRAFFIC STRIPE (1-COAT)	LF	26800	\$ 0.95	\$ 25,460.00
234	840665		PAINT PAVEMENT MARKING (1-COAT)	SQFT	1190	\$ 7.00	\$ 8,330.00
235	840667A		PAINT POSTMILE MARKINGS (1-COAT)	EA	130	\$ 100.00	\$ 13,000.00
236	846007		6" THERMOPLASTIC TRAFFIC STRIPE (ENHANCED WET NIGHT VISIBILITY)	LF	111000	\$ 1.49	\$ 165,390.00

Item No.	Item Code	F	Item Description	Unit (Alt)	Quantity	Unit Price	Final Submittal
237	846013		12" THERMOPLASTIC TRAFFIC STRIPE (ENHANCED WET NIGHT VISIBILITY)	LF	4470	\$ 1.32	\$ 5,900.40
238	846030		REMOVE THERMOPLASTIC TRAFFIC STRIPE	LF	81000	\$ 0.50	\$ 40,500.00
239	846035		REMOVE THERMOPLASTIC PAVEMENT MARKING	SQFT	430	\$ 7.00	\$ 3,010.00
240	847194		CONTRAST STRIPE PAINT (1-COAT)	LF	5400	\$ 2.00	\$ 10,800.00
241	870009		MAINTAIN EXISTING TRAFFIC MANAGEMENT SYSTEM ELEMENTS DURING CONSTRUCTION	LS	1	\$ 20,000.00	\$ 20,000.00
242	872001		TEMPORARY LIGHTING SYSTEMS	LS	1	\$ 101,000.00	\$ 101,000.00
243	872131		MODIFYING LIGHTING SYSTEMS	LS	1	\$ 245,000.00	\$ 245,000.00
244	872134		MODIFYING RAMP METERING SYSTEMS	LS	1	\$ 217,000.00	\$ 217,000.00
245	872135		MODIFYING TRAFFIC MONITORING STATIONS	LS	1	\$ 649,500.00	\$ 649,500.00
246	872145		REMOVING TRAFFIC MONITORING STATION	LS	1	\$ 24,200.00	\$ 24,200.00
247	999990	10.0%	MOBILIZATION (10%)	LS	1	\$ 8,165,417.40	\$ 8,165,417.40

**CONSTRUCTION SUBTOTAL**

**\$ 89,819,591.40**

Item No.	Item Code	F	Item Description	Unit (Alt)	Quantity	Unit Price	Final Submittal
<b>SUPPLEMENTAL WORK ITEMS</b>							
1	066015		FEDERAL TRAINEE PROGRAM	LS	1.00	\$ 16,000.00	\$ 16,000.00
2	066070		MAINTAIN TRAFFIC	LS	1.00	\$ 250,000.00	\$ 250,000.00
3	066072		MAINTAIN DETOUR	LS	1.00	\$ 150,000.00	\$ 150,000.00
4	066094		VALUE ANALYSIS	LS	1.00	\$ 10,000.00	\$ 10,000.00
5	66395A		SMOOTHNESS INCENTIVE	LS	1.00	\$ 200,000.00	\$ 200,000.00
6	066595		WATER POLLUTION CONTROL MAINTENANCE SHARING	LS	1.00	\$ 500,000.00	\$ 500,000.00
7	066596		ADDITIONAL WATER POLLUTION CONTROL	LS	1.00	\$ 75,000.00	\$ 75,000.00
8	066597		STORM WATER SAMPLING AND ANALYSIS	LS	1.00	\$ 25,000.00	\$ 25,000.00
9	066610		PARTNERING	LS	1.00	\$ 50,000.00	\$ 50,000.00
10	066670		PAYMENT ADJUSTMENTS FOR PRICE INDEX FLUCTUATIONS	LS	1.00	\$ 1,427,000.00	\$ 1,427,000.00
11	066861		MAINTAIN EXISTING AND TEMPORARY ELECTRICAL SYSTEM	LS	1.00	\$ 30,000.00	\$ 30,000.00

**SUPPLEMENTAL WORK SUBTOTAL**

**\$ 2,733,000**

Item No.	Item Code	F	Item Description	Unit (Alt)	Quantity	Unit Price	Final Submittal
<b>DEPARTMENT FURNISHED ITEMS</b>							
1	066020		RAILROAD WORK	LS	1.00	\$ 250,000.00	\$ 250,000.00
2	066062		COZEEP CONTRACT	LS	1.00	\$ 450,000.00	\$ 450,000.00
3	066063		TRAFFIC MANAGEMENT PLAN - PUBLIC INFORMATION	LS	1.00	\$ 150,000.00	\$ 150,000.00
4	066065		TOW TRUCK SERVICE PATROL	LS	1.00	\$ 225,000.00	\$ 225,000.00
5	066105		RESIDENT ENGINEERS OFFICE	LS	1.00	\$ 400,000.00	\$ 400,000.00
6	066842A		CCTV ROUTER	EA	2.00	\$ 1,000.00	\$ 2,000.00
7	066844A		MODEL 2070E CONTROLLER UNITS	EA	10.00	\$ 5,000.00	\$ 50,000.00
8	066845A		MODEL 500 CMS, WIRING HARNESS AND CONTROLLER ASSEMBLY	EA	1.00	\$ 50,000.00	\$ 50,000.00
9	066846A		CMS CONTROLLER ISOLATION ASSEMBLY	EA	1.00	\$ 1,045.00	\$ 1,045.00
10	066871		ELECTRICAL SERVICE CONNECTIONS	LS	1.00	\$ 50,000.00	\$ 50,000.00
11	066876		LOOP DETECTOR SENSOR UNITS	EA	64.00	\$ 500.00	\$ 32,000.00
12	066879A		TELEPHONE SERVICE CONNECTIONS	LS	1.00	\$ 6,000.00	\$ 6,000.00
13	066916		ANNUAL CONSTRUCTION GENERAL PERMIT FEE	LS	1.00	\$ 5,000.00	\$ 5,000.00

**DEPARTMENT FURNISHED MATERIALS SUBTOTAL**

**\$ 1,671,045**

**TRO  
Mobilization  
Working Days**

\$2,500/WD
10.0%
750

**SUBTOTAL (CONST, SUPPLEMENTAL WORK & DEPARTMENT FURNISHED MATERIALS)**

**\$ 94,223,636**

**Contingency 10.0%**

**\$ 9,422,363.64**

**CONSTRUCTION CAPITAL COSTS**

**TOTAL (Roadway/Structural, Supplemental Work, State Furnished Materials and Contingency)**

**\$ 103,646,000**

## ATTACHMENT J

### RISK REGISTER AND CERTIFICATION



**RISK REGISTER CERTIFICATION (ACCOUNTABILITY CHECKPOINTS) FORM**

PPM-0001 (REV 03/2016)

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.

<b>Project Information</b>		<input checked="" type="checkbox"/> Capital Project <input type="checkbox"/> Major Maintenance Project (Check One)	Total Estimated Cost: \$103,665,877.00
Project ID/District-EA	0419000068 / 04-264721		Date: 09/14/2020
Project Description	This project will widen US 101 to add new HOV lanes		Date: 09/14/2020
Project Manager (PM)	Wajahat Nyaz		Date: 09/14/2020
Project Risk Manager (For Risk Level 3 Projects)	Harlan Woo		Date: 09/14/2020
<input type="checkbox"/> 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	Wajahat Nyaz		Digitally signed by Wajahat Nyaz Date: 2020.09.17 19:08:22 -07'00'
			Date: 09/17/2020
	Attach		

<b>PID (Recommended for Capital Projects Only excluding Minor Projects)</b>		Attach
Project Manager		Date:
Deputy District Director, Planning		Date:
Deputy District Director*, Design**		Date:
Deputy District Director, Project Management		Date:

<b>PA&amp;ED (Required for Capital Projects Only)</b>		Attach
Project Manager		Date:
Deputy District Director*, Environmental		Date:
Deputy District Director*, Design**		Date:
Deputy District Director, Project Management		Date:

<b>Prior to PS&amp;E (Required for Capital Projects and Major Maintenance Projects)</b>		Attach
Project Manager	Wajahat Nyaz	Digitally signed by Wajahat Nyaz Date: 2020.09.21 09:54:13 -07'00'
Deputy District Director*, Design**	Ziad Abubaker	Date: 10/14/2020
Deputy District Director*, Construction		Date: 10-21-20
Deputy District Director*, Right of Way	Mark L. Weaver	Digitally signed by Mark L. Weaver Date: 2020.09.25 13:46:31 -07'00'
Deputy District Director*, Environmental	Melissa Coppola	Digitally signed by Melissa Coppola Date: 2020.10.01 16:30:09 -07'00'
Deputy District Director, Project Management**		Date: 10/27/2020

<b>RE File hand-off (Recommended for Capital Projects and Major Maintenance Projects)</b>		Attach
Project Manager		Date:
Deputy District Director*, Design**		Date:
Deputy District Director*, Construction		Date:
Deputy District Director, Project Management**		Date:

\*or the respective Project Delivery Division Chief signatures in the North Region or Central Region

\*\*or Deputy District Director, Maintenance signature for HM Projects designed by the District Maintenance Division



