

ROAD REPAIR AND ACCOUNTABILITY ACT OF 2017  
PROJECT BASELINE AGREEMENT

Ridgewood Pavement Rehabilitation (01-0H160)

**SHOPP-P-2122-03B**

Resolution \_\_\_\_\_

(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 *Ridgewood Pavement Rehabilitation (01-0H160)*, effective on, December 8, 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*, and the Implementing Agency, *Caltrans*, sometimes collectively referred to as the "Parties".

**3. RECITAL**

- 3.2 Whereas at its May 13, 2020 meeting the Commission approved the State Highway Operation and Protection Program, and included in this program of projects the *Ridgewood Pavement Rehabilitation (01-0H160)*, 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 *Insert Number*, "Adoption of Program of Projects for the Solutions for Congested Corridors Program", dated \_\_\_\_\_
  - Resolution G-20-40, "Adoption of Program of Projects for the State Highway Operation and Protection Program", dated May 13, 2020
  - 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 State Highway Operation and Protection 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 Caltrans agrees to secure funds for any additional costs of the project.
- 4.6 Caltrans agrees to report 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

Ridgewood Pavement Rehabilitation (01-0H160)

Resolution SHOPP-P-2122-03B

Richard Mullen

Digitally signed by Richard Mullen  
Date: 2021.10.12 12:04:18 -07'00'

October 12, 2021

Richard Mullen

Date

Caltrans Deputy District Director, Program/Project Management

Project Applicant

Richard Mullen

Digitally signed by Richard Mullen  
Date: 2021.10.12 12:05:01 -07'00'

October 12, 2021

Richard Mullen

Date

Caltrans Deputy District Director, Program/Project Management

Implementing Agency

Matthew K. Brady

Digitally signed by Matthew K. Brady  
Date: 2021.10.13 12:15:50 -07'00'

October 13, 2021

Matthew K. Brady

Date

District Director

California Department of Transportation





Toks Omishakin

Date

11.19.21

Director

California Department of Transportation





Mitchell Weiss

1/4/22

Date

Executive Director

California Transportation Commission

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

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

BASELINE AGREEMENT						Date:	10/07/21 02:30:27 PM
District	EA	Project ID		PPNO	Project Manager		
01	0H160	0117000117		4677	EVERETT, KATIE M		
County	Route	Begin Postmile	End Postmile	Implementing Agency			
MEN	101	R 33.7	R 43.2	PA&ED	Caltrans		
				PS&E	Caltrans		
				Right of Way	Caltrans		
				Construction	Caltrans		
Project Nickname							
Ridgewood Class 1 Pavement							
Location/Description							
Near Willits, from 1.1 miles north of West Road to 0.6 mile south of Haehl Creek Bridge. Rehabilitate pavement, replace concrete median barrier, rehabilitate drainage systems, and upgrade guardrail, signs, lighting, and Transportation Management System (TMS) elements.							
Legislative Districts							
Assembly:	01	Senate:	02	Congressional:	01		
PERFORMANCE MEASURES							
	Primary Asset	Good	Fair	Poor	New	Total	Units
Existing Condition	Pavement	.1	36.9	0.5		37.5	Lane-miles
Programmed Condition	Pavement	37.5				37.5	Lane-miles
Project Milestone						Actual	Planned
Project Approval and Environmental Document Milestone						09/24/21	
Right of Way Certification Milestone							10/03/22
Ready to List for Advertisement Milestone							10/15/22
Begin Construction Milestone (Approve Contract)							02/28/23
FUNDING (Allocated amounts are shaded)							
Component	Fiscal Year	SHOPP					Total
PA&ED	20/21	561					561
PS&E	21/22	910					910
RW Support	21/22	33					33
Const Support	22/23	3,457					3,457
RW Capital	22/23	39					39
Const Capital	22/23	47,888					47,888
Total		52,888					52,888



# Project Report

## *For Project Approval*

On Route     101  
Between     PM R033.730  
And         PM R043.200

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:

*Tadj Ratajczak*

Tadj Ratajczak (Sep 24, 2021 14:25 PDT)

---

Tadeusz A. Ratajczak, District Division Chief, NR Right of Way

APPROVAL RECOMMENDED:

*Katie Everett*

---

Katie Everett, Project Manager

PROJECT APPROVED:

*Matthew K. Brady*

Matthew K. Brady (Sep 24, 2021 14:33 PDT)

---

Matthew K. Brady, District 1 Director

09/24/2021

---

*Date*

# VICINITY MAP



**PROJECT LOCATION**  
MEN-101-PM R33.73/R43.20

**RIDGEWOOD CLASS 1 PAVEMENT**  
**01-MEN-101 (PM R33.73/R43.20)**  
**01-OH160 (0117000117)**

**No Scale**

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.

*Dino Khloth*

REGISTERED CIVIL ENGINEER

09/07/2021

DATE



## Table of Contents

1. INTRODUCTION.....	1
2. RECOMMENDATION.....	2
3. BACKGROUND.....	2
4. PURPOSE AND NEED .....	2
4A. Problem, Deficiencies, Justification.....	2
4B. Regional and System Planning.....	2
4C. Traffic.....	3
5. ALTERNATIVES .....	3
5A. Viable Alternative .....	3
5B. Rejected Alternative.....	8
6. CONSIDERATIONS REQUIRING DISCUSSION.....	9
6A. Hazardous Waste.....	9
6B. Value Analysis .....	9
6C. Resource Conservation.....	9
6D. Right-of-Way Issues .....	9
6E. Environmental Compliance.....	9
6F. Air Quality Conformity .....	10
6G. Title VI Considerations.....	10
6H. Noise Abatement Decision Report.....	10
6I. Life-Cycle Cost Analysis.....	10
7. OTHER CONSIDERATIONS AS APPROPRIATE .....	10
7A. Public Hearing Process .....	10
7B. Stage Construction .....	10
7C. Accommodation of Oversize Loads.....	10
7D. Asset Management.....	10
7E. Complete Streets.....	11
7F. Complete Streets Facilities .....	11
7G. Climate Change Considerations.....	12
7H. Stormwater.....	12
8. FUNDING, PROGRAMMING AND ESTIMATE .....	12
9. DELIVERY SCHEDULE .....	14

10. RISKS..... 14

11. EXTERNAL AGENCY COORDINATION..... 14

12. PROJECT REVIEWS ..... 14

13. PROJECT PERSONNEL ..... 15

14. ATTACHMENTS (Number of Pages)..... 15

## 1. INTRODUCTION

### Project Description:

The proposed project will improve Class I Asphalt Concrete (AC) pavement using a strategy consisting of cold-planning AC surfacing by spot milling (0.25'-0.33') existing AC and replacing with Type A Hot Mix Asphalt (HMA-A), placing an HMA leveling course, and placing Rubberized HMA (RHMA) overlay plus shoulder backing. Some existing concrete median barriers will be replaced with Portable Concrete Barriers (Type 60K). Existing Metal Beam Guardrail (MBGR) will be replaced with Midwest Guardrail System (MGS), and existing MGS will be raised. High Friction Surface Treatment (HFST) will be added. One drainage system at Post Mile 40.62 will be repaired by regrouting the inlet and outlet, repairing the inlet, and repairing the culvert liner. A census station will be upgraded, sign panels will be replaced, and one new highway lighting asset will be constructed. Layouts are available as Attachment A, and a Typical Cross-Section is available as Attachment B.

<b>Project Limits</b>	01-MEN-101-R33.73/R43.20	
<b>Number of Alternatives</b>	2 (Including No Build)	
	<b>Current Cost Estimate:</b>	<b>Escalated Cost Estimate:</b>
<b>Capital Outlay Support</b>	\$4,664,000	\$4,934,000
<b>Capital Outlay Construction</b>	\$37,799,000	\$41,545,000
<b>Capital Outlay Right-of-Way</b>	\$11,000	\$12,000
<b>Funding Source</b>	20.XX.201.121 (Pavement Rehabilitation)	
<b>Funding Year</b>	2023	
<b>Type of Facility</b>	Four-lane expressway. (Freeway from PM R42.472 to PM R43.200.)	
<b>Number of Structures</b>	0	
<b>SHOPP Project Output</b>	37.508 Lane Miles Class 1 Pavement SHOPP Effectiveness = 99.81, Rehab Effectiveness = 40.97 (See Attachment K - Performance Measures)	
<b>Environmental Determination or Document</b>	California Environmental Quality Act (CEQA): Categorical Exemption (CE) National Environmental Policy Act (NEPA): Categorical Exclusion (CE)	
<b>Legal Description</b>	In Mendocino County near Willits from 1.1 miles north of West Road Overcrossing to 0.6 mile south of Haehl Creek Bridge 10-129	
<b>Project Development Category</b>	4B	

## 2. RECOMMENDATION

The Department recommends approval of the project using the one build alternative as the preferred alternative (designated as Alternative A in this report) and for the project to proceed to the design phase.

## 3. BACKGROUND

District 1 Maintenance Engineering sponsored the project to address existing and future pavement distress. The project was initially scoped as a 2R (Pavement Focused) project in the 201.122 Roadway Rehabilitation program and was targeted for funding through Senate Bill 1. Consideration was given to redefine the scope of the project due to funding limitations and apply a combination strategy that more appropriately addresses predicted pavement condition by utilizing a Minor Pavement Rehabilitation (formerly CAPM) strategy for lane-miles projected to be “fair”, and a Major Rehabilitation (formerly 2R) strategy for lane-miles projected to be “poor” at time of construction are planned.

## 4. PURPOSE AND NEED

### 4A. Problem, Deficiencies, Justification

#### Purpose:

The purpose of this project is to restore Class I pavement to good condition using a pavement rehabilitation or CAPM strategy, and to restore existing safety, drainage, and signage assets to good condition.

#### Need:

The project is needed to rehabilitate the pavement in both fair and poor condition to extend service life of the pavement and prevent further deterioration. Additionally, guardrail, terminal systems, concrete barriers, and transition railings work is needed consequent to repaving work due to increased height of pavement and to meet revised standards; drainage work is needed to prevent potential roadway damage resulting from drainage system failures; and signage and a TMS asset is in poor condition and needs upgrades or repairs.

### 4B. Regional and System Planning

#### Route Concept

U.S. Route 101 meets the 20-year Facility Concept, which is to maintain four-lane freeway or expressway. U.S. Route 101 is a Class 1 route and extends through District 1 from the Mendocino/Sonoma County line to the California/Oregon border. It is part of the strategic highway network.

The project area is classified as a four-lane expressway with rolling hill terrain. The project location is included in the Pacific Coast Bicycle Route and is a Terminal Access Route for STAA. The project begins in Redwood Valley near the intersection of Uva

Drive at the north end of a long stretch of concrete-paved highway. The interchange to LAK-20 is approximately two miles south. Steep hills exist on either side of the roadway and the area is prone to soil movement. The area is rural with little to no residential communities and one industrial business. The project ends just before the bypass to the town of Willits.

The route concept for this segment of highway is to maintain and rehabilitate as necessary; improve safety as needed; and widen paved shoulders where feasible to a minimum of four feet to accommodate non-motorized traffic. This project is consistent with the route concept.

Similar and Adjacent Projects

EA	County	Route	PM Limits	Project Description	Construction Year
0H660	MEN	101	41.17/41.17	Weigh in Motion Facility	2023
0K410	MEN	101	41.2/42.8	Concrete Median Barrier	2024
0H170	MEN	101	48.96/55.06	Pavement Rehabilitation	2024
0L380	MEN	101	39.8/40.4	Shoulder Widening and Pullouts	2025
0K890	MEN	101	50.7/52.2	Safety Improvements	2027

**4C. Traffic**

Collision Analysis

District 1 Traffic Safety conducted a collision analysis for the most recently available five-year period in TASAS Table B; between April 1, 2016 and March 31, 2021. The segment reviewed was U.S. Route 101 in Mendocino County, PM R33.73 to R43.20.

Actual Collision Rates (MVM)*			Average Collision Rates (MVM)*		
Fatal	F+I	Total	Fatal	F+I	Total
0.017	0.33	1.39	0.009	0.18	0.48

\*MVM = Million Vehicle Miles

The primary collision factor was “Speeding” (41.3%). The primary type of collision is “Hit Object” (66.3%). The primary object struck is “Other Vehicle” (66.3%).

**5. ALTERNATIVES**

Two alternatives were considered for this project:

- Alternative A – Pavement Rehabilitation, described in 5A below.
- Alternative B – No Build Alternative, described in 5B below.

**5A. Viable Alternative**

Alternative A is recommended as the preferred and only viable alternative, as it is the best and only alternative that meets the project purpose and need.



## **Alternative A**

### Proposed Engineering Features

Pavement strategies are recommended per the Materials Recommendation (Attachment F). This project proposes to improve the condition of the pavement to good using a Minor Pavement Rehabilitation strategy for pavement in fair condition and a Major Pavement Rehabilitation strategy for pavement in poor condition. The pavement strategies will be refined in the 1 Phase to further evaluate opportunities for cost savings, based on a future field trip by Materials and the existing conditions at the time of the field trip. For this report, the following pavement strategies are recommended for the entire pavement length and width:

- Cold plane and remove 0.10 foot of existing open grade friction course
- Mill and fill with 0.33 foot of HMA-A at localized severe pavement failures (rutting greater than ½ inch)
- Rout and seal all cracks wider than ¼ inch
- Place shoulder backing

For the pavement designated as “FAIR” in the RTL year (2023) per the Pavement Condition Report (PCR; Attachment G), the following minor overlay strategy would be used:

- 0.20 foot of RHMA-G
- 0.10 foot of RBWC-G

For the pavement designated as “POOR” in the RTL year (2023) per the PCR, a 10-year rehabilitation (major overlay) strategy would be used as follows:

- 0.15 foot of HMA-A
- 0.20 foot of RHMA-G
- 0.10 foot of RBWC-G

The pavement will be ground and conformed to the bridge deck at the South Willits Overhead. Cold planing throughout the project will affect the vehicle counter loops for the census station (PM 40.32), the temperature sensor for the weather station (PM 41.20 #3), and the loops for the truck crossing (PM 40.67), and the affected items will be replaced. The existing Census Station (PM 40.20 #164) will be relocated to behind the HMA dike along the southbound side of U.S. Route 101 at PM 40.68 and will be upgraded to a Vehicle Classification Station. In addition to the pavement strategies, HMA dike will be replaced, and the following safety features will be constructed:

- Upgrade MBGR to MGS and place minor concrete vegetation control
- Upgrade existing signs
- Replace existing permanent Concrete Barrier with Portable Concrete Barrier (Type 60K)
- Replace existing temporary Concrete Barrier (Type K) with Portable Concrete Barrier (Type 60K)

- Replace existing rumble strips
- Add HFST

Existing permanent concrete barrier is being replaced with portable barrier due to geologic instability of the project area. Use of the portable barriers will reduce costs to maintain the concrete barriers due to frequent emergency projects in the area. Rumble strips will be omitted where shoulder width is less than four feet on flat or uphill grades and where shoulder width is less than six feet on downhill grades.

HFST will be added along southbound U.S. Route 101, between approximate Sta: 435+63 and Sta: 458+18, where a downhill grade exists, to enhance traffic safety.

Shoulders will be investigated in the PS&E phase to determine opportunities for restriping, to increase widths. Where feasible, the outside and inside shoulders should be increased with priority given to the outside shoulder for pedestrian and bicyclist safety. The outside shoulder should have not less than four feet of usable surface.

Overside drains at HMA dikes will be replaced, and drainage inlets will be adjusted to finish grade.

The culvert at PM 40.62 has the following proposed repairs: regrouting of the inlet and outlet, repairing of the inlet, and repairing of the culvert liner. A Drainage Report Exemption is included as Attachment N.

One new highway lighting asset will be constructed near Black Bart Road, PM 40.77.

#### Ramp Metering

There are no ramps within the project limits.

#### Roadside Design and Management

Concrete weed barrier will be used in lieu of woven fabric weed mat.

#### Reversible Lanes and High-Occupancy Vehicle Lanes

This project does not qualify as a capacity increasing or a major street or highway realignment project therefore reversible lanes and high-occupancy lanes have not been considered.

#### Deviations from Mandatory and Advisory Design Standards

The Seventh Edition of the Highway Design Manual (HDM; July 1, 2020 for Chapter 200 and Chapter 300) was used to evaluate highway features within this project. The Build Alternative will require three design exceptions, as detailed in the Table below. The non-standard geometric features include: (1) Minimum Horizontal Clearance, (2) Minimum Shoulder Width, and (3) Minimum Stopping Sight Distance on Horizontal Curves.

Preparation of a Design Standard Decision Document (DSDD) to document the proposed Exceptions to Geometric Design Standards will be deferred until the PS&E phase, when more accurate topographical survey data will be available. The decision to defer was

concurred by the approval authority, Ron Tollison, Acting Chief, NRPD Office of Design.

<b>Design Standards Risk Assessment</b>			
<b>Alternative</b>	<b>Design Standard from HDM</b>	<b>Probability of Nonstandard Design Feature Approval (None, Low, Medium, High)</b>	<b>Justification for Probability Rating</b>
A	<p><b>HDM 309.1 Horizontal Clearances for Highways</b></p> <p><b>309.1(3)(c) Minimum Clearances. On conventional highways, frontage roads, city streets and county roads within the State right of way (all without curbs), the minimum horizontal clearance shall be the standard shoulder width as listed in Tables 302.1 and 307.2, except that a minimum clearance of 4 feet shall be provided where the standard shoulder width is less than 4 feet. For RRR projects, widths are provided in DIB 79.</b></p>	<p><b>Nonstandard Feature:</b> Non-standard horizontal minimum clearance distance in multiple locations including inside and outside shoulders.</p> <p><b>Risk Rating of Not Being Approved: LOW</b></p>	<p><b>Justification for the Approval Risk Rating:</b> Severity of collisions with guard rail or median barrier is expected to be reduced in lieu of an errant vehicle leaving the roadway and striking a fixed object or terrain features that are less forgiving than striking the guard rail or median barrier itself. The severity of a rear-end or hit object collision is less than the severity of a head-on collision.</p> <p><b>Additional Data/Studies needed for Approval:</b> Proposed non-standard horizontal minimum clearance distances and extent. Final location of median barrier. Summary of constraints and support.</p>
<b>Alternative</b>	<b>Design Standard from HDM</b>	<b>Probability of Nonstandard Design Feature Approval (None, Low, Medium, High)</b>	<b>Justification for Probability Rating</b>
A	<p><b>HDM 302.1 Width</b></p> <p><b>The shoulder widths given in Table 302.1 shall be the minimum continuous usable width of paved shoulder on highways.</b></p>	<p><b>Nonstandard Feature:</b> Non-standard shoulder width in multiple locations including left</p>	<p><b>Justification for the Approval Risk Rating:</b> Severity of collisions with guard rail or median barrier is expected to be reduced in lieu of an errant vehicle leaving the roadway and striking a fixed object or terrain features that are less forgiving than striking the guard rail or median</p>

	<p>Table 302.1 indicates that for a freeway or expressway with 4 lanes, the left paved shoulder should be 5 feet wide and the right paved shoulder should be 10 feet wide.</p>	<p>and right shoulders.</p> <p><b><u>Risk Rating of Not Being Approved:</u></b></p> <p><b>LOW</b></p>	<p>barrier itself. The severity of a rear-end or hit object collision is less than the severity of a head-on collision.</p> <p><b><u>Additional Data/Studies needed for Approval:</u></b></p> <p>Proposed nonstandard shoulder widths and extent.</p> <p>Summary of constraints and support.</p>
<p>A</p>	<p><b>HDM 201.6 Stopping Sight Distance on Horizontal Curves</b></p> <p><b>Table 201.1 shows the minimum standards for stopping sight distance related to design speed for motorists.</b></p> <p>The stopping sight distance indicated in Table 201.1 is as follows: 500 feet for a design speed of 55 mph, 580 feet for a design speed of 60 mph, and 660 feet for 65 mph.</p>	<p><b><u>Nonstandard Feature:</u></b></p> <p>Non-standard stopping sight distance exists at several project locations that have existing horizontal curves with radii of less than 2,000 feet and median barrier is present.</p> <p><b><u>Risk Rating of Not Being Approved:</u></b></p> <p><b>LOW</b></p>	<p><b><u>Justification for the Approval Risk Rating:</u></b></p> <p>Severity of collisions with guard rail or median barrier is expected to be reduced in lieu of an errant vehicle leaving the roadway and striking a fixed object or terrain features that are less forgiving than striking the guard rail or median barrier itself. The severity of a rear-end or hit object collision is less than the severity of a head-on collision.</p> <p><b><u>Additional Data/Studies needed for Approval:</u></b></p> <p>Proposed nonstandard stopping sight distances and extent.</p> <p>Final location of median barrier.</p> <p>Summary of constraints and support.</p>

Erosion Control

In locations within project limits where the soil is disturbed due to earthwork, soil stabilization and sediment control such as hydroseed, hydro mulch, fiber rolls, and straw will be used. Further details can be viewed in the Landscape Architecture Assessment Study (LAAS) (Attachment E).

Interim Features

There are no interim features planned as part of this project.

California Highway Patrol (CHP) Enforcement Activities

The project will use the Construction Zone Enhanced Enforcement Program (COZEEP) to provide additional officers on the job site during the work. COZEEP monies were included in the cost estimate. Other than use of COZEEP, the project will have no effect on CHP activities.

Earth Retaining Systems

There are no proposed earth retaining systems planned as part of this project.

Highway Planting and Irrigation

There is no highway planting or irrigation work planned as part of this project.

Noise Barriers

There are no noise barriers proposed in this project.

Traffic Analysis

Maintaining existing loops and upgrading the existing census station will create a more accurate and reliable census system.

Asset Management

A combination approach is employed to extend the pavement life, consisting of both a Minor Pavement Rehabilitation strategy and a Major Pavement Rehabilitation strategy.

Context-Sensitive-Solutions

The Landscape Architecture Assessment Study (LAAS) noted that the project area is eligible for Scenic Highway status, but no visual impact mitigation is required. An aesthetic treatment will be required for the concrete guardrail weed control color.

Culvert Material Considerations

Culvert material considerations were developed from the pH and resistivity values of the soil near the culvert at PM 40.62. Thickness requirements for the culvert for a 50-year design life include 0.109” Galvanized, Polymeric Sheet Coated CSP, Corrugated HDPE Type S, and RCP conforming to Section 65-2.02 of the Standard Specifications. Further detail of these recommendations can be found in the Materials Recommendation dated 03/14/2019 (Attachment F). Allowable pipe materials shall be limited to non-flammable material types, or the ends may be limited to non-flammable material types due to wildfire potential in the project area.

Fish Passage Obstructions

A search was performed on the California Fish Passage Assessment Database and a culvert at PM 41.76 is listed as a total barrier, PM 33.52 as a partial barrier, and culverts at PMs 38.65, 38.6, 37.3, and 36.9 are listed as unassessed for fish passage. Fish passage work is outside the scope of this project.

Current Construction and Right-of-Way Cost Estimates

The current costs for construction and right-of-way are identified in the Cost Estimate (Attachment H).

**5B. Rejected Alternative**

The No Build Alternative is not recommended because it does not satisfy the purpose and need of the project. This segment of US 101 has degraded beyond Highway Field Maintenance’s ability to repair. Facility conditions will continue to worsen if this project

is not programmed, which would lead to a more extensive and costlier project in the future.

## **6. CONSIDERATIONS REQUIRING DISCUSSION**

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

An Initial Site Assessment (ISA) was completed by the Office of Environmental Engineering – South (OEES) on 12/04/2018 (Attachment I). The following list summarizes the findings:

- A geologic evaluation was conducted and indicates the presence of altered ultramafic bedrock, alluvium derived from ultramafic rock, or other rock commonly associated with Naturally Occurring Asbestos (NOA). An NSSP for NOA will be required.
- The proposed project is not within or impacting any site on the Cortese List.
- Low levels of lead from historical combustion of leaded fuel is commonly associated with the highway system. To address this issue SSP 7-1.02K(6)(j)(iii) should be included in the final project PS&E and listing packages.
- Thermoplastic paint may contain lead of varying concentrations depending upon color, type and year of manufacture. To address this issue SSP 36-4 and/or SSP84-9.03C should be included in the final project PS&E and listing packages.
- Treated wood waste will be generated during this project due to guardrail upgrades. SSP14-11.14 should be included in the final project PS&E and listing packages.

### **6B. Value Analysis**

This project exceeds the \$25 million total project cost threshold requiring Value Analysis (VA) study. A VA Study is currently being coordinated by the Project Manager. During the PS&E phase, the project manager must request a FHWA approved VA study or submit a VA Study Exception signed by the District Director to the HQ VA Program.

### **6C. Resource Conservation**

Resources will be conserved to the maximum extent feasible. The new highway lighting will use LED lights to reduce energy consumption.

### **6D. Right-of-Way Issues**

Right-of-way issues are not anticipated; all work is planned to be performed within the existing right-of-way. Further, utility relocations are not anticipated; one culvert will be relined, keeping the same profile. Additional details are available in the Right of Way Data Sheet (Attachment J).

### **6E. Environmental Compliance**

To identify and address environmental issues, a Categorical Exemption for CEQA and a Categorical Exclusion for NEPA (CE/CE) have been prepared. Refer to Attachment O for additional information.

**6F. Air Quality Conformity**

This project is in an area that is designated as attainment or is unclassified for all current National Ambient Air Quality Standards. Therefore, conformity requirements do not apply.

**6G. Title VI Considerations**

This project is not anticipated to adversely affect any low income or minority populations.

**6H. Noise Abatement Decision Report**

No Noise Abatement Decision Report is required.

**6I. Life-Cycle Cost Analysis**

A LCCA is not required because a Minor Pavement Rehabilitation strategy (formerly CAPM) will be used for the bulk of the pavement work.

**7. OTHER CONSIDERATIONS AS APPROPRIATE****7A. Public Hearing Process**

No public hearing is required.

**7B. Stage Construction**

Anticipated traffic control includes lane reductions, moving land closures for striping, and partial shoulder closure. See Attachment M for the Transportation Management Plan.

**7C. Accommodation of Oversize Loads**

Oversize loads will be accommodated because temporary traffic control will be lane closures using cones and a 16-foot lane can be provided in case of need.

**7D. Asset Management**

This project rehabilitates pavement along with highway signage, TMS elements, and drainage to more efficiently address multiple asset deficiencies within a designated segment of roadway. The project meets performance objectives through the rehabilitation of 0.508 lane-miles of poor pavement, 36.965 lane-miles of fair pavement, repair of one culvert system, repair of one TMS element, construction of one new highway lighting feature, and repair of 184 highway signs in poor condition. This project's performance objectives are consistent with the Transportation Asset Management Plan, Ten-Year SHOPP Plan, Ten-Year Project Book, and Five-Year Maintenance Plan. The Performance Measures are available in Attachment K. Assets are also listed below.

1. Mainline Existing Asphalt Pavement Rehabilitation (201.122): 0.508 LNMI Poor, 36.965 LNMI Fair, 0.035 LNMI Good
2. Rumble Strips (201.010/015): 170,000 LF Poor
3. Slip Line Culvert (201.151): 115 LF Poor
4. Sign Panel Replacement (201.170): 184 EA Poor
5. Census Station (201.315): 1 EA Poor, Upgrading to Vehicle Classification Station

6. Median Barrier (201.010/015): 14,000 LF Poor.

7. Guard Rail (201.010/015): 28,000 LF Poor.

### **7E. Complete Streets**

Caltrans' Complete Streets Directive promotes a transportation system that accommodates bicyclists, pedestrians, and transit users. The proposed project will have no effect on complete streets elements such as bicycle lanes or pedestrian facilities. Improved bicycle or pedestrian facilities and shoulder widening is beyond the scope of this project.

The Transportation Planning Scoping Information Sheet (TPSIS) prepared for the Project Initiation Proposal stated that if feasible, non-standard shoulders should be upgraded. Some existing shoulders are non-standard width. An updated TPSIS was requested during preparation of the PIR and a Complete Streets meeting was held with the Transportation Planning Senior - South and Advance Planning staff preparing the PIR. Per the Complete Streets meeting, it was determined that widening work within this project is infeasible due to existing topography and geological instability, and the pavement-centered scope of the project. However, shoulders will be investigated further in the PS&E phase to determine opportunities for restriping, to increase widths.

### **7F. Complete Streets Facilities**

- Pedestrian Facilities  
Pedestrians are allowed use of the shoulder within the project limits. There are no pedestrian facilities within the project limits, and no pedestrian facilities are proposed within the project limits; however, the resurfacing of the shoulder will improve pedestrian travel.
- Bicycle Facilities  
MEN 101 is a Class III Bikeway (Bike Route) within the project limits. Bicyclists are allowed on the Expressway/Highway and to use the paved shoulder; however, no bicycle facilities exist. The shoulder width varies within the project limits, with a minimum right shoulder width of two feet. Shoulders will be investigated further in the PS&E phase to determine opportunities for restriping, to increase widths. There are no proposed expanded bicycle facilities within the project limits.
- Transit Facilities  
Mendocino Transit Authority (MTA) bus Routes 20 and 65 passes through the project limits. Route 65 provides service between Ukiah and Willits Monday through Saturday with four trips each northbound and southbound. Route 20 provides service between Calpella and Willits Monday through Friday with six trips each northbound and southbound. Between the two bus lines, a total of 20 trips per day are provided.
- Park and Ride Facilities  
There are no existing or proposed park and ride facilities within the project limits.



## **7G. Climate Change Considerations**

### Greenhouse Gas (GHG) Reduction Measures:

This project will generate the following Construction & Maintenance GHG Emissions:

537 MT CO<sub>2</sub>e Unmitigated GHG Emission

374 MT CO<sub>2</sub>e Proposed Mitigated GHG Emission, 30.35% decrease in GHG Emissions due to alternative construction and maintenance techniques.

The resulting GHG emission calculation was obtained using the Federal Highways Administration (FHWA) Infrastructure Carbon Estimator (ICE) Tool. This is an estimate using data inputs in the planning phase, before details about specific facility dimensions, materials, and construction practices are known. The tool may not be appropriate to inform engineering analysis and pavement selection. Although Caltrans will continue considering the benefits of utilizing the FHWA Carbon Estimator Tool, at this time this estimate should not be used as a benchmark for GHG calculations in future phases of project development beyond the PA&ED phase (0-phase). The term “mitigation” relates only to the limited number of items used in the FHWA ICE tool as GHG reduction measures and does not necessarily reflect all measures that could be included in the development process to reduce GHG emissions. The use of the word “mitigation” also does not apply to the CEQA or NEPA process and/or determination for the proposed project.

The GHG emission calculation from the FHWA ICE Tool does not cover work done for the following items: TMS census stations (under traffic sensors), guardrail end treatments, rumble strip installation (if done with new striping), roadway safety improvements (meaning vegetation control treatment under existing guardrail), and any storm water mitigation (such as erosion control).

## **7H. Stormwater**

The project meets the requirements for a Short Form Stormwater Data Report (SWDR), since the project disturbs less than 5 acres of soil and Treatment BMPs are not required (i.e. New Impervious Surface Area (NIS) is less than 1.0-acre). See Attachment D for a copy of the draft SWDR.

## **8. FUNDING, PROGRAMMING AND ESTIMATE**

### Funding

Special Funding: This project will be requesting SB-1 funding for programming.

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

Programming

Fund Source	Fiscal Year Programmed				Estimated Cost	Difference
	20/21	21/22	22/23	Total	Total	
20.XX.201.121						
Component	<i>In thousands of dollars (\$1,000)</i>					%
PA&ED Support	561			561	494	-11.9
PS&E Support		910		910	822	-9.7%
Right-of-Way Support		33		33	22	-33.3%
Construction Support			3,457	3,457	3,596	4.0%
Right-of-Way Cap			39	39	12	-69.2%
Construction Cap			47,888	47,888	41,545	-13.2%
Total				52,888	46,500*	-12.1%

\* Rounded up to the nearest \$100,000

The support to capital ratio is 11.9%

Estimate

The total escalated estimate is \$46,500,000 (rounded up to the nearest \$100,000), which includes \$41,545,000 for Construction Capital, \$12,000 for Right of Way Capital, and \$4,934,000 for support. The cost estimate is available as Attachment H.

Cost Comparison

The total escalated estimate is below the total programmed amount of \$52,888,000 by 12.1% or \$6,388,000. This is largely due to decreases in contingency, time-related overhead, and increases in the support costs.

## 9. DELIVERY SCHEDULE

Project Milestones		Milestone Date (Month/Day/Year)
PROGRAM PROJECT	M015	06/24/20
BEGIN ENVIRONMENTAL	M020	07/16/20
PA & ED	M200	09/22/21
PS&E TO DOE	M377	08/15/22
RIGHT OF WAY CERTIFICATION	M410	10/03/22
READY TO LIST	M460	10/15/22
HEADQUARTERS ADVERTISE	M480	11/15/22
AWARD	M495	01/02/23
APPROVE CONTRACT	M500	02/28/23
CONTRACT ACCEPTANCE	M600	12/01/25
END PROJECT EXPENDITURES	M800	02/01/28
FINAL PROJECT CLOSEOUT	M900	11/01/29

## 10. RISKS

A Risk Register was prepared for the project and is included as Attachment C. Broadband inclusion is identified as a high-level risk, as a result of the Middle-Mile Broadband effort, and Potholing is identified as a low-level risk, to account for potential future potholing in the event that currently undiscovered utilities are found within the project limits.

## 11. EXTERNAL AGENCY COORDINATION

No external agency permits are anticipated for the project and project work, as noted in the CE/CE Environmental Determination Form in Attachment O.

## 12. PROJECT REVIEWS

Review	Reviewer	Date
District Program Advisor	Curtis Coburn	07/21/2021
HQ SHOPP Program Advisor	Long Huynh	07/21/2021
District Maintenance	Mark Gorona	07/16/2021
HQ Project Delivery Coordinator	Zebunnesa Tareque	07/21/2021
Project Manager	Katie Everett	08/04/2021
District Safety Review	Brian Simon	08/07/2021
Constructability Review	Juan Reyes	07/13/2021

**13. PROJECT PERSONNEL**

Name	Position	Phone Number
Katie Everett	Project Manager	707-684-6998
Steve Heryford	Design Senior	530-812-6990
Dino Khloth	Design Project Engineer	530-821-8029
Dana York	Environmental Senior	707-572-0948
Laurel Osborn	Environmental Coordinator	707-492-4064
Paul Amato	Biologist	530-741-4484
David Morgan	Traffic Safety Chief	707-445-6376
Yvonne Becker	Right of Way Coordinator	707-815-5116
Geoff Wright	Area Construction Senior	707-496-4355
Jamie Lusk	Traffic Operations Coordinator	707-498-1594
Dan Kornegay	Field Maintenance Supervisor	707-489-3662

**14. ATTACHMENTS (Number of Pages)**

- A. Layouts (21)
- B. Typical Section (1)
- C. Risk Register (2)
- D. Storm Water Data Report (6)
- E. Landscape Architecture Assessment Sheet (3)
- F. Materials Recommendation (10)
- G. Pavement Condition Report (3)
- H. Cost Estimate (10)
- I. Initial Site Assessment (2)
- J. Right of Way Data Sheet (5)
- K. Performance Measures (3)
- L. Programming Sheet (2)
- M. Transportation Management Plan (6)
- N. Drainage Report Exemption (1)
- O. Environmental Report (3)

# Attachment A

## Layouts



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

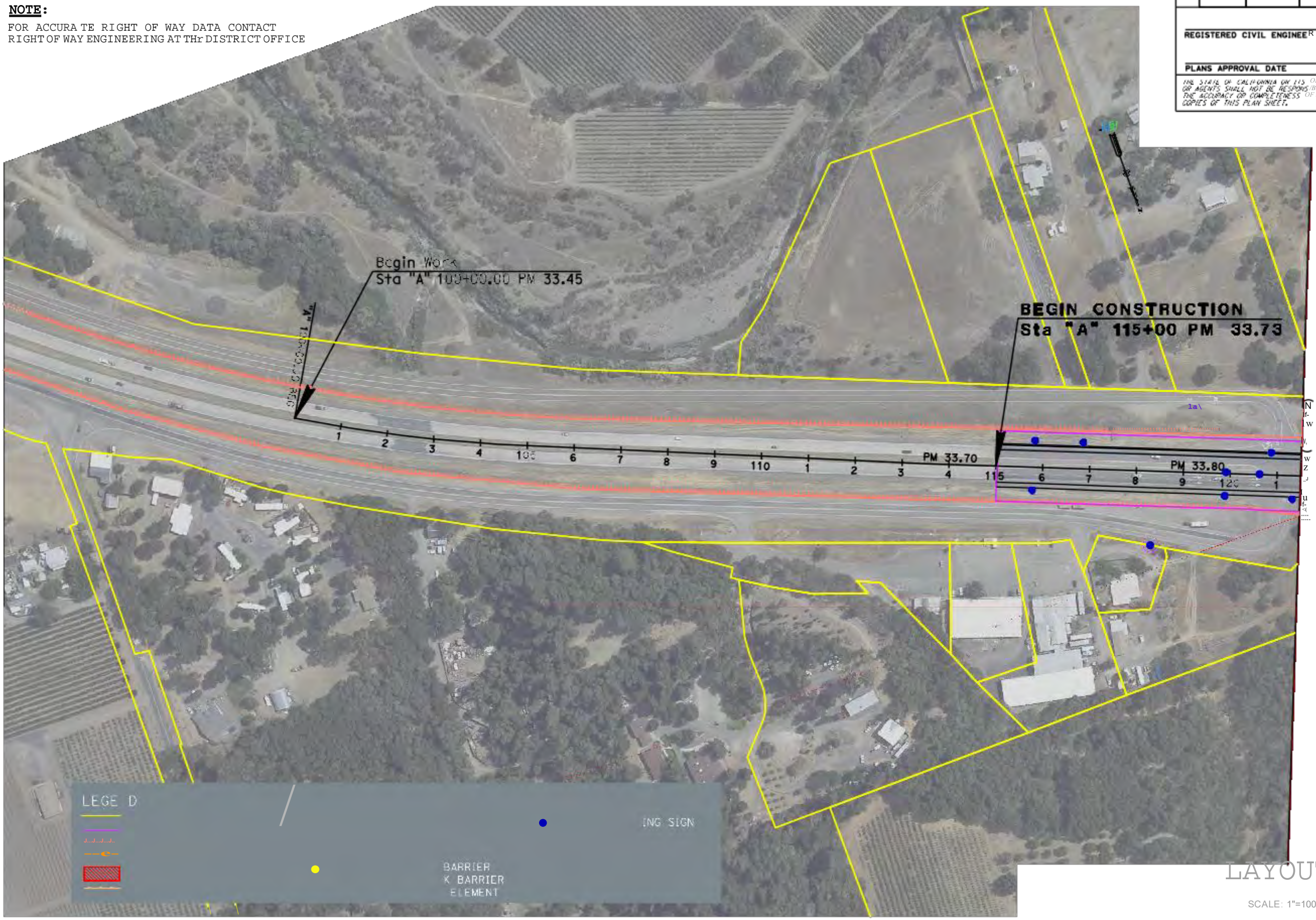
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL No. SH. SETS
	Men	101	33.73/43.2	21

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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

No. \_\_\_\_\_  
Exp. \_\_\_\_\_  
CIVIL ENGINEER OF



LAYOUT  
SCALE: 1"=100'

L-01

SYNOPSIS OF REVISIONS

NO.	DATE	DESCRIPTION
1	7/2/2011	BORDER LAST REVISED



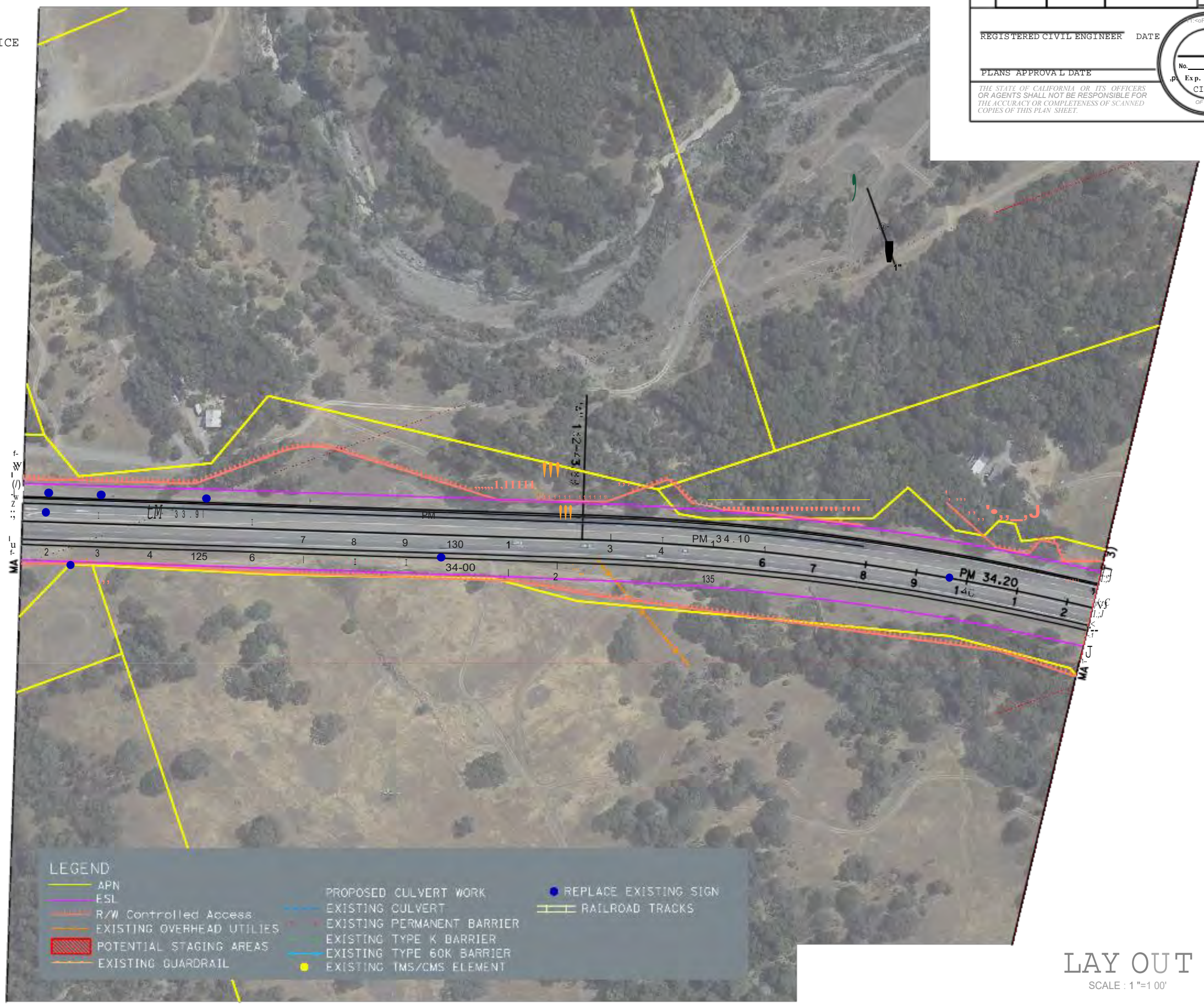
**NOTE:**  
FOR ACCURATE RIGHT OF WAY DATA CONTACT  
RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
	Men	101	33.73/ 3.2	2 / 21

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.