RISK REGISTER LEVEL		3	PROJECT NAME		MRN/SON Route 101 - Marin Sonama Narrow MSN (B7)		DIST-EA		Project Manager		Wajahat Nyaz (PM)		RISK MANAGER		Patrick Treacy / Gurmukh Thiara / Daniel Y. Chang				TOTAL COST ( Capital +Support)			\$131,061,000.00				
PROJECT PHASE		PS&E	PDT MEMBERS				RISK ASSESSMENT INFORMATION															TOTAL DAYS ( Construction + Initial review (30 days)+ Closeout (60 days))			840	
Risk Identification						Probability		Cost Impact				Time Impact (days)				Phase	Capital / Support	Individual Risk	Risk Response							
Status	ID #	Category	Title	Risk Statement	Assumptions	Prob Low	Prob High	Cost Low	Cost Most likely	Cost High	Cost Probable	Time Low	Time Most likely	Time High	Time Probable	ENG / CON	C/S	Rationale	Strategy	Response Actions / Current Status		Risk Owner	Updated			
Active	1	Construction (CT)	Soil Nail Walls (RW No. 2 & 12)	As a result of traffic handling restrictions (lane/freeway closure options and available working space) during geotechnical investigations, horizontal borings (in support of the soil nail wall design), was not feasible, and unanticipated soil conditions may be encountered during construction, which would lead to delays and increased construction costs..	During investigations, supplemental vertical borings (from above) were conducted at the wall locations in critical locations in order to help characterize the most likely conditions to facilitate the design.	40	50	\$150,000	\$200,000	\$250,000	\$90,000	15	20	30	10	CON	C	Max cost impact 1/2 of soil nail bid item.	Mitigate	1. Work closely with contractor and adjust design during construction in a timely manner. 2. Utilize 10% Contingency, as required.		Farhad Farzmand/Syd Valeh (Construction)	10/13/2020			
Active	2	Environmental	Offsite Mitigation (Storm Water Treatment and Trash-Capture Deficits)	As a result of limited R/W and corridor topographic constraints, trash capture and stormwater treatment deficits, which will lead to non-compliance with the current NPDES Permit between RWQCB and Caltrans leading to cost impacts.	- 22 Acre SW Treatment (On-Site); 22 acres needed off-site. - 20% Trash Capture Strategy (On-Site)	90	100	\$1,000,000	\$2,500,000	\$5,250,000	\$2,572,917	0	0	0	0	ENG	C	Offsite cost at \$250,000/acre are \$5,000,000.	Accept	1. Work with County to execute agreements and fund/implement off-site stormwater treatment projects prior to MSN B7 Construction Completion (Summer/Fall 2024)		Kit Chan (Env Engineering - Water Quality)	10/13/2020			
Active	3	Environmental	Permit Applications RWQCB, CDFW, & ACOE	As a result of RWQCB's ongoing review the 401 Permit and issues pertaining to stormwater treatment and off-site trash capture there is a risk for delay past October leading to cost impacts. All permit applications and off-site mitigation proposals have been submitted to the agencies. Caltrans has received a final CDFW 1602 and ACOE 404 NWP application is in its final review.	404 - Received 10/5/2020 1602 - Received 9/24/2020 401 - anticipated to be received by mid-October	40	60	\$10,000	\$20,000	\$30,000	\$10,000	0	0	0	0	ENG	C	Minimal cost to delay as long as approval is on-time for RTL. Assume no time impact at this moment.	Accept	1. USACoE released their draft permit conditions; permit is anticipated by 10/23/2020. 2. CDFW issued 1602. in September 3. RWQCB is reviewing and finalizing 401 Certification; permit is anticipated by 10/23/2020 4. Continue to work with Resource Ageencies (permit conditions) and County to execute agreements and fund/implement off-site mitigation.		Rebecca Carson (Env/Biology/1602 and 404 Permits)  Kit Chan (Env/Water Quality/401 Cert)	10/13/2020			
Retired	4	PM	Design Submittal and Review Delay	As a result of delayed deliverables review, major changes in design may occur, which could affect project completion/RTL Schedule.	Design submittal milestones and District/HQ review durations/dates cited in PDT Schedule will be held. Final comments received end of April; PS&E package resubmitted in June. RTL October 2020	60	80	\$10,000	\$20,000	\$30,000	\$14,000	0	0	0	0	ENG	C	Minimal cost to delay as long as comments are received and resolved on-time for RTL. Assume no time impact at this moment.	Mitigate	1. Hold Schedule. 2. Early/continual involvement of reviewers and stakeholders . 3. Proper QA/QC.		Wajahat Nyaz (PPM)	6/30/2020			
Retired	5	Design	Design Standards/Plan Preparation Changes	As a result of updates to design standards during the project development phases, changes to design requirements may occur, which would lead to redesigns and additional delays to the project approval timeline.	Use latest (April 2020) standard plans/standard specs/special provisions	20	40	\$50,000	\$75,000	\$100,000	\$22,500	10	15	30	6	ENG	C	Estimated design cost approximately 6-14 person weeks to update full final PS&E set to the most recent.	Mitigate	1. Incorporate April 2020 revisions. 2. Monitor current design standards and get commitment from project approval agency as to the project controlling standards at the earliest possible time. 3. Maintain project schedule in order to minimize probability of changes.		BKF	6/30/2020			
Retired	6	Design	Trash Capture Standards	As a result of trash capture requirements and details that are not yet part of current CT Standard Plans, the trash capture strategy will need to be coordinated/adjusted which could lead to project approval delays.	Design based on Draft Standard Plan Details and nSSPs provided by D4/HQ Stormwater Branch.	70	90	\$100,000	\$150,000	\$200,000	\$120,000	0	0	0	0	ENG	C	Estimated \$80k for each additional location using previously approved technology. Given unknown of technology approval, currently assuming 2+ locations.	Mitigate	1. Work with the board and Caltrans to develop an economical and constructible trash capture solution that meets permit requirements. 2. Work with D4/HQ SW Branches to implement draft standard plans and nSSPs. 3. If requirements are not agreed to in time for RTL package, design will be issued as a change order at a later time to minimize schedule impacts.		Hardeep Takhar (Water Quality)	6/30/2020			
Active	7	Construction (CT)	Buried Object-Site Condition	As a result of unanticipated buried man-made objects uncovered during construction, conflicts could arise, which would lead to resulting additional cost for removal and disposal.	Design is based on as-built plans, geotechnical testing.	40	60	\$100,000	\$300,000	\$500,000	\$150,000	5	10	15	5	CON	C	Engineering judgement based on scope. Assume \$50-100k per location and 4-5 locations.	Mitigate	1. Work closely with contractor and adjust design during construction. 2. Utilize 10% Contingency, as required.		Farhad Farzmand/Syd Valeh (Construction)	10/13/2020			
Active	8	Construction (CT)	Utility Conflicts	A unexpected utilities, including crossings, during construction, construction conflicts may occur, which would lead to construction schedule delays and cost impacts.	Design is based on as-built plans and pothole results.	20	50	\$100,000	\$300,000	\$600,000	\$110,833	5	10	15	4	CON	C	Assume 2-4 locations @150k each	Mitigate	1. Work closely with Contractor and adjust design during construction 2. Utilize 10% Contingency, as required.		Farhad Farzmand/Syd Valeh (Construction)	10/13/2020			
Active	9	Environmental	Buried Archaeological Resource	As a result of undocumented conditions, the discovery of Archeological Resources outside of AMA specified areas during construction may occur, which could lead to delays to the project.	Design is based on as-built plans, archeological testing, and coordination with Caltrans Cultural Resources. Project AMA area is managed in the design; this is low risk.	30	50	\$750,000	\$1,000,000	\$1,250,000	\$400,000	30	60	90	24	CON	S	Updated cost per consensus at Risk Management Meeting.	Mitigate	1. Work closely with Contractor and CT Cultural and adjust design during construction. 2. Utilize 10% Contingency, as required.		Kathryn Rose (Env-Cultural)	10/13/2020			
Retired	10	Design	TCDS	As a result recent meeting with SW Branch, TCDS will be required for all work affecting Waters of the US, which will require additional design efforts, as well as capital costs for each diversion..	Previous: TCDS for Major/Riparian Waters of the US.	40	60	\$45,000	\$65,000	\$85,000	\$32,500	0	0	0	0	ENG	C		Avoid	Per PDT (1/9/2020), it was confirmed TCDS will be required for each Waters of the US (29 Locations) and Plans, Specs, Estimate and Permit have been updated to include		BKF	1/9/2020			
Active	11	Construction (CT)	Added SWPPP and BMPs	As a result of heavy or longer rainy season, added SWPPP/Construction BMP work will be required leading to additional costs and potential delays.	Plans and EE include standard bid item costs for and allowance for supplemental costs for SWPPP related items of work based on normally expected winter rainy season (3 winters assumed)	60	80	\$200,000	\$1,000,000	\$2,000,000	\$723,333	30	60	90	42	CON	C	Per discussion in Risk Management Meeting, most jobs exceed the BEEs by 125% - 350% depending on the active weather condition for the duration of the project in North bay. WPC Item total is 800K	Avoid	1. Work together with the contractor during periods of inclement weather to reduce SWPPP and BMP costs. 2. Utilize 10% Contingency, as required.		Farhad Farzmand/Syd Valeh (Construction)	10/13/2020			
Active	12	Construction (CT)	Dewatering	As a result of weather/tidal conditions, fluctuating and higher than anticipated ground water level may occur, which would require additional dewatering for work involving excavation and deeper CIDH activities.	Plans assume groundwater levels based upon log of test borings	40	60	\$30,000	\$60,000	\$90,000	\$30,000	5	10	15	5	CON	C	Cost is per location, assume 1-3 locations	Accept	1. Work together with Contractor to monitor ground water level, and try to schedule deep excavations in dry/low tide times when possible. 2. Utilize 10% Contingency, as required.		Farhad Farzmand/Syd Valeh (Construction)	10/13/2020			