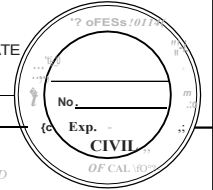
LEGEND					
	APN		PROPOSED CULVERT WORK		REPLACE EXISTING SIGN
	ESL		EXISTING CULVERT		RAILROAD TRACKS
	R/W Controlled Access		EXISTING PERMANENT BARRIER		
	EXISTING OVERHEAD UTILITIES		EXISTING TYPE K BARRIER		
	POTENTIAL STAGING AREAS		EXISTING TYPE 60K BARRIER		
	EXISTING GUARDRAIL		EXISTING TMS/CMS ELEMENT		

**LAY OUT**  
SCALE : 1"=100'  
**L-02**

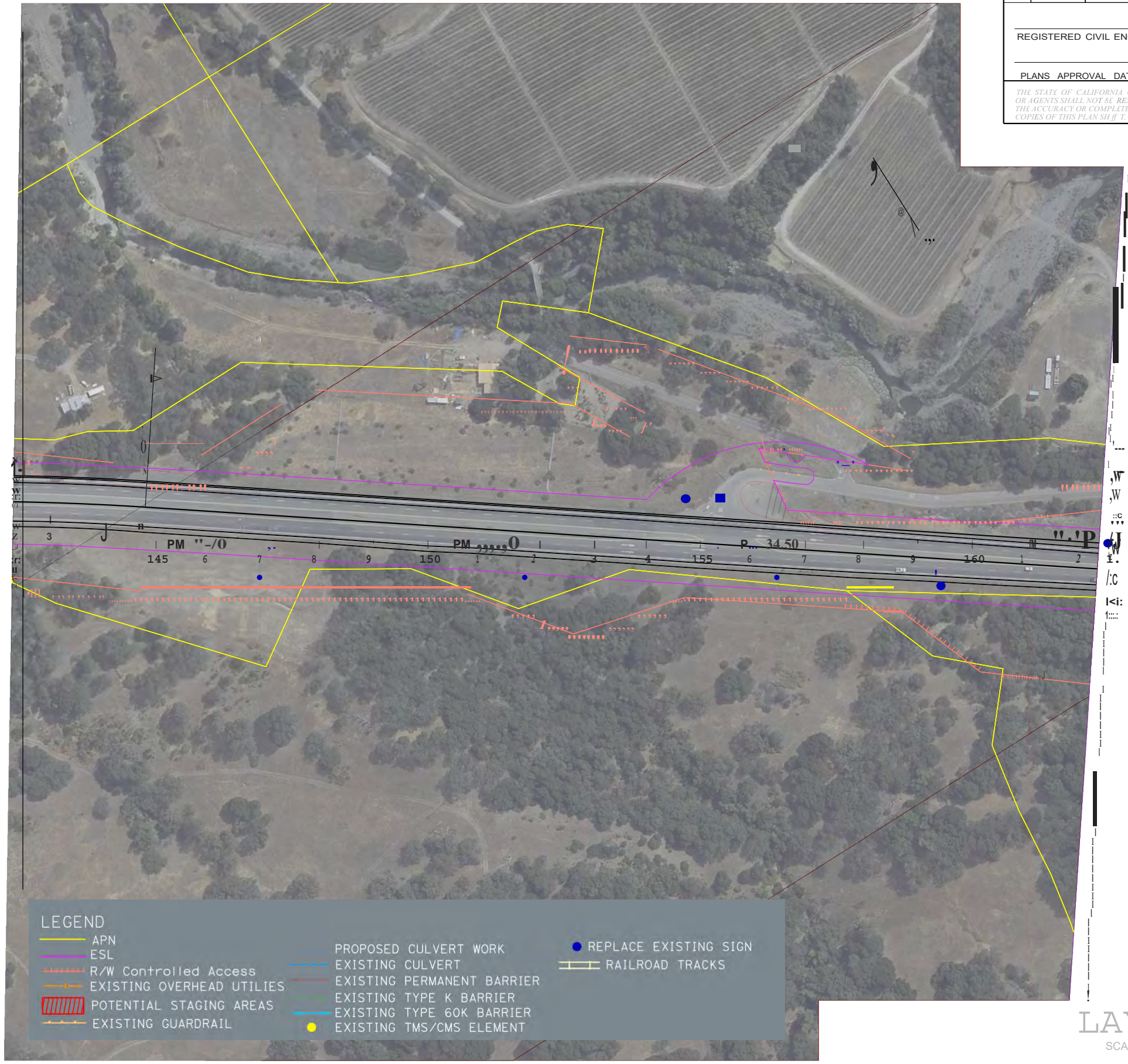
SYVA FEDERAL CORP - SAN JOSE COUNTY  
 PROJECT NUMBER: 0000000001  
 SHEET NUMBER: L-02  
 DATE: 07/20/10  
 DRAWN BY: J. B. BROWN  
 CHECKED BY: J. B. BROWN  
 APPROVED BY: J. B. BROWN



Dis-t	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL No. SHEETS
B	Men	101	33.73/43.2	3 21
REGISTERED CIVIL ENGINEER		DATE		
PLANS APPROVAL DATE				
<small>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.</small>				



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



**LEGEND**

APN	PROPOSED CULVERT WORK	REPLACE EXISTING SIGN
ESL	EXISTING CULVERT	RAILROAD TRACKS
R/W Controlled Access	EXISTING PERMANENT BARRIER	
EXISTING OVERHEAD UTILITIES	EXISTING TYPE K BARRIER	
POTENTIAL STAGING AREAS	EXISTING TYPE 60K BARRIER	
EXISTING GUARDRAIL	EXISTING TMS/CMS ELEMENT	

LAYOUT  
SCALE: 1" = 100'  
L 03

REVISED BY  
 DATE  
 LAY NO.  
 DATE  
 PROJECT NAME  
 DRAWING NO.  
 SHEET NO.



PROJECT NUMBER & PHASE

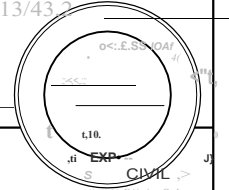
0000000001

0

0



			SHEET TOTAL
			No. SHEETS
Dist COUNTY	ROUTE	POST MILES TOTAL PROJECT	4 21
E Mon	101	33.13/43.2	
REGISTERED CIVIL ENGINEER			
PLANS APPROVAL DATE			
THE STATE OF CALIFORNIA OR ITS AGENCIES OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.			



til ID  
 FOR ACCURATE RIGHT OF WAY DATA CONTACT  
 RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE

LEGE D

PR

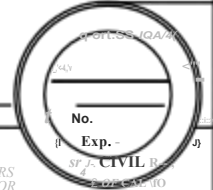
BARRIER K BARRIER ELEMENT

PM 3.101  
 8

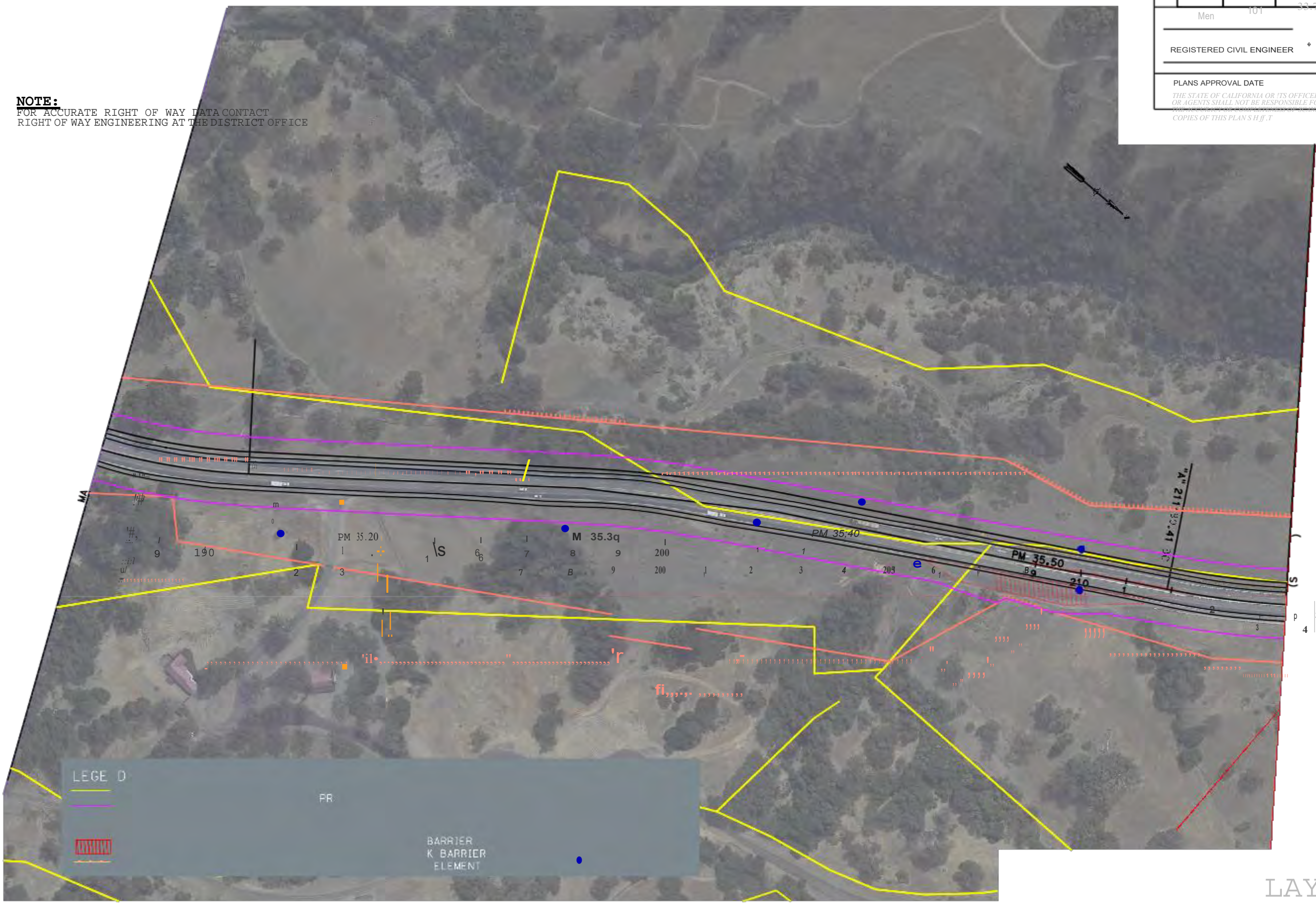
LAYOUT  
 SCALE: 1"=100'

trans



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL No. SHEETS
	Men	101	33.73443.2	5 21
REGISTERED CIVIL ENGINEER				
PLANS APPROVAL DATE				
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION OR DATA SHOWN ON THESE COPIES OF THIS PLAN S.H.#.T</small>				

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



LEGE D

FR

BARRIER  
K BARRIER  
ELEMENT

LAYOUT  
SCALE: 1"=100'

L-05

trans

0.5W > 5W 0.5W

x

x

x

x

0.5W > 5W 0.5W

35!

4

J

4

4

4

4

4

4

4

4

4

4

4

PROJECT NUMBER &  
PHASE

0000000001































































































+

<

(

\_\_\_\_\_





o

.

di











































x

<  
a::  
0  
a...  
v:  
z  
<  
a::  
l-  
u..  
0  
l-  
W  
...E  
a::  
a...  
w  
c::

l































































x  
0  
w  
t  
w

SCALE : 1" = 1.00'

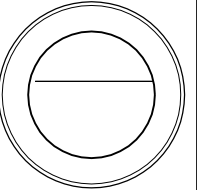
L-09

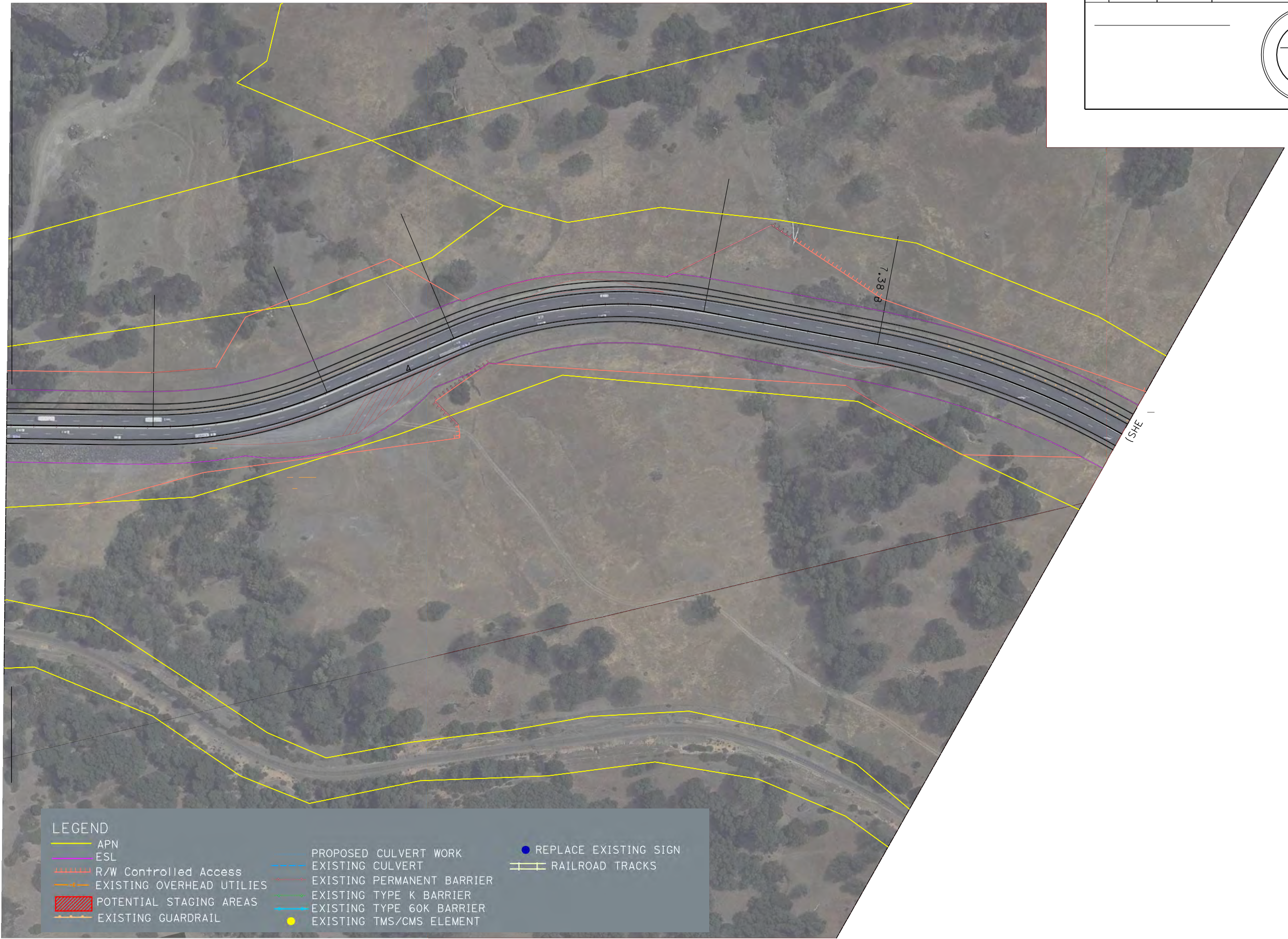
0





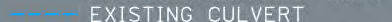






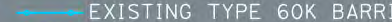


0



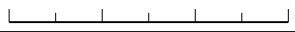




LEGEND					
	APN		PROPOSED CULVERT WORK		REPLACE EXISTING SIGN
	ESL		EXISTING CULVERT		RAILROAD TRACKS
	R/W Controlled Access		EXISTING PERMANENT BARRIER		
	EXISTING OVERHEAD UTILITIES		EXISTING TYPE K BARRIER		
	POTENTIAL STAGING AREAS		EXISTING TYPE 60K BARRIER		
	EXISTING GUARDRAIL		EXISTING TMS/CMS ELEMENT		

**starr**



















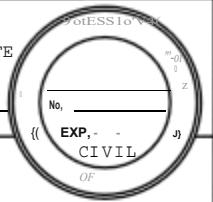


DISTRICT	COUNTY	ROUTE	POST MILES	SHEET	TOTAL
	Men	101	33.73/ 3.2	101	21

REGISTERED CIVIL ENGINEER DATE \_\_\_\_\_

PLANS APPROVAL DATE \_\_\_\_\_

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



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



LEGEND

BARRIER BARRIER ELEMENT

LAY OUT  
SCALE: 1"=100'

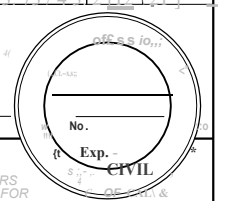
STATE OF CALIFORNIA  
 COUNTY OF MENARD  
 DISTRICT 101  
 PROJECT NO. 101  
 SHEET NO. 101  
 TOTAL SHEETS 21