RISK REGISTER LEVEL		3	PROJECT NAME		MRN/SON Route 101 - Marin Sonama Narrow MSN (B7)		DIST-EA		Project Manager		Wajahat Nyaz (PM)		RISK MANAGER		Patrick Treacy / Gurmukh Thiara / Daniel Y. Chang				TOTAL COST ( Capital +Support)		\$131,061,000.00					
PROJECT PHASE		PS&E	PDT MEMBERS				RISK ASSESSMENT INFORMATION																TOTAL DAYS ( Construction + Initial review (30 days)+ Closeout (60 days))		840	
Risk Identification							Probability				Cost Impact				Time Impact (days)				Phase	Capital / Support	Individual Risk		Risk Response			
Status	ID #	Category	Title	Risk Statement		Assumptions		Prob Low	Prob High	Cost Low	Cost Most likely	Cost High	Cost Probable	Time Low	Time Most likely	Time High	Time Probable	ENG / CON	C/S	Rationale	Strategy	Response Actions / Current Status		Risk Owner	Updated	
Active	13	Construction (CT)	Unsuitable Subgrade Material/Localized Subgrade Conditions	As a result of unknown and unanticipated subgrade conditions and site/drainage/weather conditions, unsuitable subgrade material may be exposed or localized subgrade conditions (such as pumping) may occur, which would lead to additional work/materials or issues with equipment mobility on site and the need for rework of the subgrade, aeration and/or over-excavation with costs and delays to mitigate prior to earthwork, paving or foundation operations.		Design based on geotechnical recommendations (per testing and boring logs conducted and presented in GDMR).		20	40	\$100,000	\$300,000	\$500,000	\$90,000	5	10	15	3	CON	S	Assume approximately 10% of roadway excavation total from BEEs	Accept	1. Adjust design during construction. 2. Utilize 10% Contingency, as required.		Farhad Farzmand/Syd Valeh (Construction)	10/13/2020	
Active	14	Construction (CT)	Contaminated Materials	As a result of unanticipated subsurface contamination, excavation operations uncovering new or additional contaminated materials (ADL, ground water, naturally occurring asbestos, etc.) may occur, which would lead to increased project costs.		Design based on SIR recommendations (per testing/assessment of ADL, asbestos, and lead-containing materials).		20	40	\$150,000	\$250,000	\$350,000	\$75,000	5	10	15	3	CON	S	PDT recommendation based on previous projects.	Mitigate	1. Adjust design during construction. 2. Utilize 10% Contingency, as required.		Farhad Farzmand/Syd Valeh (Construction)	10/13/2020	
Active	15	Construction (CT)	Excavation/Drilling/Driving Operations	As a result of unknown fluctuations in subsurface conditions, the contractor may encounter difficult excavation conditions at RW 1 and 3-11, difficult drilling conditions at RW 2 & 12 and Franklin OH, and difficult pile driving conditions at Olive Ave UC, that would require construction/design adjustments and affect schedule/costs..		Design based on geotechnical recommendations (per testing and boring logs approved by D4, and conducted and presented in FR).		40	60	\$100,000	\$125,000	\$150,000	\$62,500	5	10	15	5	CON	C	The long walls on this project necessitate this item.	Accept	1. Adjust design during construction. 2. Utilize 10% Contingency, as required.		Farhad Farzmand/Syd Valeh (Construction)	10/13/2020	
Active	16	Construction (CT)	Extra Construction Season	As a result of Project Funding/Delivery/AAA Schedule, calendar and environmental restrictions (work-windows) and delays related to staging/phasing of sequential work may occur, which could lead to additional construction season. This item addresses cost risk only.		3 construction seasons have been assumed and construction between 3/2021 and 4/2024.		20	40	\$850,000	\$1,700,000	\$3,000,000	\$532,500	0	0	0	0	CON	C	Assume extra cost in range of 1-3.5% of estimated construction costs for added construction season.	Accept	1. Hold Schedule: RTL in October, Fund in December, Advertise in Jan/Feb, Award in March/April, and Begin Construction in May 2021 2. Work closely with Contractor to Manage Work adn Identify Construction Phasing Alternatives. 3. Utilize Summer 2024, as as contingency. 4. Utilize 10% Contingency, as required.		Farhad Farzmand/Syd Valeh (Construction)	10/13/2020	
Active	17	Environmental	Migratory Birds	As a result of presence of nesting birds in the project limits/vicinity (trees to be removed (160), structures modified, or within restricted radius of construction), work may not be able to proceed, or mitigation may be necessary (such as bridge scraping for swallow nesting), which would lead to work delays.		Work (tree removal and structures) will align with permit work-windows.		20	40	\$50,000	\$75,000	\$100,000	\$22,500	5	15	30	5	CON	C	Due to the staging of the project and the fact that the trees are outside of the travel lanes, this item is low probability.	Accept	1. Adjust phasing/staging and first order of work to align with permit work windows - will explore when AAA schedule is locked-in. 2. Assess/consider nSSP for exclusionary work at structures - will address when all permits are issued and can move forward with writing the specs 3. Utilize CT Standard Specs (Biological Monitoring) during restricted windows - will address when all permits are issued and can move forward with writing the specs. 4. Consider separate Tree Removal packages/advanced tree cutting contract. - will explored when AAA schedule is locked-in. 5. Trim vegetation - will address once all permits are issued and can move forward with writing the specs		Rebecca Carson (Env/Biology/Permits)	10/13/2020	
Active	18	Construction (CT)	Existing Utilities (to Remain)	As the result of the separate Utility Relocation Package (MSN B8), existing overhead utilities within Caltrans ROW may remain in place (with a possibility of concurrent/overlapping relocation work), could lead to coordination and construction challenges.		Utility Relocation (MSN B8) for PG&E, Frontier and AT&T will occur after (or during) MSN B7 Construction. The B8 work is outside of Caltrans R/W (except for pole removal).		80	100	\$50,000	\$125,000	\$175,000	\$108,750	15	25	30	21	CON	C	Costs related to coordination between multiple contractors between B7/B8.Unknown coordination with PG&E for construction adjacent to existing lines depending on status of relocation. Assume approximately \$3k to \$6k per day.	Accept	1. Coordinate MSN B7 and B8 schedules. 2. Work closely with utility owners and protect-in-place utilities during construction. 3. Coordination clause added to the contract.		Farhad Farzmand/Syd Valeh (Construction)	10/13/2020	
Retired	19	Hydraulic	Drainage/Flooding at Cherry Ave/Armstrong Street	As a result of existing flooding conditions in this area (outside of Caltrans R/W), Project sponsors (TAM and CT) have committed to County/City to explore solutions to mitigate, and as a result, site investigation, resource mapping/impacts, and drainage design solutions are being explored, which could affect project permitting, approval and RTL delivery.		Intermediate solution addressed in current PS&E documents.		50	70	\$75,000	\$125,000	\$150,000	\$72,500	5	10	15	6	ENG	C		Accept	1. Conduct supplemental mapping, survey, and develop preliminary design options. 2. Integrate design options into PS&E and update Resource Permit Application (temp/perm impacts).		BKF	4/21/2020	
Active	20	RightofWay	SMART Coordination	As a result of unforeseen SMART requirements, additional railroad coordination during construction may be required, which would lead to cost impacts and schedule delays.		Requirements will be stipulated in C&M which is currently proceeding. Discussions with CPUC upcoming.		40	60	\$150,000	\$300,000	\$450,000	\$150,000	10	20	30	10	CON	C	With sufficient planning, impacts expected to minimal. Cost based on TRO=\$14.7k	Accept	1. Coordinate closely with SMART during construction. 4. Utilize 10% Contingency, as required.		Alden Chalk (R/W)	6/30/2020	
Retired	21	Construction (CT)	Localized Subgrade Conditions	As a result of unforeseen subsurface conditions and site/drainage/weather conditions, localized subgrade conditions (such as pumping) may occur, which could lead to issues with equipment mobility on site and the need for rework of the subgrade, aeration and/or over-excavation, resulting in additional costs and potential delays.		Design based on geotechnical recommendations (per testing and boring logs conducted and presented in GDMR). Retired and combined with item 13 "Unsuitable Material"		50	70	\$75,000	\$125,000	\$150,000	\$72,500	5	10	15	6	CON	C		Accept	1. Adjust design during construction. 2. Pursue 10% Contingency. 3. Identify applicable (permissible) bid items under supplemental work.		Farhad Farzmand/Syd Valeh (Construction)	3/11/2020	



RISK REGISTER LEVEL	3		PROJECT NAME		MRN/SON Route 101 - Marin Sonama Narrow MSN (B7)		DIST-EA		Project Manager		Wajahat Nyaz (PM)		RISK MANAGER		Patrick Treacy / Gurmukh Thiara / Daniel Y. Chang				TOTAL COST ( Capital +Support)			\$131,061,000.00				
PROJECT PHASE	PS&E		PDT MEMBERS				RISK ASSESSMENT INFORMATION																TOTAL DAYS ( Construction + Initial review (30 days)+ Closeout (60 days))		840	
Risk Identification							Probability				Cost Impact				Time Impact (days)				Phase	Capital / Support	Individual Risk		Risk Response			
Status	ID #	Category	Title	Risk Statement		Assumptions		Prob Low	Prob High	Cost Low	Cost Most likely	Cost High	Cost Probable	Time Low	Time Most likely	Time High	Time Probable	ENG / CON	C/S	Rationale	Strategy	Response Actions / Current Status		Risk Owner	Updated	
Active	22	Construction (CT)	CIDH Installation	As a result of unforeseen drilling conditions, caving during excavation and the installation of CIDH may occur, which could lead to the need for casing, shoring, additional excavation and additional concrete quantities in excess of the standard specs, adding cost to the project.		Design based on geotechnical recommendations (per testing and boring logs conducted and presented in FRs). Casing is a standard specification item that is to be used if necessary.		40	60	\$75,000	\$125,000	\$150,000	\$60,417	5	10	15	5	CON	C	Assume occurs at 3 large CIDH (bridge or OH sign) @ \$25k-50k each	Accept	1. Work closely with contractor during construction 2. Utilize 10% Contingency, as required.		Farhad Farzmand/Syd Valeh (Construction)	10/13/2020	
Retired	23	Organization	Expedite Award & Approval of the Project	The CTC will program new SB1 SCCP projects in the 2020 program for FY 21/22 and 22/23 in Dec 2020. The project schedule assumes the SB1-SCCP allocation will be advanced to FY 20/21, and the allocation will be concurrent with new programming in December 2020. CTC may choose not to advance funding to FY 20/21, leading to a six-month delay in project advertisement.		The CTC will advance allocation of SB1 funding to Dec 2020 concurrent with programming		20	60	\$100,000	\$150,000	\$200,000	\$60,000	120	140	180	59	ENG	C	Based on past experience. The CTC has advanced funding for shovel ready projects	Accept	RTL in October 2020 and request funding in December 2020 CTC meeting. Lobby CTC for advance allocation citing benefits of early allocation		Wajahat Nyaz (PPM)	9/4/2020	
Active	24	PM	Insufficient Funding (RM3 and SB1 - SCCP)	As a result of programmed by phase, the project may experience funding issues in future phase due to the lack of SB1 and RM3 funds leading to suspension of the project to RTL into construction resulting in additional cost and schedule delay when funding becomes available		The project funds were not programmed through the life of the project. Currently, RM3 funding that was anticipated to be used for this project, however there is an on going litigation which may not be resolved by December 2020. RM3 funding will only be released after litigation is resolved. CTC may also not program this project as part of the 2020 program. If either funding is not capture, the project cannot move into construction phase. CTC will program new SB1 SCCP projects in Dec 2020.		40	60	\$1,673,000	\$3,345,000	\$6,690,000	\$1,811,917	20	80	120	37	CON	C	Worst case Capital cost impact funding delayed 2 years with Escalation cost of 3.2% percent, most likely 1 year to resolve current lawsuit and optimistically 6 months for cost impact. Schedule wise 1 to 6 months to update and prepare PS&E package for RTL.	Accept	PM will work with the Project Sponsors to lobby CTC to fund the project for SB1 funding 2021 cycle and citing project benefits and high cost/benefit ratio. Hopefully, the litigation could be resolved by December 2021 the RM3 funding would also become available. In the absence of either SB1 funding or RM3 funding, the project will be delayed with an uncertain amount of time and could be beyond 2 years which is accounted in this risk. Project maybe shelved until funding becomes available.		Wajahat Nyaz (PPM)	9/10/2020	
Retired	25	RightofWay	Right of Way Certificate	As a result of the late discovery of utility (PG&E gas line) conflict, a utility agreement is needed for R/W certification. The utility agreement will require PG&E to prepare the utility relocation plans and estimate. PG&E staff working on the project have been reassigned temporarily to address wildfire issues, and this may delay the project RTL.		The project schedule assumes that PG&E will complete the relocation plans and estimate, and the utility agreement will be signed by Oct 30, 2020.		20	60	\$0	\$0	\$0	\$0	15	30	60	14	ENG	S	Based on CT past experience.	Accept	Coordinate closely with PG&E to avoid/minimize the delay.		Julie McDaniel / Dan Asprogerakas (R/W)	9/4/2020	
Active	26	RightofWay	Unanticipated Utility Relocation	As a result of the late discovery of utility (PG&E gas line) conflict, a utility agreement is needed for R/W certification. The utility agreement will require PG&E to prepare the utility relocation plans and estimate. PG&E staff working on the project have been reassigned temporarily to address wildfire issues, and this may delay the Right of Way Certificate as well as project RTL.		PG&E will meet the RTL date for utility Agreement.		20	50	\$100,000	\$300,000	\$600,000	\$110,833	5	10	15	4	CON	C	Assume 2-4 locations @150k each	Mitigate	1. Resolve utility agreement and complete R/W Certification		Julie McDaniel / Dan Asprogerakas (R/W)	10/12/2020	
Active	27	Construction	Allocation for unidentified risks	Contingency needs to be allocated (based on industry practice) for issues that are missed when identifying uncertain events.		Industry accepted practical recommendations for including "unknown unknowns" into probabilistic cost and schedule risk models are used.		80	100	\$518,330	\$1,036,660	\$2,073,320	\$1,010,744	0	0	0	0	CON	C	Size of "unknown " allowances is dependent on the novelty of the project, stage of development of the project and type of industry. This risk account for all unidentified risks that the PDT didn't anticipate.	Accept	1. The projects Contingency funds includes 1% for all "Unknown Unknowns". RE to tap into contingency in case of need. 2. Utilize 10% Contingency, as required.		Farhad Farzmand/Syd Valeh (Construction)	6/30/2020	
Active	28	Construction	Support Costs Due to weather days	When contractor is allocated a weather day, COS costs will be incurred to the department. This risk is to cover all COS incurred to the Department. There are no delay costs.		No weather days were anticipated by the design team.		80	100	\$0	\$650,000	\$1,300,000	\$585,000	0	0	0	0	CON	S	Based on CT historical data. Projects with similar working days have an average of 0% - 10% of weather days allocated.	Accept	In case of need, RE and PM to tap into G-12 support funds.		Farhad Farazmand/Syd Valeh (CT) / Contractor (TBD)	3/18/2020	
Retired	29	Design	COS costs due to delay	Additional support costs will be needed if the project is delayed during design phase. Cumulative costs of all Design risks.		These are Unanticipated COS costs expended by the design team due to changes and delays to the project.		100	100	\$0	\$0	\$0	\$0	0	0	0	0	ENG	S	This is cumulative of all the active risks with "P1" of Phase column.	Accept	1. Conditional RTL is on target for end of October. 2. See individual responses if there were any to the various risks identified in phase 1 (Design) that have schedule impacts. In case of any support costs overruns PM to request for G-12 support funds.		Mustaqur Rahman /Gordon Sweet [BKF] (Design)	10/13/2020	
Retired	30	Design	Indirect costs of Project Design/RTL Delay: (Mostly Escalation Costs)	If the project gets delayed in Design phase, RTL will be delayed resulting in Escalation of project costs. This is cumulative of all costs due to delay of RTL.		Escalation costs of 5%/year is assumed for projects that get delayed in design phase.		100	100	\$0	\$0	\$0	\$0	0	0	0	0	ENG	C	This is cumulative of all the active risks with "P1" of Phase column.	Accept	1. Conditional RTL is on target for end of October. 2. See individual risk responses if there were any to the various risks identified in Phase 1 (Design).		Mustaqur Rahman /Gordon Sweet [BKF] (Design)	10/13/2020	
Active	31	Construction	COS costs due to delay	Cumulative costs of additional Construction COS needed due to delays in construction phase.		These are Unanticipated COS costs expended by the Construction team due to changes and delays to the project.		100	100	\$1,678,563	\$2,097,333	\$2,516,103	\$2,097,333	0	0	0	0	CON	S	This is cumulative of all the active risks with "P4" of Phase column.	Accept	See individual responses if there were any to the various risks identified in Phase 4 (Construction) that have schedule impacts. In case of any support costs overruns PM to request for G-12 support funds.		Farhad Farazmand/Syd Valeh (CT) / Contractor (TBD)	3/18/2020	
Active	32	Construction	Indirect costs of Project Construction: (TRO & TRO+ & Escalation)	Cumulative costs of delays due to any of the other risk items occurring in construction phase, these are the indirect costs associated with occurrence of any of identified risks causing a construction delay.		Has CO delay costs (TRO, TRO+ and Escalation Costs) Escalation = 5%/Year, TRO=10% of Capital Costs/Year TRO+ = 5% of Capital Costs/year		100	100	\$4,152,062	\$5,187,923	\$6,223,785	\$5,187,923	0	0	0	0	CON	C	This is cumulative of all the active risks with "P4" of Phase column.	Accept	See individual responses to the various risks identified in Construction.		Farhad Farazmand/Syd Valeh (CT) / Contractor (TBD)	3/18/2020	

PROJECT RISKS REGISTER LEVEL 3 INFORMATION SUMMARY SHEET					
Item	Cost	Schedule or Activity			EA: 04-26472 (0419000068)
		Start Date	End Date	Total Days	Remarks
Project Construction Capital Costs	\$103,666,000				Based on CTIPS
Project ROW Capital Costs	\$7,045,000				Based on CTIPS
Project Capital Costs	\$110,711,000				Based on CTIPS
PA&ED support costs (Total)	\$0			0	Based on CTIPS, Total days is just working days.
PS&E support costs (Total)	\$7,300,000	07/01/18	10/29/20	609	Based on CTIPS, Total days is just working days.
R/W support costs (Total)	\$50,000				Based on CTIPS.
Construction Support (Total)	\$13,000,000				Based on CTIPS.
Project Support Costs(Total)	\$20,350,000				Based on CTIPS
Total Project Costs	\$131,061,000				Based on CTIPS
Initial Review time (In days)	30				Based on common practices
Construction allocated time (days)	750				Based on Engineers Estimate
Project Closeout (In days)	60				Based on common practices
Total Project days (Construction +Initial review+ Closeout)	840				Based on Construction days+ Initial review of 30 days+ Project close out of 60 days
Design Actual Burn Rate/ Month	\$100,000				Enter the actual burn rate/month. Provided by the PM
RISK REGISTER LEVEL 3 INDIRECT COSTS					
Escalation Costs / Day	\$22,142				Assumed 0-5%/year. For low cost impact use 0%, Most
TRO / Day	\$13,822				(Construction Capital *10%)/(Construction days)
TRO+ / Day	\$6,911				50% of TRO/Day
Design Indirect costs/day	\$22,142				Assuming 5% escalation/ year. Its total escalation /250
Construction Indirect costs/day	\$42,875				Total of (Escalation+(TRO+)) per day
RISK REGISTER LEVEL 3 DELAY TIME					
Confidence levels	50%	10%	50%	90%	
Total Delays	121				2/3 of Total delays (Design + Construction)
Design Delay days (P1-Phase 1)	0	0	0	0	2/3 of actual design delay risks. There will be some risks
Construction Delay Days (P4-Phase4)	121	97	121	145	2/3 of actual construction risks. There will be some risks
RISK REGISTER LEVEL 3 COS COSTS					
Design COS costs due to Delays / Day (Based on PM input)	\$4,545				This is the actual design burn rate per month/22
Design COS costs due to Delays / Day (Based on PA&ED support allocation)	\$0				This is the average design burn rate per day based on PA&ED allocation.
Design COS costs due to Delays / Day (Based on PS&E support allocation)	\$11,987				This is the average design burn rate per day based on PS&E allocation.
Design COS costs (Greater of Actual or Average)	\$11,987				This is greater of Actual or Programmed COS costs. This will change based on phase of the project.
Construction COS costs due to Delays /Day	\$17,333				Total Construction allocated costs/ No. of Construction days
RISK REGISTER LEVEL 3 TOTAL COST OF RISKS					
Confidence levels	50%	70%	80%	90%	
Total Costs of Risks	\$15,992,500	\$16,725,248	\$17,167,296	\$17,783,881	Total Costs of Risks for this Project.
Percentage of Total Risks vs Total project costs	12.20%	12.76%	13.10%	13.57%	(Total costs of risks)/( Total cost of project).
Total Capital Risks in Construction phase (P4) (Draw Against Contingency)	\$10,162,250	\$10,661,108	\$10,962,057	\$11,381,831	Based on the Risk Register . These are just Capital Risks and are draw against contingency.
Percentage of Const. Capital Risks vs Construction Capital costs	9.80%	10.28%	10.57%	10.98%	Total Capital Risks / Project Const. Costs (This will be a draw against contingency)
Project Allocated Contingency	5.00%	5.00%	5.00%	5.00%	Based on Engineers Estimate (PID,PA&ED,PS&E)
Total Capital Risks in Design phase (P1)	\$2,582,917	\$2,597,358	\$2,620,640	\$2,656,460	Based on Capital Costs Assumptions by the PDT.
Anticipated Support cost overruns based on Risk Analysis	\$3,247,333	\$3,466,781	\$3,584,599	\$3,745,590	Based on Risks and the Risk Curve.
Total Support Costs Risks	\$3,247,333	\$3,466,781	\$3,584,599	\$3,745,590	Total increase in support costs based on Project Risk Register and Risk based estimation curve.
Cost Probable Summation	Cost Summation	Time Summation			
PA&ED COS Risk Cost (Phase 0)		42.00			Summation of time impacting PA&ED phase
PS&E COS Risk Cost (Phase 1)		27.00			Summation of time impacting PS&E phase
Construction COS Risk Cost (Phase3)		3.00			Summation of time impacting Construction phase
Right of Way COS Risk Cost (Phase2)		0.00			Summation of time impacting Right of Way COS
Right of Way Capital Risk Cost (Phase 9)	\$ -				Summation of Cost impacting Right of Way phase
Construction Capital Risk Cost (Phase 4)	\$ 4,011,250.00				Summation of Cost impacting Construction phase
RISK EXPLANATIONS					
RISK TITLE	DESCRIPTION				
Design COS	This is the Capital outlay support (COS) cost that the project would incur due to delays in design phase. The delays in design phase				
Design Indirect costs	These are escalation costs that the department would incur due to delays to RTL. Risk team assumes Max. of 5% escalation per year				
Construction COS	These are additional support costs needed based on delays to project.				
Construction Indirect costs	This includes escalation costs, TRO costs and TRO + costs due to delays to project.				





## NEPA/CEQA RE-VALIDATION FORM

<b>DIST-CO-RTE:</b> <u>04-MRN/SON-101</u>
<b>PM/PM:</b> <u>MRN 18.6/27.7 and SON 0.0/7.2</u>
<b>EA or Fed-Aid Project No.:</b> <u>26400 &amp; 26472</u>
<b>Other Project No. (specify):</b> <u>0419000068</u>
<b>Project Title:</b> <u>Marin Sonoma Narrows HOV Widening Project</u>
<b>Environmental Approval Type:</b> <u>EIR/EIS</u>
<b>Date Approved:</b> <u>10/30/09</u>
<b>Reason for Consultation (23 CFR 771.129), check one:</b> <input checked="" type="checkbox"/> Project proceeding to next major federal approval <input checked="" type="checkbox"/> Change in scope, setting, effects, mitigation measures, requirements <input type="checkbox"/> 3-year timeline (EIS only) <input type="checkbox"/> <b>N/A</b> (Re-Validation for CEQA only)
<b>Description of Changed Conditions:</b> <i>Briefly describe the changed conditions or new information on page 2. Append continuation sheet(s) as necessary. Include a revised Environmental Commitments Record (ECR) when applicable.</i>

### NEPA CONCLUSION - VALIDITY

Based on an examination of the changed conditions and supporting information: (*Check ONE of the three statements below, regarding the validity of the original document/determination (23 CFR 771.129). If document is no longer valid, indicate whether additional public review is warranted and whether the type of environmental document will be elevated.*)

- ☐ **The original environmental document or CE remains valid. No further documentation will be prepared.**
- ☒ **The original environmental document or CE is in need of updating; further documentation has been prepared and ☐ is included on the continuation sheet(s) or ☒ is attached. With this additional documentation, the original ED or CE remains valid.**  
**Additional public review is warranted (23 CFR 771.111(h)(3)) ☐ Yes ☐ No**
- ☐ **The original document or CE is no longer valid.**  
**Additional public review is warranted (23 CFR 771.111(h)(3)) ☐ Yes ☐ No**  
**Supplemental environmental document is needed. ☐ Yes ☐ No**  
**New environmental document is needed. ☐ Yes ☐ No (If "Yes," specify type: )**

### CONCURRENCE WITH NEPA CONCLUSION

I concur with the NEPA conclusion above.