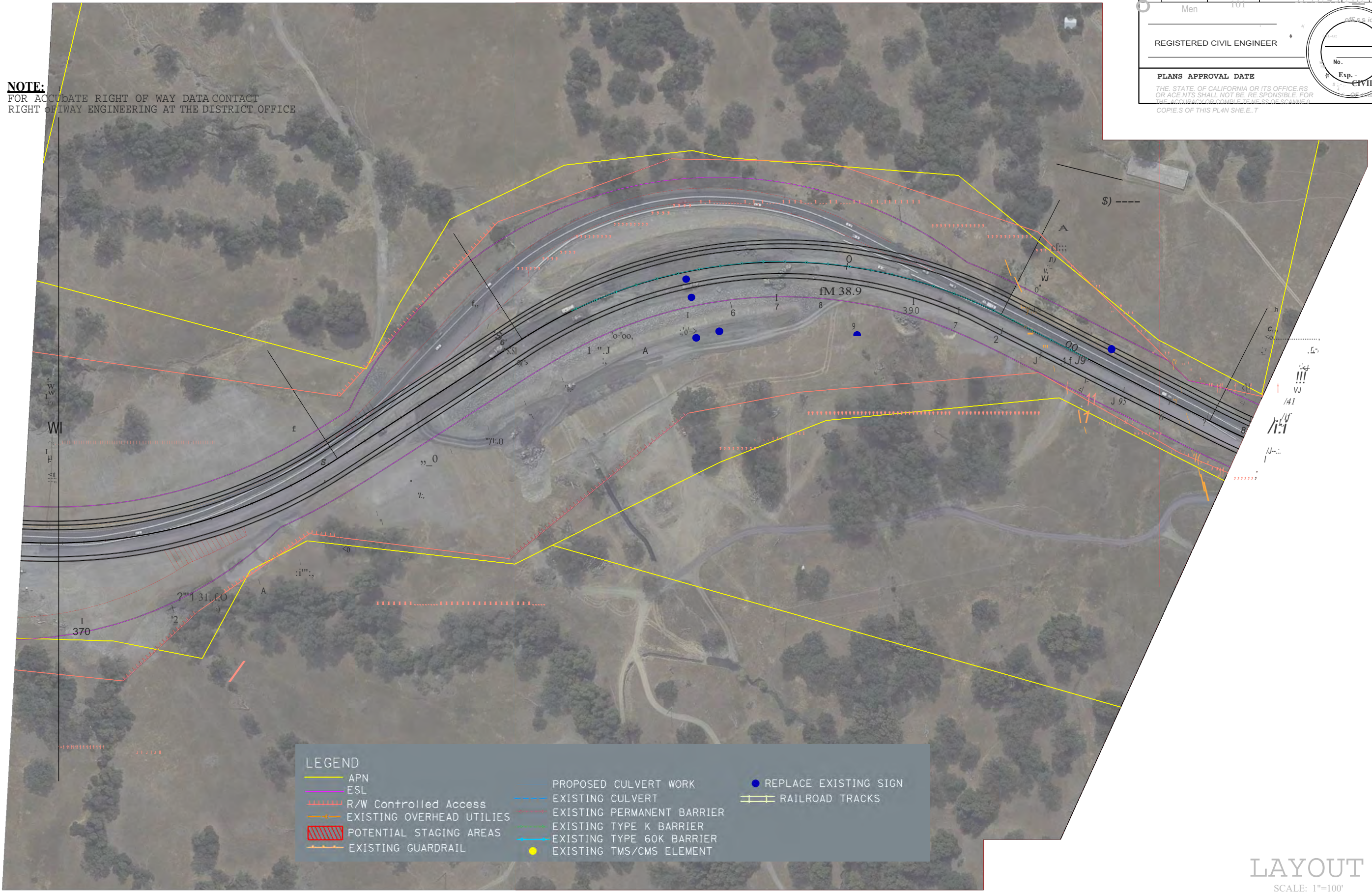




DIST COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL No. SHEETS
Men	101	33.73/43	21/21
REGISTERED CIVIL ENGINEER			
PLANS APPROVAL DATE			
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ANY INFORMATION COPIED FROM THIS PLAN SHEET.			



**NOTE:**  
FOR ACCURATE RIGHT OF WAY DATA CONTACT  
RIGHT OFWAY ENGINEERING AT THE DISTRICT OFFICE



LEGEND					
	APN		PROPOSED CULVERT WORK		REPLACE EXISTING SIGN
	ESL		EXISTING CULVERT		RAILROAD TRACKS
	R/W Controlled Access		EXISTING PERMANENT BARRIER		
	EXISTING OVERHEAD UTILITIES		EXISTING TYPE K BARRIER		
	POTENTIAL STAGING AREAS		EXISTING TYPE 60K BARRIER		
	EXISTING GUARDRAIL		EXISTING TMS/CMS ELEMENT		

LAYOUT  
SCALE: 1"=100'



PROJEC  
T  
NUMBER  
& PHASE

42  
000000000  
01

Dist.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL No. SHEETS
	Men	101	33.73/43.2	13 / 21

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.

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



LAY OUT  
SCALE: 1" = 100'

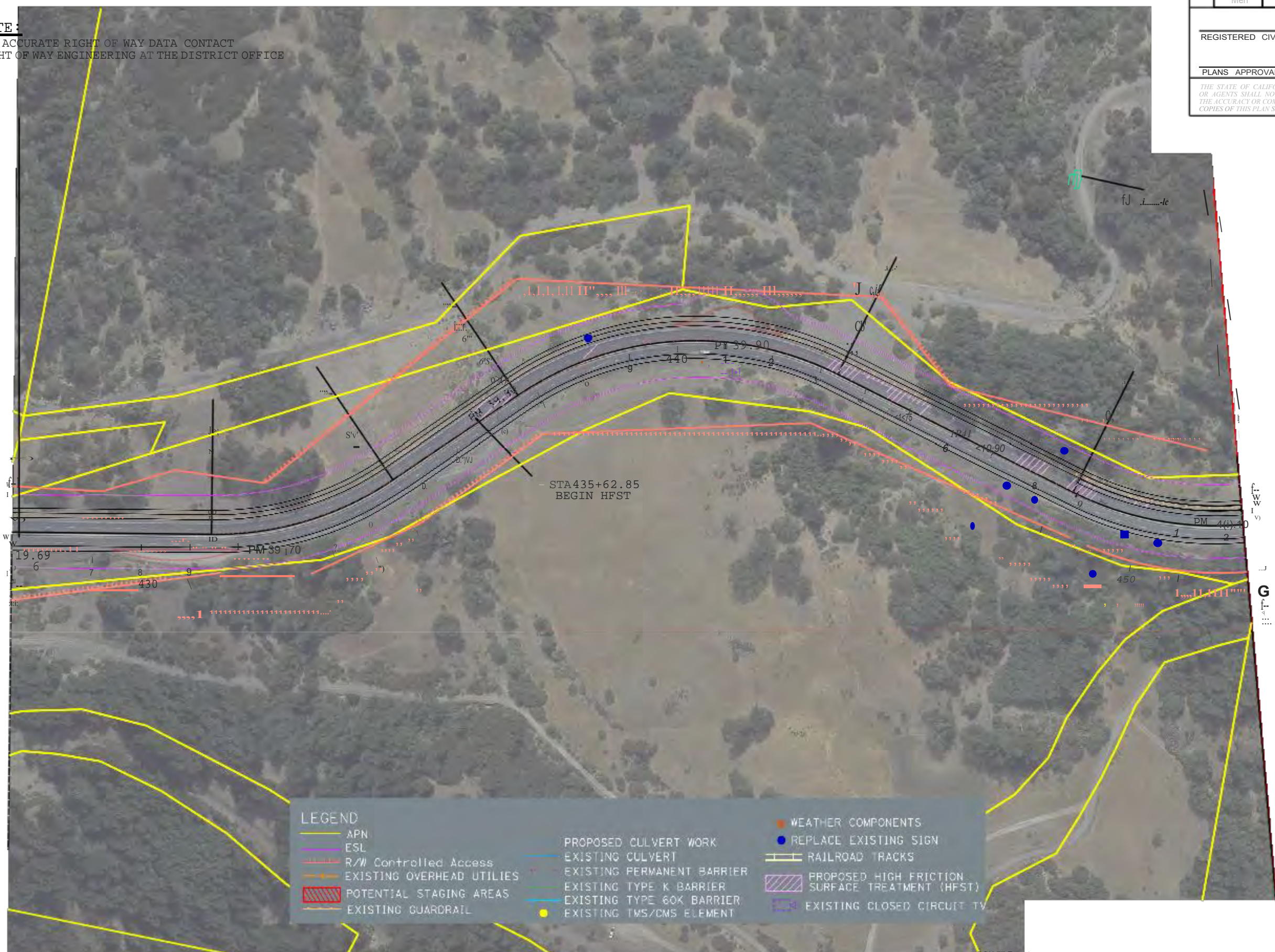
STATE OF CALIFORNIA  
 COUNTY OF MENARD  
 DISTRICT OFFICE  
 PROJECT NO. 101  
 SHEET NO. 13  
 DATE: 10/15/10  
 DRAWN BY: [Name]  
 CHECKED BY: [Name]  
 APPROVED BY: [Name]



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL No. SHEETS
	Men	101	33.73/43.2	14 / 21
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.				



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



LEGEND			
	APN		WEATHER COMPONENTS
	ESL		REPLACE EXISTING SIGN
	R/W Controlled Access		RAILROAD TRACKS
	EXISTING OVERHEAD UTILITIES		PROPOSED HIGH FRICTION SURFACE TREATMENT (HFST)
	POTENTIAL STAGING AREAS		EXISTING CLOSED CIRCUIT TV
	EXISTING GUARDRAIL		EXISTING TMS/CMS ELEMENT
	PROPOSED CULVERT WORK		
	EXISTING CULVERT		
	EXISTING PERMANENT BARRIER		
	EXISTING TYPE K BARRIER		
	EXISTING TYPE 60K BARRIER		

LAYOUT

IS IN INCHES

BORDER LAST  
REVISED  
7/2/2010

DGN FILE => L-  
14.dgn

0000

SCALE : 1"=100'

L 14

00000000001

PROJECT  
NUMBER & PHASE

0'-0"  
0  
NIST0  
0  
0



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	Men	101	33 73 / 43 2	1 1 S 1	21

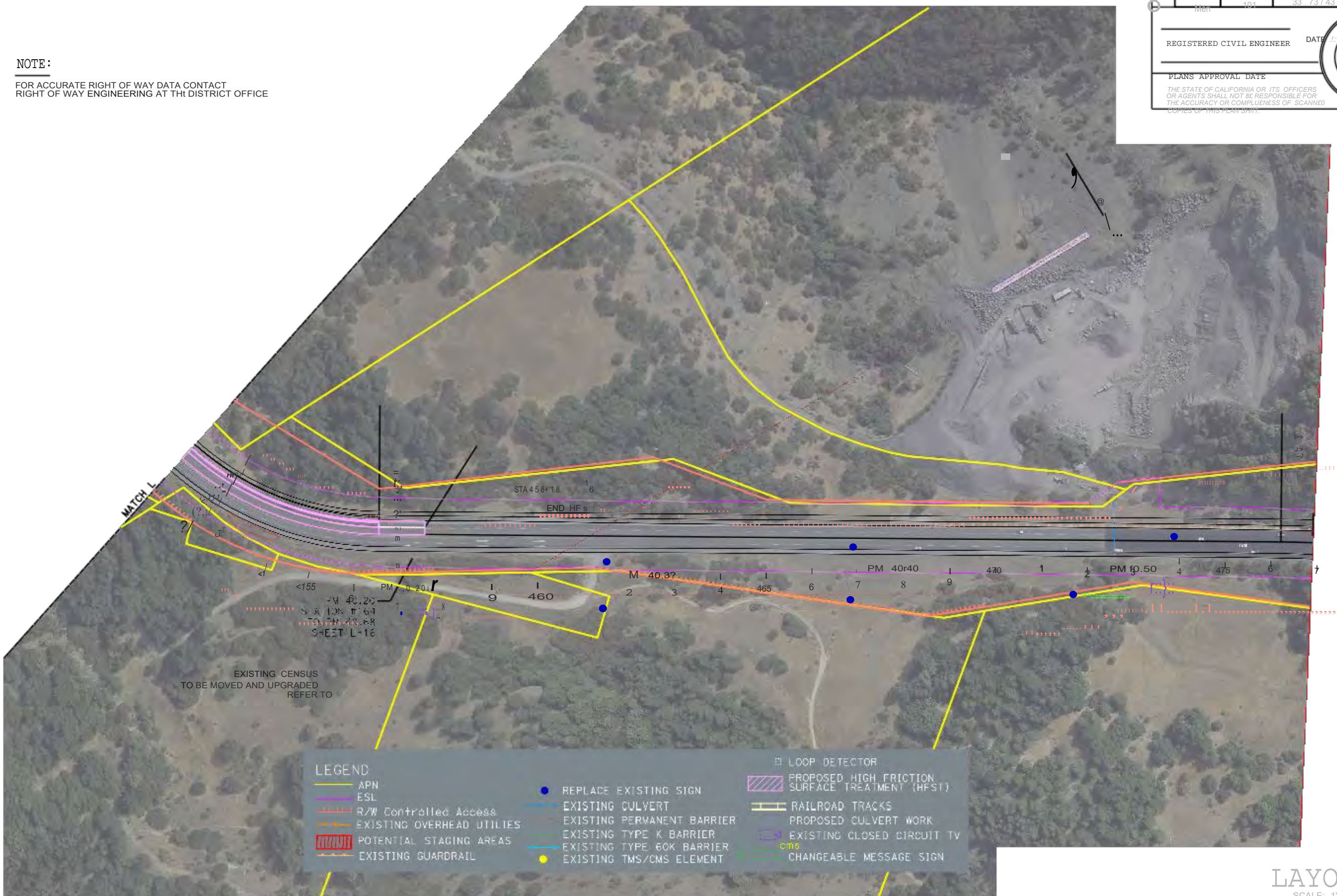
  

REGISTERED CIVIL ENGINEER	DATE
PLANS APPROVAL DATE	

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.

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



LEGEND	
	APN
	ESL
	R/W Controlled Access
	EXISTING OVERHEAD UTILITIES
	POTENTIAL STAGING AREAS
	EXISTING GUARDRAIL
	REPLACE EXISTING SIGN
	EXISTING CULVERT
	EXISTING PERMANENT BARRIER
	EXISTING TYPE K BARRIER
	EXISTING TYPE 60K BARRIER
	EXISTING TMS/CMS ELEMENT
	LOOP DETECTOR
	PROPOSED HIGH FRICTION SURFACE TREATMENT (HFST)
	RAILROAD TRACKS
	PROPOSED CULVERT WORK
	EXISTING CLOSED CIRCUIT TV
	CHANGEABLE MESSAGE SIGN

LAYOUT  
SCALE: 1"=100'

L-1 5

UNIT 0000

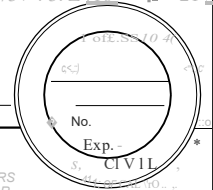
TRANSPORTATION  
 COUNTY OF MENARD  
 DISTRICT OFFICE  
 1000 N. MAIN ST.  
 MENARD, CA 95229  
 TEL: (530) 835-1000  
 FAX: (530) 835-1001  
 WWW.MENARDCOUNTY.CA.GOV

PROJE  
CT  
NUMB  
ER &  
PHASE

0  
00000000  
01



POST MILES	SHEET TOTAL
TOTAL PROJECT	No. SHEETS
33.73 / 43.21	1 / 21
Men	101
REGISTERED CIVIL ENGINEER	
PLANS APPROVAL DATE	
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF DRAWING COPIES OF THIS PLAN SHEET.	



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



**LEGEND**

- Orange circle: ATED AND UPGRADED T ON
- Green circle: E
- Blue circle: EXTIM
- Green dashed box: TRAFFIC MONITORING STATION
- Blue dashed box: E SIGN

1 LAYOUT  
SCALE: 1"=100'

L-16

REVISED BY: [Name]  
 DATE: [Date]  
 CHECKED BY: [Name]  
 DATE: [Date]  
 DESIGNED BY: [Name]  
 DATE: [Date]



l:fil.m

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

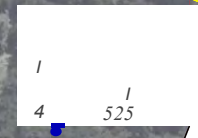
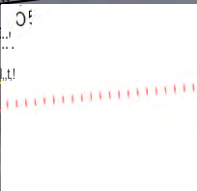
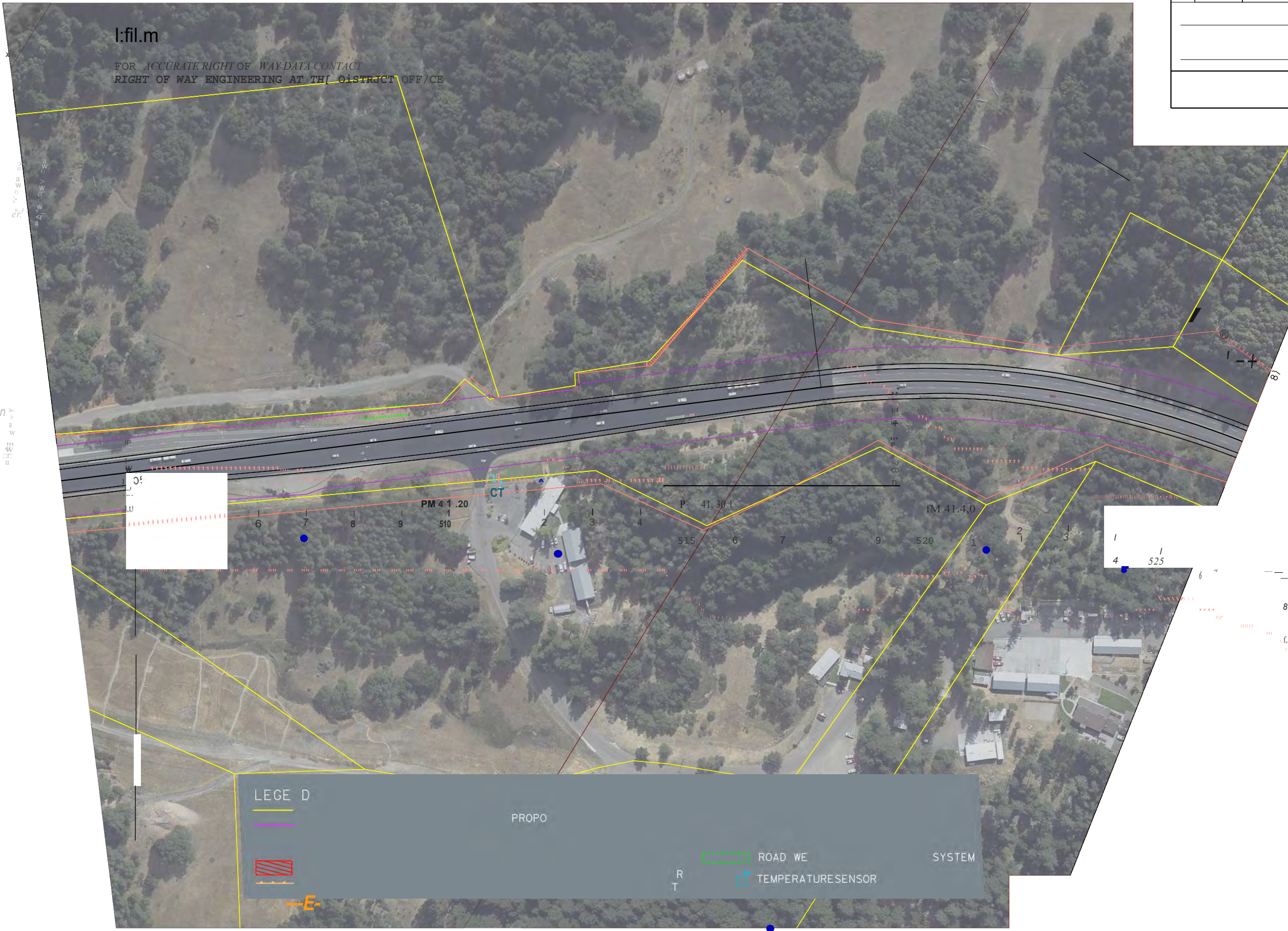

Dist. COUNTY  
**GJ**

ROUTE  
101  
POST MILES  
TOTAL PROJECT  
33.73143

REGISTERED CIVIL ENGINEER

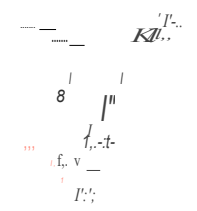
PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS  
OR AGENTS SHALL NOT BE RESPONSIBLE FOR  
THE QUALITY OR ACCURACY OF THE INFORMATION  
CONTAINED HEREIN OR THE GREENNESS OF SCANNED