<u>Golanda Rivas</u> Signature: Environmental Branch Chief	<u>10/29/20</u> Date
<u>Wajahat Nyaz</u> Signature: Project Manager/DLAE	<u>10/30/2020</u> Date

## NEPA/CEQA RE-VALIDATION FORM

### **CEQA CONCLUSION** (Only mandated for projects on the State Highway System.)

Based on an examination of the changed conditions and supporting information, the following conclusion has been reached regarding appropriate CEQA documentation: (*Check ONE of the five statements below, indicating whether any additional documentation will be prepared, and if so, what kind. If additional documentation is prepared, attach a copy of this signed form and any continuation sheets.*)

- ☐ Original document remains valid. No further documentation is necessary.
- ☒ Only minor technical changes or additions to the previous document are necessary.
- ☒ An addendum has been or will be prepared and is ☐ included on the continuation sheets or ☐ will be attached. It need not be circulated for public review. (CEQA Guidelines, §15164)
- ☐ Changes are substantial, but only minor additions or changes are necessary to make the previous document adequate. A Supplemental environmental document will be prepared, and it will be circulated for public review. (CEQA Guidelines, §15163)
- ☐ Changes are substantial, and major revisions to the current document are necessary. A Subsequent environmental document will be prepared, and it will be circulated for public review. (CEQA Guidelines, §15162)
- (Specify type of subsequent document, e.g., Subsequent FEIR):
- ☐ The CE is no longer valid. New CE is needed. ☐ Yes ☐ No

### **CONCURRENCE WITH CEQA CONCLUSION**

I concur with the CEQA conclusion above.

<u>Golanda Rivas</u>	<u>10/29/20</u>
Signature: Environmental Branch Chief	Date
<u>Wajahat Nyaz</u>	<u>10/30/2020</u>
Signature: Project Manager/DLAE	Date

## NEPA/CEQA RE-VALIDATION FORM

### **CONTINUATION SHEET(S)**

Address only changes or new information since approval of the original document and only those areas that are applicable. Use the list below as section headings as they apply to the project change(s). Use as much or as little space as needed to adequately address the project change(s) and the associated impacts, minimization, avoidance and/or mitigation measures, if any.

#### **Changes in project design, e.g., scope change; a new alternative; change in project alignment.**

The following CEQA/NEPA Re-Validation applies to the Marin-Sonoma Narrows Project Contract B7.

#### **Background**

Caltrans approved the Fixed HOV Alternative for the Marin Sonoma Narrows HOV Widening Project (MSN Project) based on the 2009 FEIR/S and Project Report. This alternative included roadway widening of US 101 in Marin and Sonoma counties (MRN-101-PM 18.6/27.7 and SON-101-PM 0.0/7.2) for HOV lanes within the existing median in Segment A in the southbound (SB) and northbound (NB) directions. In Segment B, the HOV lanes would continue and upgrade the US 101 facility from an expressway with at-grade intersections and access control breaks for driveways, to a fully access controlled freeway with frontage roads to access existing driveways. Programming for the project was split into phases based on available funding. In Marin County, **Phase 1** was constructed, and included segments A and portions of Segment B, which were subdivided into the following contracts:

1. MSN A1: NB and SB 101 HOV Widening Project (PM 18.6/R22.3)
2. MSN A2: SB 101 HOV Widening Extension Project (PM R20.5/R20.9)
3. MSN A3: NB 101 HOV Widening Extension Project (PM R22.2/24.3)
4. MSN B1: Redwood Landfill I/C and Frontage/Bike Path Project (PM R23.2/27.1)

Other contracts in the MSN corridor are B3, B2/B4, which have completed construction, and C2, which is currently in construction.

#### **Project Description**

The contract, formerly referred to as MSN A4/B1 Phase 2, has been renamed to MSN B7, and reflects the MSN “gap closure” located in the City of Novato and unincorporated portions of Marin County from approximately PM 20.9 to 27.0. As originally described and cleared in the 2009 MSN EIR/EIS and subsequent environmental revalidations that supported Phase 1, the Project purpose, need, and description has not deviated; improvements will include the same alignment and inside and outside widening of US 101 to add (extend) HOV lanes.

Although included in the original design concept in the 2009 EIR/EIS, the following “specific” design details/refinements/adjustments are summarized as follows:

- Mainline horizontal curve correction and vertical profile adjustments from approximately:
  - Sta 211+50 Near Buck Center (Novato City Limits) to Sta 417+64.60 – Near San Antonio Creek,
- Two (2) Caltrans Special Design Retaining Walls (see discussion below)
- Ten (10) Caltrans Standard Plan Retaining Walls (see discussion below)
- Drainage cross culverts (placement, replacement, upsizing, or rehabilitation),
- Post Construction Stormwater Quality Treatment BMPs along NB/SB US 101. (see discussion below).

## NEPA/CEQA RE-VALIDATION FORM

### Structures – Bridges

The existing Franklin Avenue Overhead consists of two parallel structures, one carrying northbound and the other carrying southbound Highway 101 traffic. Widening is proposed along the southbound Franklin Avenue Overhead which currently carries three traffic lanes, a 5-foot shoulder (inside) and varying shoulder (outside) with a minimum width of 8-foot (ramp) and 10-foot (mainline). A proposed 17.25-foot  $\pm$  widening will accommodate an additional 12-foot HOV lane, a 10-foot shoulder (inside), along with a barrier replacement along the inside edge of the structure. The widening will occur on the east side of the existing left bridge between the northbound and southbound structures.

The existing Olive Avenue Undercrossing left and right bridges are located on Highway 101 carrying northbound and southbound traffic respectively over Olive Avenue. Widening is proposed along the southbound Olive Ave UC which currently carries three traffic lanes, a 5-foot inside shoulder and 10-foot outside shoulder. A proposed 17.25-foot  $\pm$  widening will accommodate an additional 12-foot HOV lane, a 10-foot shoulder (inside), along with a barrier replacement along the inside edge of the structure. The widening will occur on the east side of the existing left bridge between the northbound and southbound structures.

- Franklin Ave OH (Widen) - The proposed southbound interior widening consists of a single frame, cast-in-place prestressed concrete box girder to match the existing bridge superstructure type. Span lengths will match that of the existing bridge. Structure depth will match the existing superstructure depth of 4.5-foot which meets AASHTO and Caltrans' minimum recommended depth-to-span ratio of 0.040 for continuous spans. The 17.25-foot wide new structure will be supported on a single 4-foot x 6-foot oblong column at each bent. One-way column flare geometry will match that of the existing columns but the column flares will be detailed as isolated architectural flares per current seismic design practice. The new and existing superstructures will be connected by a deck closure pour. New bent caps will not be connected to the existing bent caps since the existing bent cap reinforcing is not detailed to resist transverse seismic moments if the bents were connected. In order to provide lateral stability of the new single column bents, a "fixed" column base is necessary. Large 9-foot diameter Type II CIDH pile shafts are proposed to provide fixity to the new columns based on discussion with the geotechnical consultants. The new abutments will consist of concrete diaphragm abutments supported on 6-foot diameter CIDH piles with permanent steel casing. The railroad crash wall originally installed during MSN A1 will be replaced/reconstructed as required by SMART and to facilitate construction of the Franklin Ave OH (Widen).
- Olive Ave UC (Widen) - This project proposes to widen only the left bridge along the inside edge. The left bridge will be widened by 17.25-feet $\pm$  to accommodate the addition a 12-footHOV lane and a 10-foot inside shoulder. The widening will be connected to the existing bridge via a deck closure pour. The widening will match the existing left bridge and will consist of a single-span cast-in-place post-tensioned concrete box girder structure 5-foot deep, supported on diaphragm abutments. The depth to span ratio for the widenings will be 0.040.

Type 836 concrete barrier will be placed along the inside edge of widening. The existing inside overhang and barrier on existing left bridge will be removed and the existing deck reinforcement retained for incorporation into the closure pour. No modifications will be made to the existing Type 25 barrier on the outer left edge of the existing bridge.



## NEPA/CEQA RE-VALIDATION FORM

Both abutments for the widening will be in line with the existing bridge abutments and be connected to the existing abutment diaphragms and footings. An abutment diaphragm closure pour will be placed after the superstructure is post-tensioned. The abutment footings will be supported on Class 140 Alt X piles.

- Atherton Avenue OC – Mainline work is limited to barrier replacement and will not affect the bridge structure or median column.
- North Novato Overhead (OH) – It should be noted that a design exception (5-foot inside shoulder) has been conditionally approved at this location along SB 101, and the inside widening/barrier replacement of the N. Novato OH originally cleared in the 2009 EIR/EIS has been eliminated from the scope of this contract.
- Redwood Landfill OC – Mainline work is limited to barrier replacement and will not affect the bridge structure or median column.

### Structures - Retaining Walls

Twelve retaining wall are proposed within the project limits. Twelve retaining walls are along US-101 along the northbound and southbound directions, from Buck Center to San Antonio Creek. Ten have been identified as standard Caltrans Type 1 walls and two are special design (soil nail) walls. The average retaining height of these walls is approximately eight feet with a three-foot minimum and eleven foot maximum. Excavation for standard retaining wall footing is required. All retaining walls are located within Caltrans Right of Way.

- RW 1 – Height: 3-5 feet, Length: 200 feet (Sta 250+00 to Sta 252+00), Lt
- RW 2 – Height: 3-10 feet, Length: 518.93 feet (Sta 256+00 to Sta 261+25), Lt
- RW 3 – Height: 3-4 feet, Length: 403.62 feet (Sta 253+00 to Sta 257+00), Rt
- RW 4 – Height: 3-4 feet, Length: 73.75 feet (Sta 307+75 to Sta 308+50), Lt
- RW 5 – Height: 3-5 feet, Length: 393.32 feet (Sta 311+50 to Sta 315+50), Lt
- RW 6 – Height: 3-10 feet, Length: 1,688.58 feet (Sta 309+99.75 to Sta “RL1” 327+00), Rt
- RW 7 – Height: 3-11 feet, Length: 981.31 feet (Sta “RL2” 340+77.10 to Sta “N2” 350+25.03), Rt
- RW 8 – Height: 3-4 feet, Length: 706.48 feet (Sta 348+36.76 to Sta 355+50), Lt
- RW 9 – Height: 3-7 feet, Length: 350.02 feet (Sta 365+00 to Sta 368+50), Lt
- RW 10 – Height: 3-5 feet, Length: 200 feet (Sta 381+50 to Sta 383+50), Rt
- RW 11 – Height: 3-11 feet, Length: 400 feet (Sta 403+00 to Sta 407+00), Lt
- RW 12 – Height: 3-11 feet, Length: 1,314.60 feet (Sta 404+50 to Sta 417+64.60), Rt

## NEPA/CEQA RE-VALIDATION FORM

### Post Construction Stormwater Quality Treatment BMPs

After the approved Caltrans' 2009 FEIR/S, the San Francisco Bay Regional Water Quality Control Board (RWRQCB) issued a National Pollutant Discharge Elimination System (NPDES) permit that regulates stormwater discharges from Caltrans facilities in 2013. The permit requires Caltrans to maintain and implement an effective Stormwater Management Plan (SWMP) that identifies and describes the Best Management Practices (BMPs) used to control the discharge of pollutants to waters of the United States. In accordance to the Caltrans SWMP, Water Quality Treatment BMPs are now added to the Project. As part of the permanent post-construction stormwater BMPs, linear bioretention areas (LBAs) and infiltration strips are proposed along the project limits and within Caltrans's Right of Way as follows. The specific locations of the LBAs are listed on the attached Summary of Treatment BMPs.

LBAs vary in width between 1-9 feet with a subsurface drainage system (8-inch and 6-inch perforated plastic pipe (PPP)) and depth of approximately 2.9 feet, including 18-inches of imported biofiltration soil (IBS), 12-inches of permeable material, and filter fabric allowing stormwater flow along the swale to percolate through the IBS and collect/convey (via PPP) to an outfall/connection point.

Infiltration strips are constructed with 4:1 slope (or flatter) along the edges of the shoulder, consisting of approximately 6-inches of IBS with a width of 15-feet. Stormwater is treated by passing over the strips and percolating through the IBS.

Construction work for MSN B7 will be conducted mostly within Caltrans Right of Way, except for the Franklin Avenue OH (Widening). This will require the execution of a Railroad Construction and Management Agreement between Caltrans and SMART. No additional right of way will be required for MSN B7 and existing utilities will remain in place.

### NEPA/CEQA Re-Validation Discussion

The following discussion summarizes technical analysis prepared for the purposes of this Re-Validation, which includes a review of potential changes in impact to the Natural Environment (Biology), Water Quality, Visual/Aesthetics, and Cultural Resources. Discussion of these topics are limited to areas where changes are relevant. Topics not found to warrant further discussion based upon the scope of the proposed changes are not mentioned.

### Changes in environmental setting, e.g., new development affecting traffic or air quality.

#### *Cultural Resources*

There are no additional cultural resources located within the current Area of Potential Effects (APE) for the project. However, due to the design refinements, additional Extended Phase I (XPI) identification studies and Phase III Data Recovery excavations were completed in 2019 and as permitted in the 2008 Memorandum of Agreement. This work was undertaken to evaluate and mitigate for project impacts due to the design refinements. As a result of these investigations, eleven archaeological sites previously identified as being within or adjacent to the APE had record updates resulting in changes to the recorded site boundaries to several of the recorded sites within the B7 segment project area. Specifically, three archaeological sites have been combined under the same identification number and the boundary of the archaeological sites now extends further into Caltrans right-of-way, and on both sides of the current highway. An additional two sites were combined under one identifier resulting in a larger site boundary.

## NEPA/CEQA RE-VALIDATION FORM

An updated Archaeological APE was prepared and signed on September 30, 2020, to capture the changes to archaeological site boundaries within the project. The Architectural History APE remains unchanged.

### **Changes in environmental circumstances, e.g., a new law or regulation; change in the status of a listed species.**

#### *Biology*

Species lists from the US Fish and Wildlife (USFWS) and National Marine Fisheries services (NMFS) have been updated as of September 17, 2020. Based upon the species lists and project description, there are no new Threatened or Endangered species or species of concern since the October 2009 Record of Decision that would be affected by the project. Also, there are no project changes or changes in designated critical habitat that would require reopening consultation with USFWS or NMFS. Therefore, Caltrans' original Biological Opinions for California Red-legged Frog; Salt Marsh Harvest Mouse; Central California Coast steelhead and critical habitat; and North American Green Sturgeon and critical habitat are still in effect for the project.

#### *Water Quality*

Since the approval of the MSN FEIR/S (2009) , the San Francisco Bay Regional Water Quality Control Board (RWRQCB) has issued a National Pollutant Discharge Elimination System (NPDES) permit that regulates stormwater discharges from Caltrans facilities in 2013. The permit requires Caltrans to maintain and implement an effective Stormwater Management Plan (SWMP) that identifies and describes the Best Management Practices (BMPs) used to control the discharge of pollutants to waters of the United States. In accordance to the Caltrans SWMP, Water Quality Treatment BMPs are now added to the Project.

In addition, the NPDES permits necessitate compliance with region-specific trash-reduction requirements. Both the above requirements would be met as part of the Clean Water Act (CWA) Section 401 permit.

### **Changes to environmental impacts of the project, e.g., a new type of impact, or a change in the magnitude of an existing impact.**

#### *Cultural Resources*

Multiple Contract B7 project elements have had refinements in location and design. These refinements necessitated a re-evaluation and of the potential impacts to the previously identified archaeological sites within the project area. An XPI/PIII investigation was completed in 2019 in order to complete identification efforts and mitigate for impacts of the B7 refinements. Although the project refinements have changed the specifics of the impacts to the archaeological sites within the project area, the overall magnitude of the impacts has not change from the 2009 FEIR/S.

## NEPA/CEQA RE-VALIDATION FORM

### *Visual/Aesthetics*

For design refinements involving retaining walls, the locations, limits, and lengths are all within the original study area. There are no further aesthetic concerns as the wall/barrier profiles haven't substantially changed within the study area based on the Contract B7 PS&E.

The tree removal under Contract B7 is consistent with that which was anticipated in the MSN Project FEIR/S.

### **Changes to avoidance, minimization, and/or mitigation measures since the environmental document was approved.**

### *Biology*

Roadway widening and culvert extensions within the scope of Contract B7 would impact jurisdictional areas such as Waters of the US and riparian habitats. Therefore, Caltrans is seeking a CWA Section 404 Nationwide Permit and CDFW 1600 Streambed Alteration Agreement.

### *Water Quality*

To meet CWA Section 401 requirements, new and re-worked impervious areas and additional treated areas (ATA) measuring 44.16 acres will be treated through LBAs and Infiltration Strips. The Project will treat approximately 22.05 acres within Caltrans Right of Way. Balance of treatment will be addressed off-site (see Summary of MSN Contract B7 Mitigation Plan).

### *Cultural Resources*

The XPI/PIII testing and data recovery completed in 2019 resulted in the change in archaeological site boundaries of several sites. To account for the new boundaries, and the project's impact on them, Environmentally Sensitive Areas and Archaeological Monitoring Areas have been established. These mitigation measures were agreed to in the 2008 Memorandum of Agreement executed for this project and documented in the 2009 FEIR/S.

### *Visual/Aesthetics*

For visual/aesthetics, there are no substantial changes, as the same mitigation measures that apply to the project in general also apply to trees being removed as part of the MSN B7 Contract. Mitigation for tree removal is described in the attached Summary of MSN Contract B7 Mitigation Plan.

### **Changes to environmental commitments since the environmental document was approved, e.g., the addition of new conditions in permits or approvals. When this applies, append a revised Environmental Commitments Record (ECR) as one of the Continuation Sheets.**

A variety of mitigation solutions are proposed for natural environment, water quality and visual/aesthetic impacts and summarized under the attached Summary of MSN Contract B7 Mitigation Plan.

## NEPA/CEQA RE-VALIDATION FORM

### *Cultural Resources*

Mitigation measures were agreed to in the 2008 Memorandum of Agreement executed for this project and documented in the 2009 FEIR/FEIS. The project PS&E has included bid items and notes to reserve all excavated soil from within the right of way, between Station 288+50 to Station 292+25, which has been deemed sensitive for archaeological materials, and rebury/use the soil within the Segment B7 project limits. This measure is achieved through standard bid-items and Non-Standard Special Provisions (NSSPs). The work will be monitored by an archaeologist as per the standard Archaeological Monitoring Area procedures.

### **Summary**

Based upon the above analysis, project impacts under MSN Contract B7 are found to be minor and consistent with the MSN Project FEIR/S. Consequently, no further analyses are required, and the 2009 MSN Project FEIR/S remains valid. This Re-Val is not complete without the following attachments:

1. Linear Bioretention Areas (LBAs)
2. Summary of MSN Contract B7 Mitigation Plan
3. USFWS Species List 9/22/20
4. NMFS Species List 9/17/20