**LEGE D**

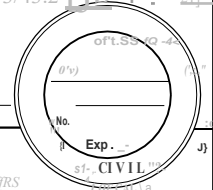
- PROPO
- ROAD WE
- TEMPERATURE SENSOR



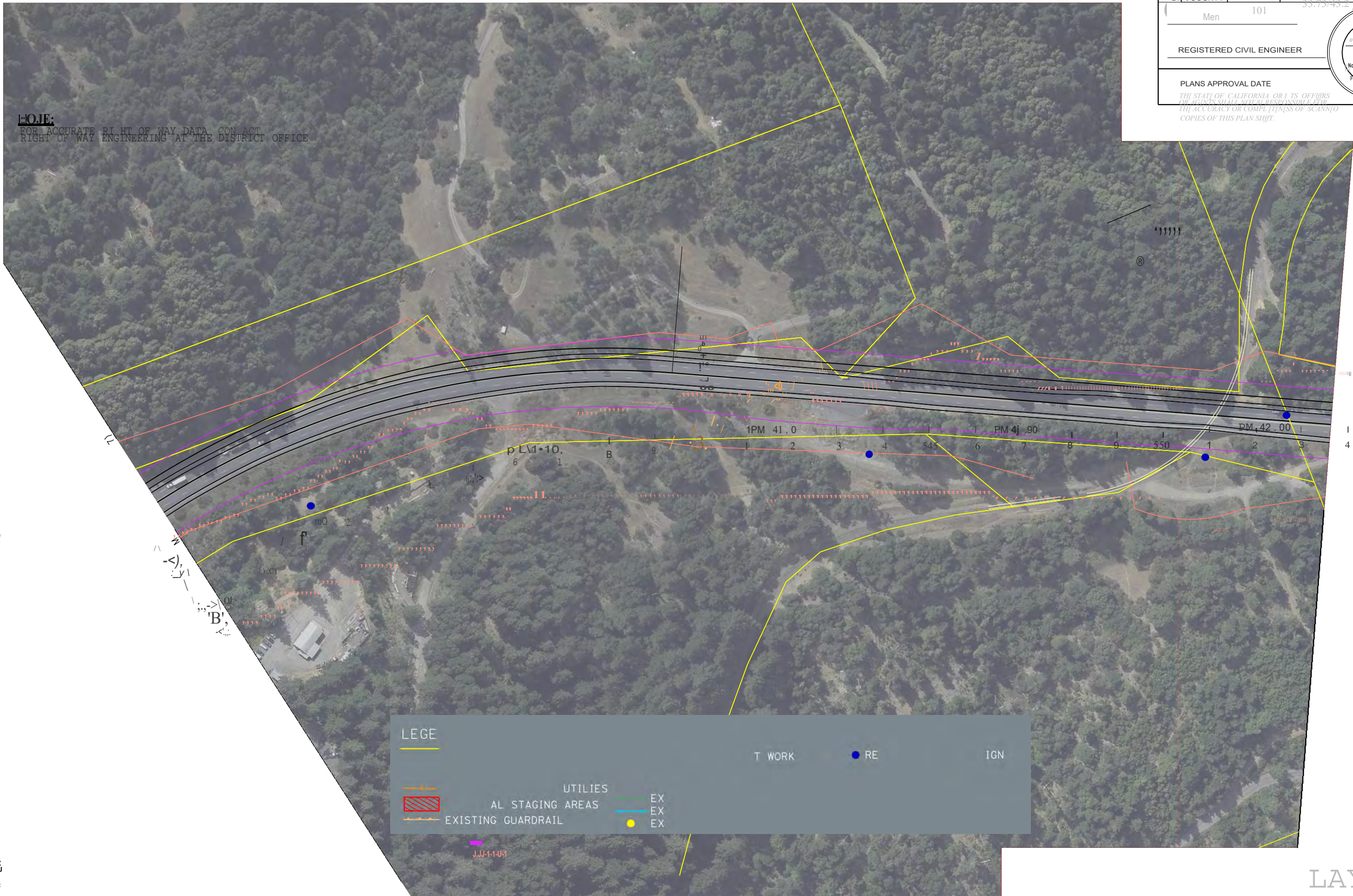
13-0005



ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL
Men 101	33.73/43.2	11
REGISTERED CIVIL ENGINEER		
PLANS APPROVAL DATE		
<small>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.</small>		



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



**LEGE**

	AL STAGING AREAS		EX
	EXISTING GUARDRAIL		EX
			EX

T WORK    
 RE    
 IGN

SUB

LAYOUT 1  
SCALE: 1"=100'



REGISTERED CIVIL ENGINEER DATE "t

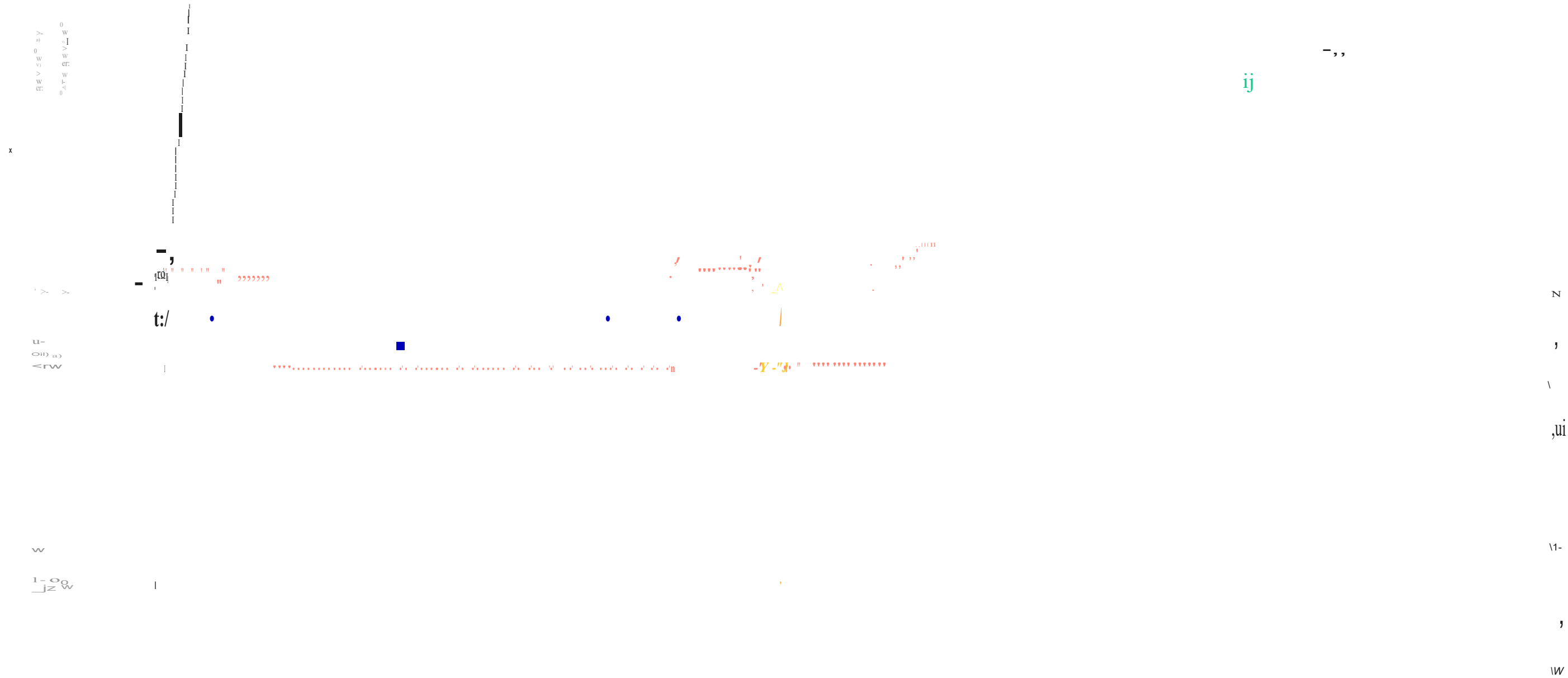
PLANS APPROVAL DATE No. \_\_\_\_\_

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.

CIVIL OF

**NOTE:**

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



0  
y\_ ~ | | || 42. 1 | | | | PM 42/20 |

7,

W: 11

!) 555 6 7 8 9 560 1 2 3 <

x uo u























































y

!

]

y

!

er:









































x  
^Y P^L F ^  
:Y F Y G^ s P^G W  
:Y F Y G^ s P^G W  
:Y F Y G^ s P^G W  
:Y F Y G^ s P^G W  
:Y F Y G^ s P^G W

:Z:  
0  
W  
c::  
a.. W  
|  
:Z:  
c::  
0  
0  
W  
W













SCALE: 1"=100'

L - 19

00

AA

Ww

Ww 1.011

0

s-0

0

0

N

0

0

0

N

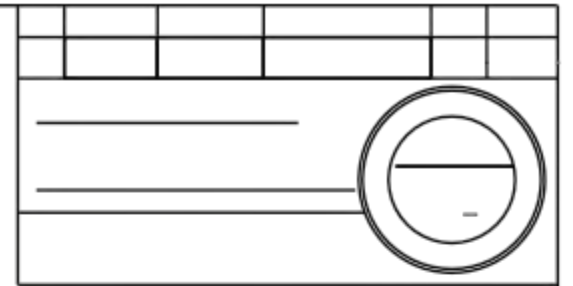
1

N

0



RELATIVE BORDER SCALE  
IS IN INCHES 0



BORDER LAST REVISED 7/2/2010

USERNAME => E530

UNIT 0000

PROJECT NUMBER & PHASE

0000000001

MA

MATCH L

DGN FILE => L\_19.dgn

LEGEND

- APN
- ESL
- R/W Controlled Access
- EXISTING OVERHEAD UTILITIES
- POTENTIAL STAGING AREAS
- EXISTING GUARDRAIL
- PROPOSED CULVERT WORK
- EXISTING CULVERT
- EXISTING PERMANENT BARRIER
- EXISTING TYPE K BARRIER
- EXISTING TYPE 60K BARRIER
- EX
- REPLACE EXISTING SIGN
- RAILROAD TRACKS

trans





Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
	Men	101	33.73/3.2	20	21

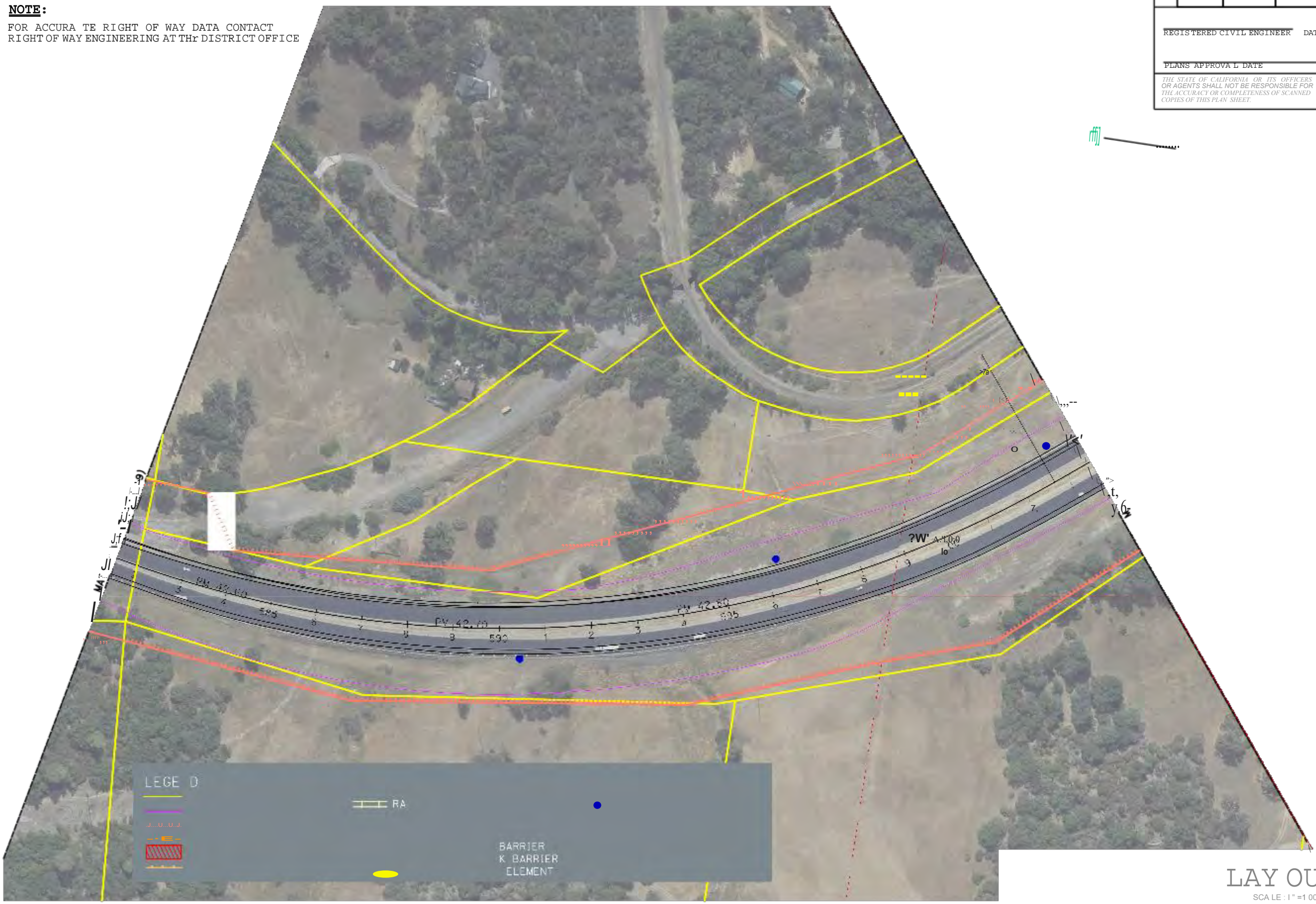
  

REGISTERED CIVIL ENGINEER	DATE
PLANS APPROVAL DATE	

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.

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



**LEGE D**

- Yellow line —
- Purple line —
- Red line —
- Blue line —
- Green line —
- Orange line —
- Grey line —
- Black line —
- Dashed line —
- Dotted line —
- Solid line —
- Hatched area —
- RA —
- BARRIER ELEMENT —

**LAY OUT**  
SCALE: 1" = 100'

L - 20

SVAY F...  
 PLAN...  
 DATE...  
 BY...  
 CHECKED...  
 DATE...  
 BY...

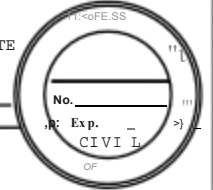


Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
	Men	101	33.73/43.21	21	21

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.



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



LEGEND			
	APN		REPLACE EXISTING SIGN
	ESL		RAILROAD TRACKS
	R/W Controlled Access		PROPOSED CULVERT WORK
	EXISTING OVERHEAD UTILITIES		EXISTING CULVERT
	POTENTIAL STAGING AREAS		EXISTING PERMANENT BARRIER
	EXISTING GUARDRAIL		EXISTING TYPE K BARRIER
	EXISTING TYPE 60K BARRIER		EXISTING TYPE 60K BARRIER
	EXISTING TMS/CMS ELEMENT		CHANGABLE MESSAGE SIGN
			EXTINGUISHABLE MESSAGE SIGN

**LAYOUT**  
SCALE: 1"=100'  
**L - 21**

STATE FORMAL BOARD OF PROFESSIONAL ENGINEERS  
 PLANNING SUPERVISOR  
 REVIEWED BY  
 CHECKED BY  
 DATE



Attachment B  
Typical Section



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	MEN	101	PM R33.73/R43.2		

**DESIGN STUDY ONLY**

REGISTERED CIVIL ENGINEER

PLANS APPROVAL DATE

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

REGISTERED PROFESSIONAL ENGINEER  
CIVIL  
STATE OF CALIFORNIA

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

**Caltrans**

REVISIONS: DATE PLOTTED => DATE  
00-00-00 TIME PLOTTED => \$TIME

REVISOR

REVISION

DATE

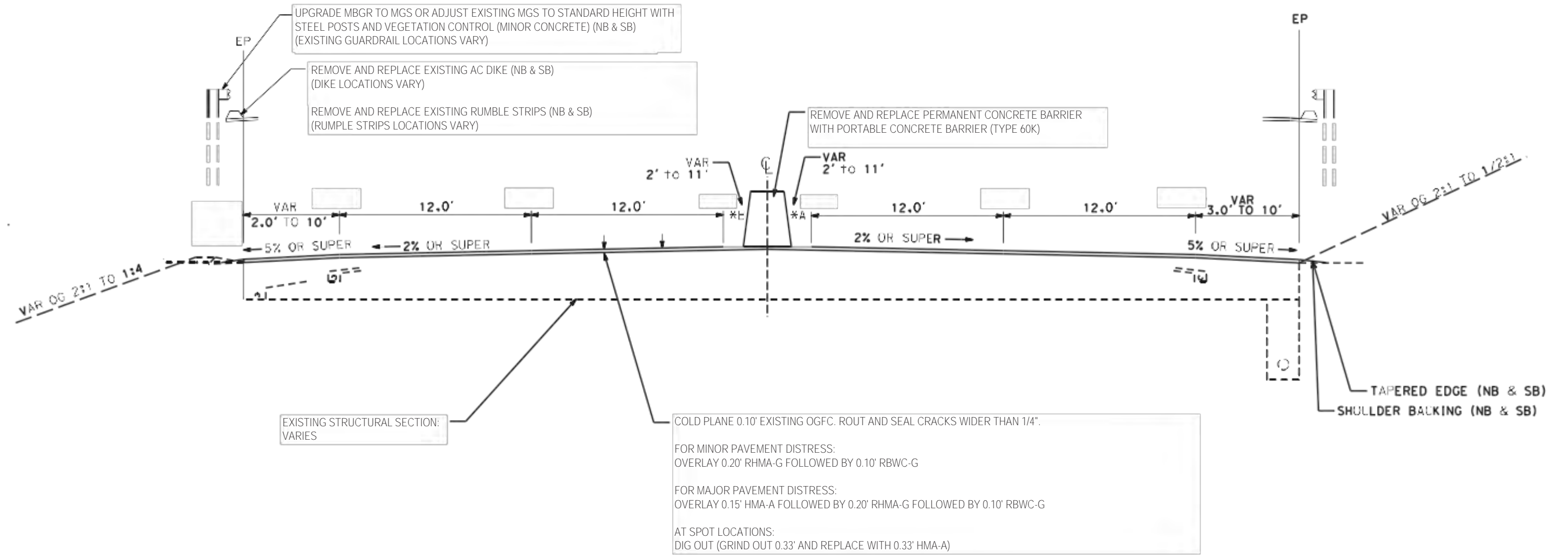
CHECKED BY

DESIGNED BY

FUNCTIONAL SUPERVISOR

DATE

TIME



PM R33.73 TO PM R43.2  
EXCEPT AT BRIDGE LOCATIONS

Typical Section  
X-1  
NO SCALE

# Attachment C

## Risk Register

# Risk Register for 0H160, Ridgewood Class 1 Pavement

Form v3.3 last modified 10/30/2018 CB

<b>Risk Checkpoint:</b> PA&ED
Date: 8/18/2021
Project Nickname: Ridgewood Class 1 Pavement
EA: 0H160
Co-Rt, Post Miles: MEN 101 PM 33.73 / 43.20
Project Manager: Katie Everett
<b>FY &amp; Program (SHOPP or STIP): 2020 (SHOPP)</b>
Capital Costs: \$41,557k
Support Costs: \$4,934k
Total Costs: \$46,491k
RTL Target: 10/15/2022

Phase	Cost Contingency Range \$k			Schedule Contingency Range (Wkg Days)		
	Optimistic	PERT	Pessimistic	Optimistic	PERT	Pessimistic
0-PA&ED	\$0	\$0	\$0	0	0	0
1-PS&E	\$49	\$85	\$125	114	174	234
2-RW Sup	\$0	\$0	\$0	0	0	0
3-Con Sup	\$4	\$8	\$12	6	12	18
Support Contingency	\$53	\$93	\$136	120	186	252
9-RW Cap	\$0	\$0	\$0	0	0	0
4-Con Cap	\$1,200	\$1,800	\$2,400	72	108	144
Capital Contingency	\$1,200	\$1,800	\$2,400	72	108	144
Total Contingency	\$1,253	\$1,893	\$2,536	192	294	396

Risk Identification								Risk Assessment			Risk Response				Quantifying "Red" (High P & I) Level Risks			
Status	ID #	Type	Category	Title	Risk Statement	Current status / assumptions	Risk Trigger	Probability (P)	Cost Impact Schedule Impact (I)	Cost Score Schedule Score (PxI)	Strategy	Response Actions	Risk Owner	Updated	Impacted Phase	Calculated Contingency	Support (hours) Capital Cost \$k	Schedule (Days)
Active	1	Threat	Utilities	Potholing	As a result of future potholing for utility conflicts, currently undiscovered utilities may be found which could impact design and construction support costs.	Currently assume utilities have been recorded correctly	Future studies	2-Low (11-30%)	2 - Low (<\$2,403k)	4	Accept	The PDT will coordinate with R/W and Utilities early in project development to allow time in the schedule for potential design changes.	Project Manager	3/5/2019	1-PS&E Sup	\$8k	O 160 hours ML 320 hours P 480 hours	O 30 ML 60 P 90
								20%	2 - Low (<1 month)	4					3-Con Sup	\$8k	O 160 hours ML 320 hours P 480 hours	O 30 ML 60 P 90
Active	3	Threat	Design	Middle-Mile Broadband Effort	This project is indicated as a candidate for the inclusion of broadband as a result of the middle-mile broadband effort. Changes in project scope may occur to include broadband, which would lead to increase in cost and delay of schedule.	Broadband will add to the scope of this project.	Future studies	4-High (51-70%)	4 - Moderate (\$2,326k - \$4,649k)	16	Mitigate	The PDT will evaluate the inclusion of broadband in the design phase and reduce impacts as much as possible.	Project Manager	8/23/2021	1-PS&E Sup	\$77k	O 600 hours ML 1,000 hours P 1,500 hours	O 180 ML 270 P 360
								60%	16 - Very High (>6 months)	64					4-Con Cap	\$1,800k	O \$2,000k ML \$3,000k P \$4,000k	O 120 ML 180 P 240
Retired	2	Threat	Design	High Friction Surface Treatment	As a result of the lack of a separate safety geometric improvements project, High Friction Surface Treatment (HFST) may be added to the scope of work for this project during a subsequent phase. This would increase the scope and cost.	Current assumption is that Traffic Safety will initiate a separate geometric improvement project that can begin earlier than this project and therefore HFST will not be needed in this project.	No separate safety project as well as funding availability in the project contingency.	2-Low (11-30%)	2 - Low (<\$2,403k)	4	Mitigate	The PDT will include the HFST work in the project if the work is warranted and if there is funding availability in the project budget.	Traffic Safety	3/26/2019	4-Con Cap	\$0k	O \$200k ML \$350k P \$500k	O 30 ML 60 P 90
								0%	2 - Low (<1 month)	4								

Attachment D  
Storm Water Data Report



Dist-County-Route: 01-MEN-101  
Post Mile Limits: R33.73/R43.20  
Project Type: Pavement Rehabilitation  
Project ID (EA): 0117000117 (01-OH160)  
Program Identification: 201.121  
Phase:  PID  PA/ED  PS&E

Regional Water Quality Control Board(s): North Coast Region 1

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

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

Total Disturbed Soil Area: 0.00 acre New Impervious Surface: 0.00 acre  
Estimated Const. Start Date: 5/1/23 Estimated Const. Completion Date: 12/01/25  
Risk Level: RL 1  RL 2  RL 3  Not Applicable   
WPCP

Is MWELO applicable? Yes  No

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

08/16/2021

Dino Khloth, Registered Project Engineer

Date

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

[Stamp Required at PS&E only]

Iris Bishop, District Design SW Designee

Date

## 1. Project Description

This pavement rehabilitation project is in Mendocino County near Willits from 1.1 miles north of West Road Overcrossing to 0.6 miles south of Haehl Creek Bridge 10-129, on U.S. Route 101 from Post Mile (PM) R33.73 to 43.20. The project proposes to improve Class I Asphalt Concrete (AC) pavement using a strategy consisting of cold-planning AC surfacing by spot milling (0.25'-0.33') existing AC and replacing with Type A Hot Mix Asphalt (HMA-A), placing an HMA leveling course, and placing Rubberized HMA (RHMA) overlay plus shoulder backing. Some existing concrete median barriers will be replaced with Portable Concrete Barriers (Type 60K). Existing Metal Beam Guardrail (MBGR) will be replaced with Midwest Guardrail System (MGS), and existing MGS will be raised. High Friction Surface Treatment (HFST) will be added. One drainage system at Post Mile 40.62 will be repaired by regrouting the inlet and outlet, repairing the inlet, and repairing the culvert liner. A census station will be upgraded, sign panels will be replaced, and one new highway lighting asset will be constructed.

The total disturbed soil area (DSA) is approximately 0.00 acre. DSA was calculated as sum of the disturbed soil areas for the construction work, construction staging, and access to the project. The total project area is 76.45 acres. Staging area was included in the DSA calculations.

There are no Additional Treatment Area (ATA) Condition 1 or Condition 2. ATA Condition 1 does not apply since there are no existing treatment BMPs within the project limits. ATA Condition 2 does not apply because Net New Impervious (NNI) Area is approximately 0% of total post project impervious area. All values were calculated using computer aided drafting and design software.

Table 1: Project Area

Existing Impervious Area, Acres	Post Impervious Area, Acres	Net New Impervious (NNI) Area, Acres	Replaced Impervious Surface (RIS), Acres	Excluded Impervious Area (EIA), Acres	New Impervious Surface (NIS), Acres	ATA # 1, Acres	ATA # 2, Acres	PCTA, Acres
76.45	76.45	0.00	0.00	0	0.00	0	0	0

Per Section 4.3 Step 6 and Step 7 of the PPDG, July 2017, Post Construction Treatment Area (PCTA) is required for projects that are not routine maintenance and where the New Impervious Surface (NIS) equals or exceeds one acre or more, or 5,000 sf on non-highway projects. The project is routine maintenance; thus, the PCTA for this project is 0 acres.

$$PCTA = NIS + ATA \#1 + ATA \#2$$

$$NIS = NNI + RIS - EIA$$

EIA= Sidewalk, Pedestrian, Separate Bikeways Area, and areas over paved areas (any area of a bridge that goes over a road needs to be excluded)

ATA= Additional Treated Area

PCTA= Post Construction Treatment Area

The project is not subject to the treatment threshold requirements of the 2012 CT MS4 Permit.

## 2. Site Data and Stormwater Quality Design Issues

This project doesn't have the potential to create water quality impacts. An Evaluation Documentation Form was prepared on August 16, 2021.

The project is not within an Urban MS4 Permit Area.

A 401 Certification is not required.

The additional impervious area will not impact runoff. The project will not change the existing flow path, flow volumes, hydraulic capacity, or grade of drainage facilities. A Drainage Report Exemption has been obtained, dated August 9, 2021.

According to the June 5, 2020 Caltrans Maintenance IMMS Report System, there are no existing Treatment BMPs within the project limits. The project will not impact any existing Treatment BMP.

### 3. Construction Site BMPs

The project will be constructed within multiple construction seasons.

Temporary Construction Site BMPs will be developed and deployed under a contractor that has prepared a Water Pollution Control Plan (WPCP) approved by the Resident Engineer (RE). Fiber Rolls, Hydromulch, Straw, and Hydroseed have been identified as bid line items. Additional BMPs will be deployed as lump sum bid items under Prepare WPCP and CBMP Estimate.

Dewatering is anticipated for this project.

Erosion Control has been estimated at \$20,000, and NPDES has been estimated at \$531,000.

The attached Construction Site BMP Consideration Form has been completed in accordance with current North Region Directives.

#### Required Attachments<sup>1</sup>

- Vicinity Map
- Evaluation Documentation Form
- Construction Site BMP Consideration Form

---

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

# VICINITY MAP



**PROJECT LOCATION**  
MEN-101-PM R33.73/R43.20

**RIDGEWOOD CLASS 1 PAVEMENT**  
**01-MEN-101 (PM R33.73/R43.20)**  
**01-OH160 (01 1700 0117)**

**No Scale**



DATE: August 16, 2021

Project ID (EA): 0117000117 (01-OH160)

No.	Criteria	Yes ✓	No ✓	Supplemental Information for Evaluation
1.	Begin Project evaluation regarding requirement for implementation of Treatment BMPs	✓		See Figure 4-1, Project Evaluation Process for Consideration of Treatment BMPs. Continue to 2.
2.	Is the scope of the Project to install Treatment BMPs (e.g., Alternative Compliance or TMDL Compliance Units)?		✓	If Yes, go to 8. If No, continue to 3.
3.	Is there a direct or indirect discharge to surface waters?	✓		If Yes, continue to 4. If No, go to 9.
4.	As defined in the WQAR or ED, does the project:		✓	If Yes to any, contact the District/Regional Design Stormwater Coordinator or District/Regional NPDES Coordinator to discuss the Department's obligations, go to 8 or 5.  _____ (Dist./Reg. Coordinator initials)  If No to all, continue to 5.
	a. discharge to Areas of Special Biological Significance (ASBS), or		✓	
	b. discharge to a TMDL watershed where Caltrans is named stakeholder, or		✓	
	c. have other pollution control requirements for surfacewaters within the project limits?		✓	
5.	Are any existing Treatment BMPs partially or completely removed? (ATA Condition 1, Section 4.4.1)		✓	If Yes, go to 8 AND continue to 6.  If No, continue to 6.
6.	Is this a Routine Maintenance Project?	✓		If Yes, go to 9. If No, continue to 7.
7.	Does the project result in an increase of <u>one acre or more</u> of new impervious surface (NIS)?			If Yes, go to 8.  If No, go to 9.
8.	Project is required to implement Treatment BMPs.	Complete Checklist T-1, Part 1.		
9.	Project is not required to implement Treatment BMPs.  _____ (Dist./Reg. Design SW Coord. Initials) _____ (Project Engineer Initials) _____ (Date)	Document for Project Files by completing this form and attaching it to the SWDR.		

DATE: August 16, 2021

Project ID (EA): 0117000117 (01-OH160)

Project Evaluation Process for the Consideration of Construction Site BMPs

No.	Criteria	Yes ✓	No ✓	Supplemental Information
1.	Will construction of the project result in areas of disturbed soil as defined by the Project Planning and Design Guide (PPDG)?		✓	If Yes, Construction Site BMPs for Soil Stabilization (SS) will be required. Review CS-1, Part 1. Continue to 2. If No, Continue to 3.
2.	Is there a potential for disturbed soil areas within the project to discharge to storm drain inlets, drainage ditches, areas outside the RW, etc.?			If Yes, Construction Site BMPs for Sediment Control (SC) will be required. Review CS-1, Part 2. Continue to 3.
3.	Is there a potential for sediment or construction related materials and wastes to be tracked offsite and deposited on private or public paved roads by construction vehicles and equipment?	✓		If Yes, Construction Site BMPs for Tracking Control (TC) will be required. Review CS-1, Part 3. Continue to 4.
4.	Is there a potential for wind to transport soil and dust offsite during the period of construction?	✓		If Yes, Construction Site BMPs for Wind Erosion Control (WE) will be required. Review CS-1, Part 4. Continue to 5.
5.	Is dewatering anticipated or will construction activities occur within or adjacent to a live channel or stream?	✓		If Yes, Construction Site BMPs for Non-Stormwater Management (NS) will be required. Review CS-1, Part 5. Continue to 6.
6.	Will construction include saw-cutting, grinding, drilling, concrete or mortar mixing, hydro-demolition, blasting, sandblasting, painting, paving, or other activities that produce residues?	✓		If Yes, Construction Site BMPs for Non-Stormwater Management (NS) will be required. Review CS-1, Parts 5 & 6. Continue to 7.
7.	Are stockpiles of soil, construction related materials, and/or wastes anticipated?	✓		If Yes, Construction Site BMPs for Waste Management and Materials Pollution Control (WM) will be required. Review. CS-1, Part 6 Continue to 8.
8.	Is there a potential for construction related materials and wastes to have direct contact with stormwater; be dispersed by wind; be dumped and/or spilled into storm drain systems?	✓		If Yes, Construction Site BMPs for Waste Management and Materials Pollution Control (WM) will be required. Review CS-1, Part 6.

Attachment E  
Landscape Architecture  
Assessment Sheet

# Landscape Architecture Assessment Study(LAAS)




## Project Information

Project Nickname: Ridgewood Class 1 Pavement  
Phase:  [8J K-PID]  0-PA/ ED  
EA: 01-0H160  
EFIS: 01 1700 0117  
LAAS Version:  [8J Original]  LAAS Update No.  
Dist-County-Route: 01-M EN-101  
Post Mile (PM) Limits: R33.73/R43.2  
Funding Program:  [8J SHOPP]  STIP  LOCAL  OTHER:

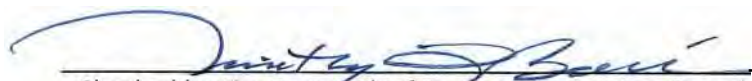
### Separate Highway Planting Contract:

[8J Roadside work as part of roadway project EA  
 Roadside work for roadway project under separate EA

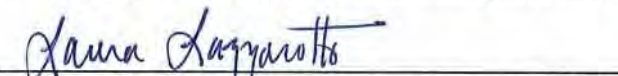
*I have reviewed the landscape Architecture Assessment Study and found it to be complete, current, and accurate :*

  
Approved by Steve Blair, Project Manager

1-22-19  
Date

  
Checked by Tim Boese, Chief Engineering Services Branch

1-18-2019  
Date

  
Prepared by Laura Lazzarotto, Landscape Architect

1-18-19  
Date

## Project Description

The proposed project will improve Class I asphalt concrete (AC) pavement. The rehabilitation (2R) and CAPM strategies are the two alternatives that will be investigated. Improvements include cold-planing AC surfacing by spot milling 0.25' of existing AC and replacing with 0.25' of Type A Hot Mix Asphalt (HMA), placing an AC leveling course, and placing a 0.20' rubberized HMA (RHMA) overlay plus shoulder backing. Some existing concrete barriers (Type K) will be replaced with new Type 60K barriers. New terminal systems will be installed, and WB transitions will be replaced with WB-31 barrier transitions. Existing Metal Beam Guardrail (MBGR) will be replaced with Midwest Guardrail System (MGS), and existing MGS will be raised. Some failing drainage systems will be repaired or replaced. Some TMS elements will be upgraded, and sign panels and appurtenant flashing beacons will be replaced.

## Environmental and Visual Setting

<b>Scenic Highway Status</b>			
<b>D</b> Officially Designated	[g] Eligible	<b>D</b> Not Designated	
		<b>YES</b>	<b>NO</b> <b>TBD</b>
<b>Classified Landscaped Freeway Status:</b>			X
<b>Visual or scenic resources within project limits:</b>	X		
PEAR prepared for this project			X
Visual impact mitigation required			X
<b>Community and Local Involvement:</b>			X
Public displays required			X
<b>Aesthetic Treatment</b> (architectural design, texture/pattern, color)			
Bridge structure (barriers, abutments, wing walls, girders)			X
Paving (beyond the gore/narrow areas/side slopes)			X
Retaining/sound wall			X
Noise barrier			X
Median barrier			X
Guardrail weed control mat (mat color)	X		
Sidewalk			X
RSP			X
Other			X
<b>National Wild and Scenic Rivers Status:</b>			X
<b>Oak woodlands:</b>	X		
<b>Main Street:</b>			X
<b>Livability features:</b>			X
<b>Other sensitive uses or resources:</b>			X



Attachment F  
Materials Recommendation

## Memorandum

*Making connections  
A California Way of life*

To: Talitha Hodgson, Chief  
Advance Planning

Date: March 14, 2019

File: 01-MEN-101-R33.7/3R43.2  
EA: 01-0H160K  
EFIS: 0117000117  
Ridgewood Class 1 Pavement

Attn: Nancy Kuykendall  
Project Engineer, Advance Planning

From: Abnish Rajbanshi  
Materials Engineering  
Department of Transportation - North Region

Subject: **Supplemental Materials Recommendation #1**

In response to a request for an updated materials recommendation dated March 12, 2019, the following information is provided. The Department's Document Retrieval System (DRS) and the Materials Laboratory's project history files were reviewed for previous work within and adjacent to this project's limits. No site visit was conducted, due to the phase of this project. The two strategies; 1) Capital Preventive Maintenance (CAPM), and 2) Rehabilitation discussed herein are based on the predicted pavement condition for construction year (2024), which was projected from actual pavement condition survey performed in 2016 (PaveM). A CAPM strategy for pavement in fair condition and rehabilitation strategy for pavement in poor condition is selected.

The overlay thickness for CAPM Strategy provided in this report is based on the guidelines in Topic 634 of the Highway Design Manual (HDM). For the rehabilitation strategy chosen, guidelines in Topic 635 of the HDM has been followed. According to this section of HDM the rehabilitation designs for flexible pavements are governed either by the structural adequacy of the existing pavement, reflective cracking retardation, or ride quality.





The overlay thickness recommended in this report satisfies the requirement for improving ride quality and reflective cracking retardation and may satisfy the structural adequacy requirement. At this phase of the project no deflection studies were performed, and no core data of existing pavement obtained, which is essential in evaluating the structural adequacy of the existing pavement. A thorough field investigation of the pavement surface, combined with deflection study, coring, subsurface and drainage condition reviews should be performed within 18 months of the commencement of construction, to determine the appropriate rehabilitation strategy.

### **Existing Roadway**

A review of the District 1 Materials Laboratory structural section inventory files and the as-built files indicate the existing structural section within this project's limit consisting; varying depths and ages of hot mix asphalt, over varying types and thicknesses of base materials. The existing pavement surface consists of 0.08' to 0.10' of open graded friction course, placed in various projects.

According to the pavement condition report (PCR) for the construction year 2024, predicted from the most current pavement condition report from 2016 (PaveM), the predicted international roughness index (IRI) within the limits of this project ranges from 83 inches per mile to 181 inches per mile, with a lane weighted average IRI of 142 inches per mile. From this predicted pavement condition report, the existing pavement in 2024 will have alligator cracking "A" varying from 11.20% to 34.50% with average of 25.74%, and alligator "B" cracking varying from 14.90% to 75.30% with an average of 34.32%. The predicted rut depth for the pavement within this project's limit will vary from 0.04 inches to 0.22 inches, with a lane weighted average of 0.14 inches. Based on the predicted PCR for 2024, the pavement condition will degrade from existing fair category to a poor category for approximately 5.67 lane miles.

### **Pavement Smoothness**

According to the Memorandum "*Providing pavement Profile smoothness Data*", signed by Steve Takigawa and Karla Sutliff, dated August 12, 2016, the District will provide to bidders the existing pavement profile smoothness data taken within six months of the project's ready to list (RTL) milestone. Please request initial profiling services through this office to determine the updated IRI of the existing pavement surface at least six months prior to RTL date.

With the implementation of the new smoothness non-standard special provision (NSSP) starting February 14, 2019, a pay adjustment has been introduced in the smoothness specification to incentivize/disincentivize based on the final smoothness of pavement surface. This change in smoothness specification has eliminated the need to estimate pre-paving grinding days that District had to provide in the past. Please refer "**Section 39 NSSP Asphalt Concrete**", for the new pavement smoothness specification for asphalt pavement.

### **Rubberized HMA**

As this project proposed to place hot mix asphalt quantity more than 1,000 tons, following the guidelines in the *Crumb Rubber Usage in Hot Mix Asphalt Pavements* memo signed in February 2015 by K. Sutliff and S. Takigawa, rubberized hot mix asphalt (RHMA) is included in this recommendation.

### **Cold Plane Existing and Repairs Prior to Overlay**

Cold plane and remove 0.10' of existing open grade friction course. Prior to overlay, conduct a thorough inspection to locate areas of severe pavement failure identified by rutting greater than 1/2 inch and/or loose spalling pavement. Dig out and repair the localized failed areas to a depth of 0.33' (mill & fill with HMA-A) and seal all cracks wider than 1/4 inch by the rout and seal method. See Attachment "A" for rout and seal random cracks detail.

### **Overlay Existing**

#### **CAPM Strategy**

Following cold planing and removal of existing open grade, and repairing areas of localized failures and sealing cracks, place 0.20' of rubberized hot mix asphalt gap-graded (RHMA-G), followed by 0.10' of rubberized bonded wearing course- gap graded (RBWC-G) from the edge of pavement to the edge of pavement.

<b><u>RBWC-G</u></b>	<b><u>RHMA-G</u></b>
<b>0.10'</b>	<b>0.20'</b>

## 10-Year Rehabilitation Strategy

Following cold planing and removal of existing open grade and repairing areas of localized failures and sealing cracks; overlay the roadway from edge of pavement to edge of pavement with 0.15' of HMA-A, followed by 0.20' of RHMA-G, followed by a final surface course layer of 0.10' of rubberized bonded wearing course -gap graded.