Linear Bioretention Areas/Bio-Strips

District-County-Route: 04-Mrn-101  
EA: 0419000068

BMP Id No.	County	Route	Station Limits		Lt/Rt	Post Mile Limits		Surface Area of BMP		Impervious Area to BMP sq-ft	Impervious Area to BMP acres	BMP area to Impervious Area Ratio	Impervious Area Treated sq-ft	Impervious Area Treated acres	BMP area to Treated Area Ratio	BAHM			
			Begin	End		Begin	End	(sq-ft)	acres			% - percent			% - percent	Modeled			
Existing BMPs			Existing Linear Bioretention Areas or Biofiltration Strips																
EX1	Mrn	101	S	179+56	to	S	181+99	Lt	22.39	22.44	482	0.01	25,792	0.59	1.9%	25,792	0.59	1.9%	Yes
EX2	Mrn	101	S	182+24	to	S	187+12	Lt	22.44	22.54	967	0.02	28,751	0.66	3.4%	28,751	0.66	3.4%	Yes
EX3	Mrn	101	S	199+19	to	S	205+21	Lt	22.76	22.88	2,390	0.05	45,064	1.03	5.3%	45,064	1.03	5.3%	
EX4	Mrn	101	S	205+21	to	S	211+48	Lt	22.88	23.00	2,471	0.06	34,786	0.80	7.1%	34,786	0.80	7.1%	
EX5	Mrn	101	S	211+48	to	S	215+17	Lt	23.00	23.07	1,453	0.03	20,886	0.48	7.0%	20,886	0.48	7.0%	
EX6	Mrn	101	S	215+17	to	S	220+08	Lt	23.07	23.16	1,949	0.04	33,561	0.77	5.8%	33,561	0.77	5.8%	
EX7	Mrn	101	S	224+00	to	S	225+38	Lt	23.23	23.26	1,318	0.03	19,417	0.45	6.8%	19,417	0.45	6.8%	
EX8	Mrn	101	S	225+38	to	S	235+78	Lt	23.26	23.46	4,151	0.10	59,294	1.36	7.0%	59,294	1.36	7.0%	
EX9	Mrn	101	S	235+78	to	S	243+59	Lt	23.46	23.61	3,123	0.07	44,007	1.01	7.1%	44,007	1.01	7.1%	
EX10	Mrn	101	N2	262+71	to	N2	265+38	Lt	23.97	24.02	To Be Removed By MSN B7								
EX11	Mrn	101	N2	270+95	to	N2	265+38	Rt	24.12	24.02	To Be Removed By MSN B7								
EX12	Mrn	101	N2	334+50	to	N2	332+05	Lt	25.33	25.28	986	0.02	14,593	0.34	6.8%	14,593	0.34	6.8%	
EX13	Mrn	101	N2	337+22	to	N2	342+29	Lt	25.38	25.47	To Be Removed By MSN B7								
EX14	Mrn	101	RL1	332+83	to	N2	321+59	Rt	25.30	25.08	To Be Removed By MSN B7								
EX15	Mrn	101	N2	329+00	to	N2	334+50	Rt	25.22	25.33	8,234	0.19	32,969	0.76	25.0%	32,969	0.76	25.0%	
EX16	Mrn	101	RL2	341+59	to	RL2	340+78	Rt	25.46	25.45	To Be Removed By MSN B7								
EX17	Mrn	101	RL3	338+37	to	RL3	340+35	Rt	25.40	25.44	To Be Removed By MSN B7								
EX18	Mrn	101	RL3	340+35	to	RL3	345+00	Lt	25.44	25.53	To Be Removed By MSN B7								
EX19	Mrn	101	N2	339+00	to	N2	340+52	Rt	25.41	25.44	565	0.01	11,346	0.26	5.0%	11,346	0.26	5.0%	
EX20	Mrn	101	N2	408+25	to	N2	411+21	Lt	26.72	26.78	1,483	0.03	39,724	0.91	3.7%	39,724	0.91	3.7%	Yes
											9.42		9.42						
Proposed Southbound			Linear Bioretention Areas																
1	Mrn	101	S	187+19	to	S	192+07	Lt	22.54	22.63	978	0.02	29,062	0.67	3.4%	29,062	0.67	3.4%	Yes
2	Mrn	101	S	192+20	to	S	197+10	Lt	22.63	22.72	980	0.02	28,423	0.65	3.4%	28,423	0.65	3.4%	Yes
3	Mrn	101	N2	243+82	to	N2	245+51	Lt	23.61	23.64	675	0.02	10,782	0.25	6.3%	10,782	0.25	6.3%	
4	Mrn	101	N2	262+33	to	N2	263+05	Lt	23.96	23.97	140	0.00	10,870	0.25	1.3%	10,870	0.25	1.3%	Yes
5	Mrn	101	N2	273+00	to	N2	274+90	Lt	24.16	24.20	572	0.01	43,219	0.99	1.3%	43,219	0.99	1.3%	Yes
6	Mrn	101	N2	293+40	to	N2	275+15	Lt	24.55	24.20	7,279	0.17	105,696	2.43	6.9%	105,696	2.43	6.9%	
7	Mrn	101	N2	296+25	to	N2	293+75	Lt	24.60	24.56	698	0.02	16,450	0.38	4.2%	16,450	0.38	4.2%	
8	Mrn	101	N2	296+25	to	N2	304+85	Lt	24.60	24.77	2,571	0.06	49,496	1.14	5.2%	49,496	1.14	5.2%	
9	Mrn	101	N2	334+50	to	N2	332+05	Lt	25.33	25.28	982	0.02	14,593	0.34	6.7%	14,593	0.34	6.7%	
10	Mrn	101	N2	363+00	to	N2	358+50	Lt	25.87	25.78	712	0.02	32,494	0.75	2.2%	32,494	0.75	2.2%	Yes
11	Mrn	101	N2	379+38	to	N2	378+62	Lt	26.18	26.16	152	0.00	4,584	0.11	3.3%	4,584	0.11	3.3%	Yes
12	Mrn	101	N2	384+17	to	N2	379+46	Lt	26.27	26.18	941	0.02	30,356	0.70	3.1%	30,356	0.70	3.1%	Yes
13	Mrn	101	N2	393+85	to	N2	384+75	Lt	26.45	26.28	1,815	0.04	52,171	1.20	3.5%	52,171	1.20	3.5%	Yes
14	Mrn	101	N2	396+50	to	N2	393+91	Lt	26.50	26.45	513	0.01	15,000	0.34	3.4%	15,000	0.34	3.4%	Yes
15	Mrn	101	N2	400+65	to	N2	396+56	Lt	26.58	26.50	815	0.02	23,740	0.54	3.4%	23,740	0.54	3.4%	Yes
16	Mrn	101	N2	401+50	to	N2	400+71	Lt	26.60	26.58	78	0.00	15,370	0.35	0.5%	8,712	0.20	0.9%	Yes
17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
18	Mrn	101	N2	411+29	to	N2	414+50	Lt	26.78	26.84	1,604	0.04	18,887	0.43	8.5%	18,887	0.43	8.5%	
											11.51		11.35						
Proposed Southbound			Biofiltration Biostrips																
19	Mrn	101	R3	338+37	to	N2	340+17	Rt	25.40	25.43	2,774	0.06	5,543	0.13	50.0%	5,543	0.13	50.0%	
											0.13		0.13						
Proposed Northbound			Linear Bioretention Areas																
20	Mrn	101	N2	266+00	to	N2	267+32	Rt	24.03	24.05	409	0.01	8,176	0.19	5.0%	8,176	0.19	5.0%	
21	Mrn	101	N2	267+51	to	N2	271+24	Rt	24.06	24.13	2,244	0.05	22,491	0.52	10.0%	22,491	0.52	10.0%	
22	Mrn	101	N2	271+43	to	N2	275+08	Rt	24.13	24.20	1,092	0.03	22,427	0.51	4.9%	22,427	0.51	4.9%	
23	Mrn	101	N2	282+96	to	N2	275+32	Rt	24.35	24.21	3,056	0.07	43,949	1.01	7.0%	43,949	1.01	7.0%	
24	Mrn	101	N2	290+94	to	N2	283+03	Rt	24.50	24.35	2,827	0.06	59,221	1.36	4.8%	59,221	1.36	4.8%	
25	Mrn	101	N2	298+00	to	N2	293+73	Rt	24.64	24.55	1,279	0.03	26,375	0.61	4.8%	26,375	0.61	4.8%	
26	Mrn	101	N2	310+03	to	N2	311+35	Rt	24.86	24.89	540	0.01	84,100	1.93	0.6%	37,026	0.85	1.5%	Yes
27	Mrn	101	N2	315+53	to	N2	316+84	Rt	24.97	24.99	267	0.01	50,543	1.16	0.5%	21,780	0.50	1.2%	Yes
28	Mrn	101	N2	316+90	to	N2	318+47	Rt	24.99	25.02	160	0.00	64,944	1.49	0.2%	17,424	0.40	0.9%	Yes
29	Mrn	101	N2	364+27	to	N3	359+49	Rt	25.89	25.80	1,303	0.03	18,897	0.43	6.9%	18,897	0.43	6.9%	
30	Mrn	102	N3	367+93	to	N4	364+32	Rt	25.96	25.89	1,082	0.02	35,454	0.81	3.1%	35,454	0.81	3.1%	Yes
31	Mrn	101	N2	374+00	to	N2	370+50	Rt	26.08	26.01	1,046	0.02	20,004	0.46	5.2%	20,004	0.46	5.2%	
32	Mrn	101	N2	376+24	to	N2	374+07	Rt	26.12	26.08	641	0.01	53,179	1.22	1.2%	52,272	1.20	1.2%	Yes
33	Mrn	101	N2	393+00	to	N2	384+00	Rt	26.44	26.26	2,700	0.06	56,291	1.29	4.8%	56,291	1.29	4.8%	
34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
35	Mrn	101	N2	404+00	to	N2	400+73	Rt	26.64	26.58	754	0.02	18,623	0.43	4.0%	18,623	0.43	4.0%	
											13.42		10.57						
Net New Impervious (NNI)								17.13 ac											
Replaced Impervious Surface								27.78 ac		Total Impervious Area To BMPs		25.06 acres		Total Impervious Area Treated by BMPs		22.05 acres			
ATA (1)								-0.75 ac											
ATA (2)								+ 0.00 ac											
Treatment Required								= 44.16 ac											

## Summary of MSN B7 Mitigation Plan

(attachment to MSN B7 Re-Val)

Impact Type	Agency Jurisdiction	Impact Amount	Requirements	Mitigation Projects	Agreement	Timing
channel	ACOE, CDFW, and RWQCB	1194 linear feet	3582 linear feet (3:1)	Novato Creek Floodplain & Channel Restoration	Deed restriction or conservation easement	Late 2021
riparian channel	CDFW and RWQCB	207 linear feet	621 linear feet (3:1)	Adobe Creek Riparian Enhancement Project	Conservancy through Petaluma State Historic Park	Before Construction
riparian habitat	CDFW and RWQCB	0.47 acre	1.41 acres (3:1)	Adobe Creek Riparian Enhancement Project	Conservancy through Petaluma State Historic Park	Before Construction
trees	CDFW and RWQCB	7 native trees	21 native trees (7 x 3)	Lawndale Oak Woodland Restoration Project	Conservancy through Trione-Annadel State Park	Before Construction
		51 oaks	306 oaks (51 x 6)			
		2 non-native trees	4 non-native trees (2 x 2)			
wetlands	ACOE and RWQCB	0.2580 acre	0.2580 acre (1:1)	Burdell Ranch Conservation Bank	Wetland bank credit purchase	Before Construction



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

Sacramento Fish And Wildlife Office

Federal Building

2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

Phone: (916) 414-6600 Fax: (916) 414-6713



In Reply Refer To:

September 30, 2020

Consultation Code: 08ESMF00-2017-SLI-2731

Event Code: 08ESMF00-2020-E-09323

Project Name: Marin Sonoma Narrows High Occupancy Vehicle Widening Project (MSN Project)

Subject: Updated list of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, under the jurisdiction of the U.S. Fish and Wildlife Service (Service) that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the Service under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

Please follow the link below to see if your proposed project has the potential to affect other species or their habitats under the jurisdiction of the National Marine Fisheries Service:

[http://www.nwr.noaa.gov/protected\\_species/species\\_list/species\\_lists.html](http://www.nwr.noaa.gov/protected_species/species_list/species_lists.html)

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.



The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan ([http://www.fws.gov/windenergy/eagle\\_guidance.html](http://www.fws.gov/windenergy/eagle_guidance.html)). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

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Attachment(s):

- Official Species List

# Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Sacramento Fish And Wildlife Office**

Federal Building

2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

(916) 414-6600

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## Project Summary

Consultation Code: 08ESMF00-2017-SLI-2731

Event Code: 08ESMF00-2020-E-09323

Project Name: Marin Sonoma Narrows High Occupancy Vehicle Widening Project (MSN Project)

Project Type: TRANSPORTATION

Project Description: The MSN Project proposes to add HOV facilities from the junction of U.S. 101/State Route 37 in the City of Novato, Marin County, to just north of the Corona Road Overcrossing in the City of Petaluma, Sonoma County, a distance of approximately 16 miles. The project was approved in 2009 and some construction has been completed or in progress.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/38.171581780752575N122.58727332667888W>



Counties: Marin, CA | Sonoma, CA

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## Endangered Species Act Species

There is a total of 24 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

## Mammals

NAME	STATUS
Salt Marsh Harvest Mouse <i>Reithrodontomys raviventris</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/613">https://ecos.fws.gov/ecp/species/613</a>	Endangered

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## Birds

NAME	STATUS
California Clapper Rail <i>Rallus longirostris obsoletus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/4240">https://ecos.fws.gov/ecp/species/4240</a>	Endangered
California Least Tern <i>Sterna antillarum browni</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/8104">https://ecos.fws.gov/ecp/species/8104</a>	Endangered
Northern Spotted Owl <i>Strix occidentalis caurina</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/1123">https://ecos.fws.gov/ecp/species/1123</a>	Threatened
Western Snowy Plover <i>Charadrius nivosus nivosus</i> Population: Pacific Coast population DPS-U.S.A. (CA, OR, WA), Mexico (within 50 miles of Pacific coast) There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/8035">https://ecos.fws.gov/ecp/species/8035</a>	Threatened
Yellow-billed Cuckoo <i>Coccyzus americanus</i> Population: Western U.S. DPS There is <b>proposed</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/3911">https://ecos.fws.gov/ecp/species/3911</a>	Threatened

## Reptiles

NAME	STATUS
Green Sea Turtle <i>Chelonia mydas</i> Population: East Pacific DPS No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/6199">https://ecos.fws.gov/ecp/species/6199</a>	Threatened

## Amphibians

NAME	STATUS
California Red-legged Frog <i>Rana draytonii</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/2891">https://ecos.fws.gov/ecp/species/2891</a> Species survey guidelines: <a href="https://ecos.fws.gov/ipac/guideline/survey/population/205/office/11420.pdf">https://ecos.fws.gov/ipac/guideline/survey/population/205/office/11420.pdf</a>	Threatened
California Tiger Salamander <i>Ambystoma californiense</i> Population: U.S.A. (CA - Sonoma County) There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/2076">https://ecos.fws.gov/ecp/species/2076</a>	Endangered