<b><u>RBWC-G</u></b>	<b><u>RHMA-G</u></b>	<b><u>HMA-A</u></b>
<b>0.10'</b>	<b>0.20'</b>	<b>0.15'</b>

Note:

- Consideration must be given to the vertical clearances under the structures and, at any other locations requiring grade control. Extra depth will be required for cold plane and removal / replace to maintain zero elevation change at these locations.
- Rubberized hot mix asphalt shall be produced using warm mix technology or additives. Using warm mix will improve asphalt compactive efforts and contribute to longer life pavements. Additionally, reductions in Green House Gas (GHG) emissions achieved using warm mix asphalts will be in concert the goals expressed in the California Global Warming Solutions Act (AB32) signed in September 2006.
- All rubberized hot mix asphalt shall be placed using Material Transfer Vehicle (MTV), as specified in section 39-2.01C(2)(b) of 2018 Standard Specifications. Using an MTV has proven effective in delivering a more homogeneous asphalt product by remixing the aggregates and redistribution the latent heat in the asphalt matrix.
- Shoulder backing, and pavement edge treatments shall be provided for new overlays. Please refer to figure 672.3A, and figure 672.38 of Highway Design Manual for Shoulder backing details, and Standard Plan P75 of 2018 Standard Plans for the pavement edge treatments for overlays.

## **Material Specifications**

- Hot Mix Asphalt: Type A (HMA-A), rubberized hot mix asphalt-gapgraded (RHMA-G), and rubberized bonded wearing course-gap graded (RBWC-G) shall conform to Section 39 of the 2018 Standard Specifications. The estimated unit weight of HMA-A is 155 lbs/ft<sup>3</sup>. The estimated unit weight for RHMA-G and RBWC-G is 150 lbs/ft<sup>3</sup>.
- Asphalt Binder: For "North Coast" climatic region for use in hot mix asphalt shall be

**PG 64-16.** The estimated asphalt binder content per total mix weight is 5.7% for HMA-A, and 7.7% for RHMA-G and RBWC-G.

- Paint Binder (Tack Coat): Shall conform to Section 39 of the 2018 Standard Specifications.
- Aggregate Base (AB): Shall be Class 2, conforming to Section 26 of the 2018 Standard Specifications.
- Aggregate Subbase (AS): Shall be Class 2, conforming to Section 25 of the 2018 Standard Specifications.
- Shoulder Backing: Shall conform to the requirements within the Standard Special Provisions for shoulder backing with District 1. The minimum loose unit weight per CTM 212, compacted method (by rodding) shall be 105 lbs/ft<sup>3</sup>

### **Alternative Pipe Culvert Recommendation**

Based on the pH and resistivity test results from the historic file data at this location, Attachment "B" contains the alternative pipe culverts (APC), that may be used for any new or modified culverts within the limits of this project and are intended for a 50-year design life for cross culverts.

Notes:

- Plastic pipe should not be used as tapered inlets, or downdrains.
- Downdrains, or overside drains buried more than 3' shall be designed with the 50-year design life thickness. Per section 855.1 of Highway Design Manual, downdrains with less than 3' of cover are recommended with an anticipated 25-year design life.
- Maximum height of cover for HDPE pipe is 15'

See attachment "C" or "D" for culvert installation detail.

If you have any questions, please call Abnish Rajbanshi at (707) 445-6386.

Attachments:

- A. Rout and Seal Random Cracks Detail
- B. Alternative Pipe Culvert Thickness Table
- C. Structure Backfill, Slurry Cement Backfill
- D. Minor Concrete Backfill

AR:ar

cc: T. Hodgson (ec)

C. Muir (ec)

H. Quintrell (ec)

N. Kuykendall (orig.)

Andre Guimaraes (ec)

Lab files

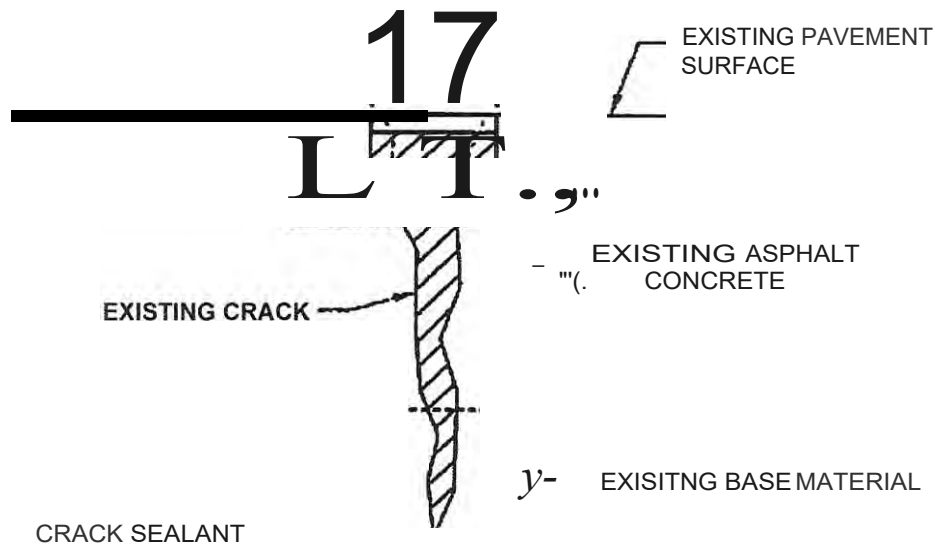
# Attachment A

## Cracks Rout and Seal Details

01-MEN-101-R33.73/R43.2  
01-0H160K

**W** = WIDTH OF ROUTING = WIDTH OF CRACK + 1/4" MIN.

**D** = DEPTH OF ROUTING = **W** + 1/4" MIN.



- NOTES: 1. ALL CRACKS 1/4" WIDE OR GREATER ARE TO BE ROUTED AND SEALED.
2. IF ANY PART OF ANY CRACK IS 1/4" OR WIDER, THEN THE ENTIRE CRACK WILL BE ROUTED AND SEALED.
3. NO SEALANT MATERIAL WILL BE ALLOWED ON AC PAVEMENT SURFACE

SEAL RANDOM CRACKS  
TYPICAL CROSS SECTION

Attachment B

Alternate\_PiQe Cul\_Vert Thicknesses

01- MEN-101-PM33.73/43.20

01-0H160K

Drainage System	Post Mile	Culverts Under Roadway						Down Drains	Comments
		Recommended Thicknesses for 50 Year Service Life						25 Yr. Service Life	
		Soil Values		Galvanized Corrugated Steel Pipe	Galvanized, Polymeric Sheet Coated CSP	Corrugated HOPE-Types	RCP (Note)	Galvanized Corrugated Steel Pipe	
pH	Resist.								
1	40.62	4.20	5136	---	0.109"	Approved for Use	(1)	NA	
2	42.90	6.90	600	-----	0.109"	Approved for Use	(1)	NA	

Recommended thicknesses are minimums allowed for 50 year service life, or 25 years for Down Drains

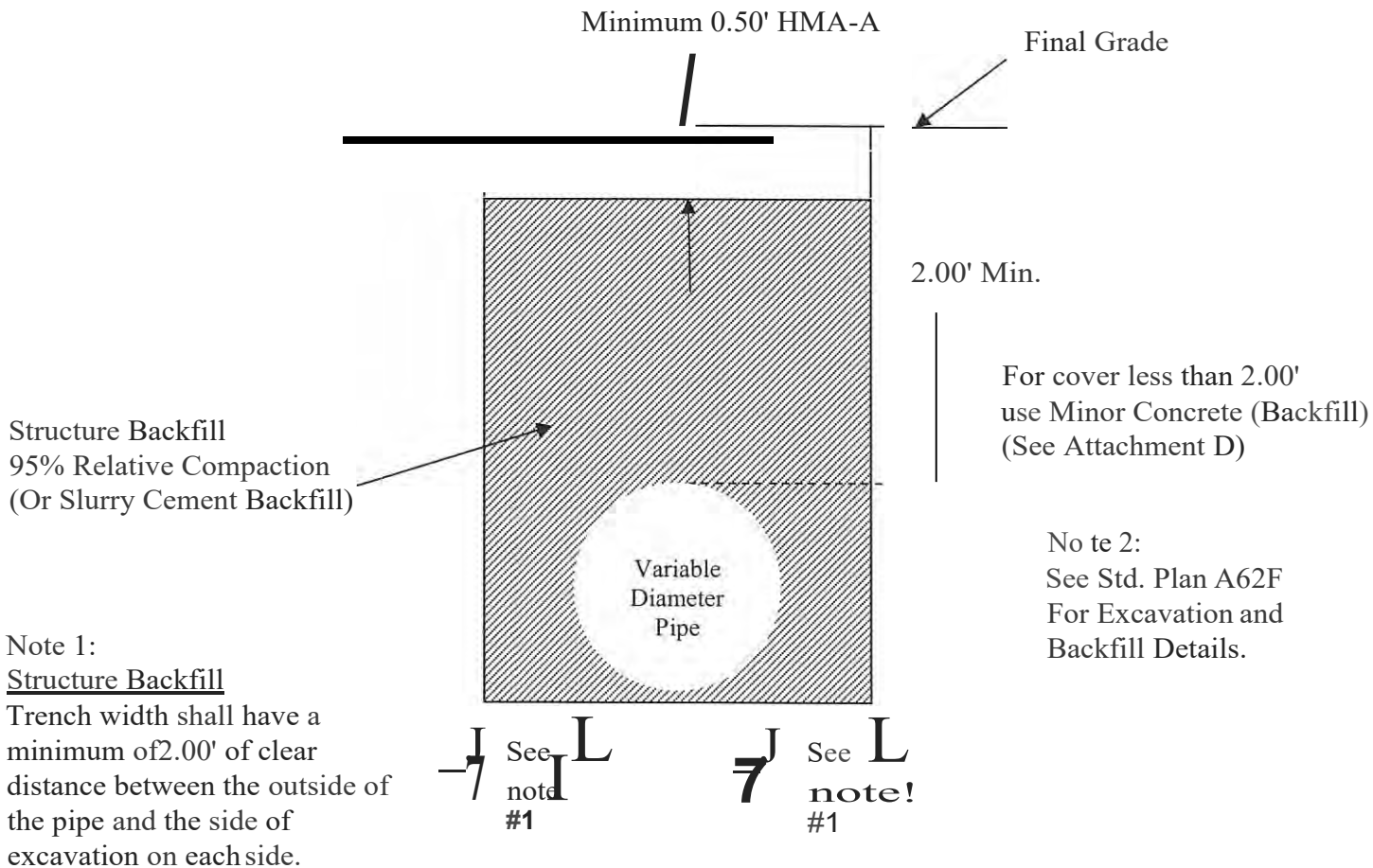
Notes: ( )

(1) RCP materials shall conform to Section 65-2.02 of Standard Specifications. Water to cement ratio shall not exceed 0.40 by weight

# Attachment C

## Structure Backfill, or Slurry Cement Backfill

01-Men-101- PM 33.73/43.20  
EA 01-0H160K



### Slurry Cement Backfill

Trench width shall be a minimum of 0.50' beyond outside edge of pipe and the side of excavation on each side for pipe diameters up to and including 42", or 1.00' for pipes over 42" in diameter. See Standard Specifications 19-3.03F and 19-3.03I.

NO SCALE

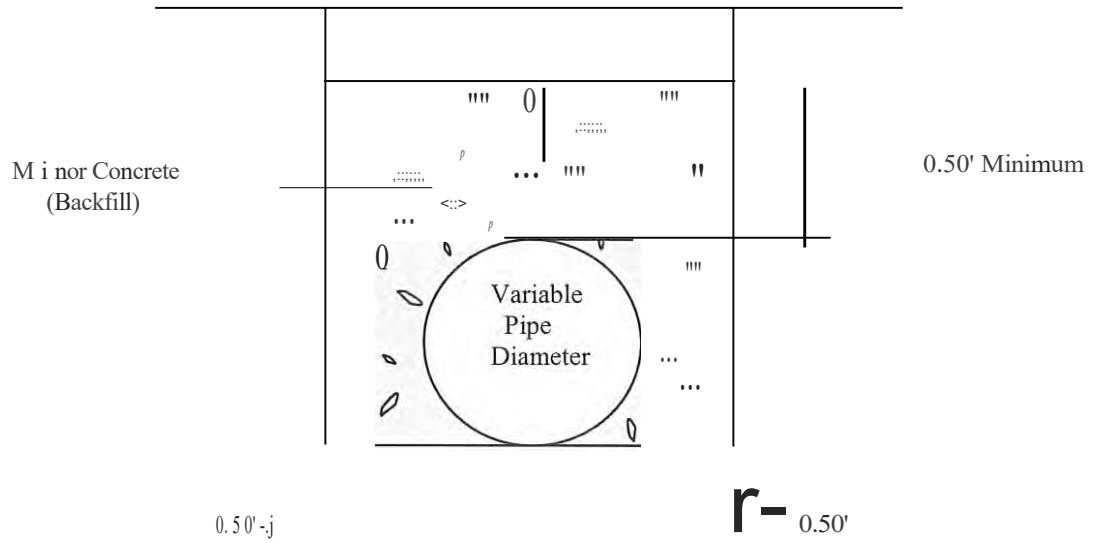


# Attachment D

## Minor Concrete (Backfill)

01-MEN-101-PMR33.73/R43.2  
01-OH160K

0.50' Minimum HMA-A



NO SCALE

Attachment G  
Pavement Condition Report

**Caltrans Pavement Program  
Pavement Condition Summary Report (PaveM)  
BOTH DIRECTIONS; ALL LANES**

**District: 1; County: Mendocino (MEN); Route: 101**

**From PM: R33.730 To PM: R43.200**

L-Length: 9.407. R-Length: 9.407

L-Lane Miles: 18.754. R-Lane Miles: 18.754 (Unknown lane miles: 0.000)

Year/ Condition Lane Miles	Traditional Condition (lane miles)					MAP-21 Condition (lane miles)			Total Lane Miles	Effectiveness (%)	
	Green	Yellow	Blue	Orange	Red	Good	Fair	Poor		SHOPP Effectiveness ((Red + Orange) /Total Lane Miles) %	Rehab Effectiveness (Red/Total Lane Miles) %
2015	9.230	21.592	0.000	6.686	0.000	12.763	24.745	0.000	37.508	17.83	0.00
2016	5.781	18.949	0.000	8.126	4.652	7.420	30.088	0.000	37.508	34.07	12.40
2017	<i>No Data Available</i>										
2018	10.212	23.085	0.000	4.211	0.000	8.806	28.702	0.000	37.508	11.23	0.00

*End Previous Years Actuals - Begin APCS Data Collection Year and Predicted Years*

2019	15.511	21.997	0.000	0.000	0.000	9.646	27.862	0.000	37.508	0.00	0.00
2020	8.753	28.755	0.000	0.000	0.000	5.918	31.590	0.000	37.508	0.00	0.00
2021	3.754	33.754	0.000	0.000	0.000	4.870	32.638	0.000	37.508	0.00	0.00
2022	0.035	37.016	0.000	0.422	0.035	3.345	34.163	0.000	37.508	1.22	0.09
2023	0.035	35.968	0.000	1.470	0.035	0.961	36.547	0.000	37.508	4.01	0.09
2024	0.035	29.208	0.000	8.230	0.035	0.035	37.473	0.000	37.508	22.04	0.09
2025	0.035	7.202	0.000	30.236	0.035	0.035	37.473	0.000	37.508	80.71	0.09
2026	0.035	1.438	0.000	36.000	0.035	0.035	37.473	0.000	37.508	96.07	0.09
2027	0.035	1.438	0.000	36.000	0.035	0.035	37.473	0.000	37.508	96.07	0.09
2028	0.035	0.930	0.000	36.508	0.035	0.035	37.473	0.000	37.508	97.43	0.09
2029	0.035	0.508	0.000	35.882	1.083	0.035	37.473	0.000	37.508	98.55	2.89
2030	0.035	0.000	0.000	24.971	12.502	0.035	37.473	0.000	37.508	99.91	33.33
2031	0.035	0.000	0.000	11.627	25.846	0.035	36.425	1.048	37.508	99.91	68.91
2032	0.035	0.000	0.000	5.711	31.762	0.000	29.278	8.230	37.508	99.91	84.68
2033	0.035	0.000	0.000	1.438	36.035	0.000	19.662	17.846	37.508	99.91	96.07

**Detailed Breakdown of MAP-21 Fair Condition (lane miles)**

Year/ Condition Lane Miles	Fair (Poor Crack)	Fair (Poor Ride)	Fair (Poor Rut/Fault)	Fair (Fair Ride Only)	Fair (Rut/Fault Only)	Fair (Cracking Only)	Fair (Cracking & IRI)	Fair (Cracking & Rutting/ Faulting Only)	Fair (IRI & Rut/Fault)	Fair (All Fair)	Fair Total Lane Miles
	F1	F2	F3/F4	F5	F6/F7	F8	F9	F10	F11	F12	
2015	0.000	0.000	0.000	15.095	0.000	0.000	8.685	0.000	0.965	0.000	24.745
2016	4.412	0.000	0.000	13.858	0.964	0.422	6.488	0.000	2.453	1.491	30.088
2017	<i>No Data Available</i>										
2018	0.035	0.000	0.000	24.181	0.000	0.840	3.646	0.000	0.000	0.000	28.702

*End Previous Years Actuals - Begin APCS Data Collection Year and Predicted Years*

2019	0.035	0.000	0.000	25.469	0.000	0.000	0.000	0.000	2.358	0.000	27.862
2020	0.035	0.000	0.000	29.197	0.000	0.000	0.000	0.000	2.358	0.000	31.590
2021	0.035	0.000	0.000	30.245	0.000	0.000	0.000	0.000	2.358	0.000	32.638
2022	0.035	0.422	0.000	31.770	0.000	0.000	0.000	0.000	1.936	0.000	34.163
2023	0.035	0.422	0.000	32.192	0.000	0.000	1.962	0.000	0.888	1.048	36.547
2024	0.035	0.422	0.000	22.279	0.000	0.000	12.801	0.000	0.888	1.048	37.473
2025	0.035	1.310	0.000	4.728	0.000	0.000	30.352	0.000	0.000	1.048	37.473
2026	0.035	1.585	0.000	1.438	0.000	0.000	33.367	0.000	0.000	1.048	37.473
2027	0.035	2.843	0.000	0.930	0.000	0.000	32.617	0.000	0.000	1.048	37.473
2028	0.035	5.781	0.000	0.930	0.000	0.000	30.727	0.000	0.000	0.000	37.473
2029	0.035	8.665	0.000	0.000	0.000	0.000	28.773	0.000	0.000	0.000	37.473
2030	0.035	11.605	0.000	0.000	0.000	0.000	25.833	0.000	0.000	0.000	37.473
2031	0.035	13.287	0.000	0.000	0.000	0.000	23.103	0.000	0.000	0.000	36.425
2032	4.272	13.196	0.000	0.000	0.000	0.035	11.775	0.000	0.000	0.000	29.278
2033	8.000	4.468	0.000	0.000	0.000	0.035	7.159	0.000	0.000	0.000	19.662

ID	Pavement Condition Rating	Description		
		Crack	Ride	Rutting or Faulting
F1	Fair (Poor Crack)	Poor	Good or Fair	Good or Fair
F2	Fair (Poor Ride)	Good or Fair	Poor	Good or Fair
F3/F4	Fair (Poor Rut/Fault)	Good or Fair	Good or Fair	Poor
F5	Fair (Fair Ride Only)	Good or Fair	Fair	Good
F6/F7	Fair (Rut/Fault Only)	Good or Fair	Good	Fair
F8	Fair (Cracking Only)	Fair	Good	Good
F9	Fair (Cracking & IRI)	Fair	Fair	Good
F10	Fair (Cracking and Rutting/Faulting Only)	Fair	Good	Fair
F11	Fair (IRI & Rut/Fault)	Good	Fair	Fair
F12	Fair (All Fair)	Fair	Fair	Fair