## Fishes

NAME	STATUS
<b>Delta Smelt</b> <i>Hypomesus transpacificus</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/321">https://ecos.fws.gov/ecp/species/321</a>	Threatened
<b>Tidewater Goby</b> <i>Eucyclogobius newberryi</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/57">https://ecos.fws.gov/ecp/species/57</a>	Endangered

## Insects

NAME	STATUS
<b>Myrtle's Silverspot Butterfly</b> <i>Speyeria zerene myrtleae</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/6929">https://ecos.fws.gov/ecp/species/6929</a>	Endangered
<b>San Bruno Elfin Butterfly</b> <i>Callophrys mossii bayensis</i> There is <b>proposed</b> critical habitat for this species. The location of the critical habitat is not available. Species profile: <a href="https://ecos.fws.gov/ecp/species/3394">https://ecos.fws.gov/ecp/species/3394</a>	Endangered

## Crustaceans

NAME	STATUS
<b>California Freshwater Shrimp</b> <i>Syncaris pacifica</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/7903">https://ecos.fws.gov/ecp/species/7903</a>	Endangered

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## Flowering Plants

NAME	STATUS
Burke's Goldfields <i>Lasthenia burkei</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/4338">https://ecos.fws.gov/ecp/species/4338</a>	Endangered
Contra Costa Goldfields <i>Lasthenia conjugens</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/7058">https://ecos.fws.gov/ecp/species/7058</a>	Endangered
Marin Dwarf-flax <i>Hesperolinon congestum</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/5363">https://ecos.fws.gov/ecp/species/5363</a>	Threatened
Sebastopol Meadowfoam <i>Limnanthes vinculans</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/404">https://ecos.fws.gov/ecp/species/404</a>	Endangered
Showy Indian Clover <i>Trifolium amoenum</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/6459">https://ecos.fws.gov/ecp/species/6459</a>	Endangered
Soft Bird's-beak <i>Cordylanthus mollis ssp. mollis</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/8541">https://ecos.fws.gov/ecp/species/8541</a>	Endangered
Sonoma Alopecurus <i>Alopecurus aequalis var. sonomensis</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/557">https://ecos.fws.gov/ecp/species/557</a>	Endangered
Sonoma Spineflower <i>Chorizanthe valida</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/7698">https://ecos.fws.gov/ecp/species/7698</a>	Endangered
Sonoma Sunshine <i>Blennosperma bakeri</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/1260">https://ecos.fws.gov/ecp/species/1260</a>	Endangered
Yellow Larkspur <i>Delphinium luteum</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/3578">https://ecos.fws.gov/ecp/species/3578</a>	Endangered

## Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.



**From:** [Carson, Rebecca@DOT](mailto:Carson.Rebecca@DOT)  
**To:** [Rivas, Yolanda@DOT](mailto:Rivas.Yolanda@DOT)  
**Subject:** Fw: Caltrans Marin-Sonoma Narrows (MSN) HOV Widening Project  
**Date:** Thursday, October 29, 2020 3:31:53 PM

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Cheers,  
Rebecca Carson, MA  
Branch Chief/Senior Biologist  
Construction Compliance and Mitigation - West Counties  
Caltrans D4  
111 Grand Avenue, MS 8E  
Oakland, CA 94612  
Mobile: 510-715-9112

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**From:** Carson, Rebecca@DOT <Rebecca.Carson@dot.ca.gov>  
**Sent:** Wednesday, September 30, 2020 7:03 PM  
**To:** nmfswcrca.specieslist@noaa.gov <nmfswcrca.specieslist@noaa.gov>  
**Subject:** Caltrans Marin-Sonoma Narrows (MSN) HOV Widening Project

Hello,

I am requesting an official species list for the Marin-Sonoma Narrows (MSN) HOV Widening Project. Thank you!

Quad Name **Novato**  
Quad Number **38122-A5**

**ESA Anadromous Fish**

SONCC Coho ESU (T) -  
CCC Coho ESU (E) - **X**  
CC Chinook Salmon ESU (T) -  
CVSR Chinook Salmon ESU (T) -  
SRWR Chinook Salmon ESU (E) -  
NC Steelhead DPS (T) -  
CCC Steelhead DPS (T) - **X**  
SCCC Steelhead DPS (T) -  
SC Steelhead DPS (E) -  
CCV Steelhead DPS (T) -

Eulachon (T) -

sDPS Green Sturgeon (T) - **X**

### **ESA Anadromous Fish Critical Habitat**

SONCC Coho Critical Habitat -

CCC Coho Critical Habitat - **X**

CC Chinook Salmon Critical Habitat -

CVSR Chinook Salmon Critical Habitat -

SRWR Chinook Salmon Critical Habitat -

NC Steelhead Critical Habitat -

CCC Steelhead Critical Habitat - **X**

SCCC Steelhead Critical Habitat -

SC Steelhead Critical Habitat -

CCV Steelhead Critical Habitat -

Eulachon Critical Habitat -

sDPS Green Sturgeon Critical Habitat - **X**

### **ESA Marine Invertebrates**

Range Black Abalone (E) -

Range White Abalone (E) -

### **ESA Marine Invertebrates Critical Habitat**

Black Abalone Critical Habitat -

### **ESA Sea Turtles**

East Pacific Green Sea Turtle (T) -

Olive Ridley Sea Turtle (T/E) -

Leatherback Sea Turtle (E) -

North Pacific Loggerhead Sea Turtle (E) -

### **ESA Whales**

Blue Whale (E) -

Fin Whale (E) -

Humpback Whale (E) -

Southern Resident Killer Whale (E) -

North Pacific Right Whale (E) -  
Sei Whale (E) -  
Sperm Whale (E) -

### **ESA Pinnipeds**

Guadalupe Fur Seal (T) -  
Steller Sea Lion Critical Habitat -

### **Essential Fish Habitat**

Coho EFH - **X**  
Chinook Salmon EFH - **X**  
Groundfish EFH - **X**  
Coastal Pelagics EFH - **X**  
Highly Migratory Species EFH -

### **MMPA Species (See list at left)**

### **ESA and MMPA Cetaceans/Pinnipeds**

**See list at left and consult the NMFS Long Beach office  
562-980-4000**

MMPA Cetaceans -  
MMPA Pinnipeds -

Quad Name **Petaluma River**  
Quad Number **38122-B5**

### **ESA Anadromous Fish**

SONCC Coho ESU (T) -  
CCC Coho ESU (E) -  
CC Chinook Salmon ESU (T) -  
CVSR Chinook Salmon ESU (T) -  
SRWR Chinook Salmon ESU (E) -  
NC Steelhead DPS (T) -  
CCC Steelhead DPS (T) - **X**  
SCCC Steelhead DPS (T) -  
SC Steelhead DPS (E) -

CCV Steelhead DPS (T) -

Eulachon (T) -

sDPS Green Sturgeon (T) - **X**

### **ESA Anadromous Fish Critical Habitat**

SONCC Coho Critical Habitat -

CCC Coho Critical Habitat -

CC Chinook Salmon Critical Habitat -

CVSR Chinook Salmon Critical Habitat -

SRWR Chinook Salmon Critical Habitat -

NC Steelhead Critical Habitat -

CCC Steelhead Critical Habitat - **X**

SCCC Steelhead Critical Habitat -

SC Steelhead Critical Habitat -

CCV Steelhead Critical Habitat -

Eulachon Critical Habitat -

sDPS Green Sturgeon Critical Habitat - **X**

### **ESA Marine Invertebrates**

Range Black Abalone (E) -

Range White Abalone (E) -

### **ESA Marine Invertebrates Critical Habitat**

Black Abalone Critical Habitat -

### **ESA Sea Turtles**

East Pacific Green Sea Turtle (T) -

Olive Ridley Sea Turtle (T/E) -

Leatherback Sea Turtle (E) -

North Pacific Loggerhead Sea Turtle (E) -

### **ESA Whales**

Blue Whale (E) -

Fin Whale (E) -

Humpback Whale (E) -

Southern Resident Killer Whale (E) -  
North Pacific Right Whale (E) -  
Sei Whale (E) -  
Sperm Whale (E) -

### **ESA Pinnipeds**

Guadalupe Fur Seal (T) -  
Steller Sea Lion Critical Habitat -

### **Essential Fish Habitat**

Coho EFH - **X**  
Chinook Salmon EFH - **X**  
Groundfish EFH - **X**  
Coastal Pelagics EFH - **X**  
Highly Migratory Species EFH -

### **MMPA Species (See list at left)**

#### **ESA and MMPA Cetaceans/Pinnipeds**

**See list at left and consult the NMFS Long Beach office  
562-980-4000**

MMPA Cetaceans -  
MMPA Pinnipeds -

Quad Name **Cotati**  
Quad Number **38122-C6**

### **ESA Anadromous Fish**

SONCC Coho ESU (T) -  
CCC Coho ESU (E) - **X**  
CC Chinook Salmon ESU (T) - **X**  
CVSR Chinook Salmon ESU (T) -  
SRWR Chinook Salmon ESU (E) -  
NC Steelhead DPS (T) -  
CCC Steelhead DPS (T) - **X**

SCCC Steelhead DPS (T) -  
SC Steelhead DPS (E) -  
CCV Steelhead DPS (T) -  
Eulachon (T) -  
sDPS Green Sturgeon (T) -

### **ESA Anadromous Fish Critical Habitat**

SONCC Coho Critical Habitat -  
CCC Coho Critical Habitat - **X**  
CC Chinook Salmon Critical Habitat -  
CVSR Chinook Salmon Critical Habitat -  
SRWR Chinook Salmon Critical Habitat -  
NC Steelhead Critical Habitat -  
CCC Steelhead Critical Habitat - **X**  
SCCC Steelhead Critical Habitat -  
SC Steelhead Critical Habitat -  
CCV Steelhead Critical Habitat -  
Eulachon Critical Habitat -  
sDPS Green Sturgeon Critical Habitat -

### **ESA Marine Invertebrates**

Range Black Abalone (E) -  
Range White Abalone (E) -

### **ESA Marine Invertebrates Critical Habitat**

Black Abalone Critical Habitat -

### **ESA Sea Turtles**

East Pacific Green Sea Turtle (T) -  
Olive Ridley Sea Turtle (T/E) -  
Leatherback Sea Turtle (E) -  
North Pacific Loggerhead Sea Turtle (E) -

### **ESA Whales**

Blue Whale (E) -  
Fin Whale (E) -

Humpback Whale (E) -  
Southern Resident Killer Whale (E) -  
North Pacific Right Whale (E) -  
Sei Whale (E) -  
Sperm Whale (E) -

**ESA Pinnipeds**

Guadalupe Fur Seal (T) -  
Steller Sea Lion Critical Habitat -

**Essential Fish Habitat**

Coho EFH - **X**  
Chinook Salmon EFH - **X**  
Groundfish EFH -  
Coastal Pelagics EFH -  
Highly Migratory Species EFH -

**MMPA Species (See list at left)**

**ESA and MMPA Cetaceans/Pinnipeds**

**See list at left and consult the NMFS Long Beach office  
562-980-4000**

MMPA Cetaceans -  
MMPA Pinnipeds -

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