Year/ Condition Lane Miles	Pavement Type	Detailed Breakdown of MAP-21 Fair Condition (lane miles)										Fair Total Lane Miles
		Fair (Poor Crack)	Fair (Poor Ride)	Fair (Poor Rut/Fault)	Fair (Fair Ride Only)	Fair (Rut/Fault Only)	Fair (Cracking Only)	Fair (Cracking & IRI)	Fair (Cracking & Rutting/ Faulting Only)	Fair (IRI & Rut/Fault)	Fair (All Fair)	
		F1	F2	F3/F4	F5	F6/F7	F8	F9	F10	F11	F12	
2015	Flexible	0.000	0.000	0.000	7.145	0.000	0.000	3.342	0.000	0.965	0.000	11.452
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2016	Flexible	2.326	0.000	0.000	7.114	0.000	0.422	1.016	0.000	2.453	0.000	13.331
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2017	No Data Available											
2018	Flexible	0.000	0.000	0.000	11.259	0.000	0.000	2.211	0.000	0.000	0.000	13.470
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

*End Previous Years Actuals - Begin APCS Data Collection Year and Predicted Years*

2019	Flexible	0.000	0.000	0.000	10.551	0.000	0.000	0.000	0.000	2.358	0.000	12.909
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2020	Flexible	0.000	0.000	0.000	13.439	0.000	0.000	0.000	0.000	2.358	0.000	15.797
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2021	Flexible	0.000	0.000	0.000	14.487	0.000	0.000	0.000	0.000	2.358	0.000	16.845
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2022	Flexible	0.000	0.422	0.000	15.048	0.000	0.000	0.000	0.000	1.936	0.000	17.406
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2023	Flexible	0.000	0.422	0.000	15.470	0.000	0.000	0.000	0.000	0.888	1.048	17.828
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2024	Flexible	0.000	0.422	0.000	12.754	0.000	0.000	3.642	0.000	0.888	1.048	18.754
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2025	Flexible	0.000	1.310	0.000	3.565	0.000	0.000	12.831	0.000	0.000	1.048	18.754
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2026	Flexible	0.000	1.310	0.000	1.438	0.000	0.000	14.958	0.000	0.000	1.048	18.754
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2027	Flexible	0.000	2.293	0.000	0.930	0.000	0.000	14.483	0.000	0.000	1.048	18.754
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2028	Flexible	0.000	4.305	0.000	0.930	0.000	0.000	13.519	0.000	0.000	0.000	18.754
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2029	Flexible	0.000	4.305	0.000	0.000	0.000	0.000	14.449	0.000	0.000	0.000	18.754
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2030	Flexible	0.000	5.193	0.000	0.000	0.000	0.000	13.561	0.000	0.000	0.000	18.754
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2031	Flexible	0.000	5.911	0.000	0.000	0.000	0.000	11.795	0.000	0.000	0.000	17.706
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2032	Flexible	0.000	6.050	0.000	0.000	0.000	0.000	8.432	0.000	0.000	0.000	14.482
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2033	Flexible	3.728	2.379	0.000	0.000	0.000	0.000	4.704	0.000	0.000	0.000	10.811
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

ID	Pavement Condition Rating	Description		
		Crack	Ride	Rutting or Faulting
F1	Fair (Poor Crack)	Poor	Good or Fair	Good or Fair
F2	Fair (Poor Ride)	Good or Fair	Poor	Good or Fair
F3/F4	Fair (Poor Rut/Fault)	Good or Fair	Good or Fair	Poor
F5	Fair (Fair Ride Only)	Good or Fair	Fair	Good
F6/F7	Fair (Rut/Fault Only)	Good or Fair	Good	Fair
F8	Fair (Cracking Only)	Fair	Good	Good
F9	Fair (Cracking & IRI)	Fair	Fair	Good
F10	Fair (Cracking and Rutting/Faulting Only)	Fair	Good	Fair
F11	Fair (IRI & Rut/Fault)	Good	Fair	Fair
F12	Fair (All Fair)	Fair	Fair	Fair

## Caltrans Pavement Program Pavement Condition Summary Report (PaveM) By Direction NORTHBOUND; ALL LANES

**District: 1; County: Mendocino (MEN); Route: 101**

**From PM: R33.730 To PM: R43.200**

L-Length: 0.000. R-Length: 9.407

L-Lane Miles: 0.000. R-Lane Miles: 18.754 (Unknown lane miles: 0.000)

Year/ Condition Lane Miles	Pavement Type	Traditional Condition (lane miles)					MAP-21 Condition (lane miles)			Total Lane Miles	Effectiveness (%)	
		Green	Yellow	Blue	Orange	Red	Good	Fair	Poor		SHOPP Effectiveness ((Red + Orange) /Total Lane Miles) %	Rehab Effectiveness (Red/Total Lane Miles) %
2015	Flexible	4.851	10.051	0.000	3.852	0.000	5.461	13.293	0.000	18.754	20.540	0.000
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2016	Flexible	1.928	7.742	0.000	6.688	2.326	1.962	16.722	0.000	18.684	48.244	12.449
	Rigid	0.035	0.035	0.000	0.000	0.000	0.035	0.035	0.000	0.070	0.000	0.000
2017	<i>No Data Available</i>											
2018	Flexible	4.782	11.627	0.000	2.275	0.000	3.487	15.197	0.000	18.684	12.176	0.000
	Rigid	0.035	0.035	0.000	0.000	0.000	0.035	0.035	0.000	0.070	0.000	0.000

*End Previous Years Actuals - Begin APCS Data Collection Year and Predicted Years*

2019	Flexible	7.194	11.490	0.000	0.000	0.000	3.766	14.918	0.000	18.684	0.000	0.000
	Rigid	0.035	0.035	0.000	0.000	0.000	0.035	0.035	0.000	0.070	0.000	0.000
2020	Flexible	3.851	14.833	0.000	0.000	0.000	2.926	15.758	0.000	18.684	0.000	0.000
	Rigid	0.035	0.035	0.000	0.000	0.000	0.035	0.035	0.000	0.070	0.000	0.000
2021	Flexible	0.561	18.123	0.000	0.000	0.000	2.926	15.758	0.000	18.684	0.000	0.000
	Rigid	0.035	0.035	0.000	0.000	0.000	0.035	0.035	0.000	0.070	0.000	0.000
2022	Flexible	0.000	18.684	0.000	0.000	0.000	1.962	16.722	0.000	18.684	0.000	0.000
	Rigid	0.035	0.000	0.000	0.000	0.035	0.035	0.035	0.000	0.070	50.000	50.000
2023	Flexible	0.000	18.684	0.000	0.000	0.000	0.000	18.684	0.000	18.684	0.000	0.000
	Rigid	0.035	0.000	0.000	0.000	0.035	0.035	0.035	0.000	0.070	50.000	50.000
2024	Flexible	0.000	11.924	0.000	6.760	0.000	0.000	18.684	0.000	18.684	36.181	0.000
	Rigid	0.035	0.000	0.000	0.000	0.035	0.035	0.035	0.000	0.070	50.000	50.000
2025	Flexible	0.000	2.654	0.000	16.030	0.000	0.000	18.684	0.000	18.684	85.795	0.000
	Rigid	0.035	0.000	0.000	0.000	0.035	0.035	0.035	0.000	0.070	50.000	50.000
2026	Flexible	0.000	0.000	0.000	18.684	0.000	0.000	18.684	0.000	18.684	100.000	0.000
	Rigid	0.035	0.000	0.000	0.000	0.035	0.035	0.035	0.000	0.070	50.000	50.000
2027	Flexible	0.000	0.000	0.000	18.684	0.000	0.000	18.684	0.000	18.684	100.000	0.000
	Rigid	0.035	0.000	0.000	0.000	0.035	0.035	0.035	0.000	0.070	50.000	50.000
2028	Flexible	0.000	0.000	0.000	18.684	0.000	0.000	18.684	0.000	18.684	100.000	0.000
	Rigid	0.035	0.000	0.000	0.000	0.035	0.035	0.035	0.000	0.070	50.000	50.000
2029	Flexible	0.000	0.000	0.000	18.684	0.000	0.000	18.684	0.000	18.684	100.000	0.000
	Rigid	0.035	0.000	0.000	0.000	0.035	0.035	0.035	0.000	0.070	50.000	50.000
2030	Flexible	0.000	0.000	0.000	10.489	8.195	0.000	18.684	0.000	18.684	100.000	43.861
	Rigid	0.035	0.000	0.000	0.000	0.035	0.035	0.035	0.000	0.070	50.000	50.000
2031	Flexible	0.000	0.000	0.000	4.544	14.140	0.000	18.684	0.000	18.684	100.000	75.680
	Rigid	0.035	0.000	0.000	0.000	0.035	0.035	0.035	0.000	0.070	50.000	50.000
2032	Flexible	0.000	0.000	0.000	1.163	17.521	0.000	14.726	3.958	18.684	100.000	93.775
	Rigid	0.035	0.000	0.000	0.000	0.035	0.000	0.070	0.000	0.070	50.000	50.000
2033	Flexible	0.000	0.000	0.000	0.000	18.684	0.000	8.781	9.903	18.684	100.000	100.000
	Rigid	0.035	0.000	0.000	0.000	0.035	0.000	0.070	0.000	0.070	50.000	50.000

Year/ Condition Lane Miles	Pavement Type	Detailed Breakdown of MAP-21 Fair Condition (lane miles)										Fair Total Lane Miles
		Fair (Poor Crack)	Fair (Poor Ride)	Fair (Poor Rut/Fault)	Fair (Fair Ride Only)	Fair (Rut/Fault Only)	Fair (Cracking Only)	Fair (Cracking & IRI)	Fair (Cracking & Rutting/ Faulting Only)	Fair (IRI & Rut/Fault)	Fair (All Fair)	
		F1	F2	F3/F4	F5	F6/F7	F8	F9	F10	F11	F12	
2015	Flexible	0.000	0.000	0.000	7.950	0.000	0.000	5.343	0.000	0.000	0.000	13.293
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2016	Flexible	2.051	0.000	0.000	6.744	0.964	0.000	5.472	0.000	0.000	1.491	16.722
	Rigid	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.035
2017	No Data Available											
2018	Flexible	0.000	0.000	0.000	12.922	0.000	0.840	1.435	0.000	0.000	0.000	15.197
	Rigid	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.035

*End Previous Years Actuals - Begin APCS Data Collection Year and Predicted Years*

2019	Flexible	0.000	0.000	0.000	14.918	0.000	0.000	0.000	0.000	0.000	0.000	14.918
	Rigid	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.035
2020	Flexible	0.000	0.000	0.000	15.758	0.000	0.000	0.000	0.000	0.000	0.000	15.758
	Rigid	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.035
2021	Flexible	0.000	0.000	0.000	15.758	0.000	0.000	0.000	0.000	0.000	0.000	15.758
	Rigid	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.035
2022	Flexible	0.000	0.000	0.000	16.722	0.000	0.000	0.000	0.000	0.000	0.000	16.722
	Rigid	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.035
2023	Flexible	0.000	0.000	0.000	16.722	0.000	0.000	1.962	0.000	0.000	0.000	18.684
	Rigid	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.035
2024	Flexible	0.000	0.000	0.000	9.525	0.000	0.000	9.159	0.000	0.000	0.000	18.684
	Rigid	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.035
2025	Flexible	0.000	0.000	0.000	1.163	0.000	0.000	17.521	0.000	0.000	0.000	18.684
	Rigid	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.035
2026	Flexible	0.000	0.275	0.000	0.000	0.000	0.000	18.409	0.000	0.000	0.000	18.684
	Rigid	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.035
2027	Flexible	0.000	0.550	0.000	0.000	0.000	0.000	18.134	0.000	0.000	0.000	18.684
	Rigid	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.035
2028	Flexible	0.000	1.476	0.000	0.000	0.000	0.000	17.208	0.000	0.000	0.000	18.684
	Rigid	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.035
2029	Flexible	0.000	4.360	0.000	0.000	0.000	0.000	14.324	0.000	0.000	0.000	18.684
	Rigid	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.035
2030	Flexible	0.000	6.412	0.000	0.000	0.000	0.000	12.272	0.000	0.000	0.000	18.684
	Rigid	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.035
2031	Flexible	0.000	7.376	0.000	0.000	0.000	0.000	11.308	0.000	0.000	0.000	18.684
	Rigid	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.035
2032	Flexible	4.237	7.146	0.000	0.000	0.000	0.000	3.343	0.000	0.000	0.000	14.726
	Rigid	0.035	0.000	0.000	0.000	0.000	0.035	0.000	0.000	0.000	0.000	0.070
2033	Flexible	4.237	2.089	0.000	0.000	0.000	0.000	2.455	0.000	0.000	0.000	8.781
	Rigid	0.035	0.000	0.000	0.000	0.000	0.035	0.000	0.000	0.000	0.000	0.070

ID	Pavement Condition Rating	Description		
		Crack	Ride	Rutting or Faulting
F1	Fair (Poor Crack)	Poor	Good or Fair	Good or Fair
F2	Fair (Poor Ride)	Good or Fair	Poor	Good or Fair
F3/F4	Fair (Poor Rut/Fault)	Good or Fair	Good or Fair	Poor
F5	Fair (Fair Ride Only)	Good or Fair	Fair	Good
F6/F7	Fair (Rut/Fault Only)	Good or Fair	Good	Fair
F8	Fair (Cracking Only)	Fair	Good	Good
F9	Fair (Cracking & IRI)	Fair	Fair	Good
F10	Fair (Cracking and Rutting/Faulting Only)	Fair	Good	Fair
F11	Fair (IRI & Rut/Fault)	Good	Fair	Fair
F12	Fair (All Fair)	Fair	Fair	Fair





Detailed Breakdown of MAP-21 Fair Condition (lane miles)												
Year/ Condition Lane Miles	Pavement Type	Fair (Poor Crack)	Fair (Poor Ride)	Fair (Poor Rut/Fault)	Fair (Fair Ride Only)	Fair (Rut/Fault Only)	Fair (Cracking Only)	Fair (Cracking & IRI)	Fair (Cracking & Rutting/ Faulting Only)	Fair (IRI & Rut/Fault)	Fair (All Fair)	Fair Total Lane Miles
		F1	F2	F3/F4	F5	F6/F7	F8	F9	F10	F11	F12	
2015	Flexible	0.000	0.000	0.000	3.292	0.000	0.000	1.671	0.000	0.000	0.000	4.963
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2016	Flexible	1.163	0.000	0.000	4.749	0.000	0.422	0.508	0.000	0.000	0.000	6.842
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2017	No Data Available											
2018	Flexible	0.000	0.000	0.000	3.856	0.000	0.000	1.163	0.000	0.000	0.000	5.019
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

End Previous Years Actuals - Begin APCS Data Collection Year and Predicted Years

2019	Flexible	0.000	0.000	0.000	4.458	0.000	0.000	0.000	0.000	0.000	0.000	4.458
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2020	Flexible	0.000	0.000	0.000	7.346	0.000	0.000	0.000	0.000	0.000	0.000	7.346
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2021	Flexible	0.000	0.000	0.000	8.394	0.000	0.000	0.000	0.000	0.000	0.000	8.394
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2022	Flexible	0.000	0.000	0.000	8.955	0.000	0.000	0.000	0.000	0.000	0.000	8.955
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2023	Flexible	0.000	0.000	0.000	9.377	0.000	0.000	0.000	0.000	0.000	0.000	9.377
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2024	Flexible	0.000	0.000	0.000	8.537	0.000	0.000	0.840	0.000	0.000	0.000	9.377
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2025	Flexible	0.000	0.000	0.000	3.057	0.000	0.000	6.320	0.000	0.000	0.000	9.377
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2026	Flexible	0.000	0.000	0.000	0.930	0.000	0.000	8.447	0.000	0.000	0.000	9.377
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2027	Flexible	0.000	0.000	0.000	0.930	0.000	0.000	8.447	0.000	0.000	0.000	9.377
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2028	Flexible	0.000	0.000	0.000	0.930	0.000	0.000	8.447	0.000	0.000	0.000	9.377
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2029	Flexible	0.000	0.000	0.000	0.000	0.000	0.000	9.377	0.000	0.000	0.000	9.377
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2030	Flexible	0.000	0.888	0.000	0.000	0.000	0.000	8.489	0.000	0.000	0.000	9.377
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2031	Flexible	0.000	1.871	0.000	0.000	0.000	0.000	7.506	0.000	0.000	0.000	9.377
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2032	Flexible	0.000	1.871	0.000	0.000	0.000	0.000	7.506	0.000	0.000	0.000	9.377
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2033	Flexible	2.802	1.871	0.000	0.000	0.000	0.000	4.704	0.000	0.000	0.000	9.377
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

ID	Pavement Condition Rating	Description		
		Crack	Ride	Rutting or Faulting
F1	Fair (Poor Crack)	Poor	Good or Fair	Good or Fair
F2	Fair (Poor Ride)	Good or Fair	Poor	Good or Fair
F3/F4	Fair (Poor Rut/Fault)	Good or Fair	Good or Fair	Poor
F5	Fair (Fair Ride Only)	Good or Fair	Fair	Good
F6/F7	Fair (Rut/Fault Only)	Good or Fair	Good	Fair
F8	Fair (Cracking Only)	Fair	Good	Good
F9	Fair (Cracking & IRI)	Fair	Fair	Good
F10	Fair (Cracking and Rutting/Faulting Only)	Fair	Good	Fair
F11	Fair (IRI & Rut/Fault)	Good	Fair	Fair
F12	Fair (All Fair)	Fair	Fair	Fair



Detailed Breakdown of MAP-21 Fair Condition (lane miles)												
Year/ Condition Lane Miles	Pavement Type	Fair (Poor Crack)	Fair (Poor Ride)	Fair (Poor Rut/Fault)	Fair (Fair Ride Only)	Fair (Rut/Fault Only)	Fair (Cracking Only)	Fair (Cracking & IRI)	Fair (Cracking & Rutting/ Faulting Only)	Fair (IRI & Rut/Fault)	Fair (All Fair)	Fair Total Lane Miles
		F1	F2	F3/F4	F5	F6/F7	F8	F9	F10	F11	F12	
2015	Flexible	0.000	0.000	0.000	3.853	0.000	0.000	1.671	0.000	0.965	0.000	6.489
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2016	Flexible	1.163	0.000	0.000	2.365	0.000	0.000	0.508	0.000	2.453	0.000	6.489
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2017	No Data Available											
2018	Flexible	0.000	0.000	0.000	7.403	0.000	0.000	1.048	0.000	0.000	0.000	8.451
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

*End Previous Years Actuals - Begin APCS Data Collection Year and Predicted Years*

2019	Flexible	0.000	0.000	0.000	6.093	0.000	0.000	0.000	0.000	2.358	0.000	8.451
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2020	Flexible	0.000	0.000	0.000	6.093	0.000	0.000	0.000	0.000	2.358	0.000	8.451
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2021	Flexible	0.000	0.000	0.000	6.093	0.000	0.000	0.000	0.000	2.358	0.000	8.451
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2022	Flexible	0.000	0.422	0.000	6.093	0.000	0.000	0.000	0.000	1.936	0.000	8.451
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2023	Flexible	0.000	0.422	0.000	6.093	0.000	0.000	0.000	0.000	0.888	1.048	8.451
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2024	Flexible	0.000	0.422	0.000	4.217	0.000	0.000	2.802	0.000	0.888	1.048	9.377
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2025	Flexible	0.000	1.310	0.000	0.508	0.000	0.000	6.511	0.000	0.000	1.048	9.377
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2026	Flexible	0.000	1.310	0.000	0.508	0.000	0.000	6.511	0.000	0.000	1.048	9.377
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2027	Flexible	0.000	2.293	0.000	0.000	0.000	0.000	6.036	0.000	0.000	1.048	9.377
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2028	Flexible	0.000	4.305	0.000	0.000	0.000	0.000	5.072	0.000	0.000	0.000	9.377
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2029	Flexible	0.000	4.305	0.000	0.000	0.000	0.000	5.072	0.000	0.000	0.000	9.377
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2030	Flexible	0.000	4.305	0.000	0.000	0.000	0.000	5.072	0.000	0.000	0.000	9.377
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2031	Flexible	0.000	4.040	0.000	0.000	0.000	0.000	4.289	0.000	0.000	0.000	8.329
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2032	Flexible	0.000	4.179	0.000	0.000	0.000	0.000	0.926	0.000	0.000	0.000	5.105
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2033	Flexible	0.926	0.508	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.434
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

ID	Pavement Condition Rating	Description		
		Crack	Ride	Rutting or Faulting
F1	Fair (Poor Crack)	Poor	Good or Fair	Good or Fair
F2	Fair (Poor Ride)	Good or Fair	Poor	Good or Fair
F3/F4	Fair (Poor Rut/Fault)	Good or Fair	Good or Fair	Poor
F5	Fair (Fair Ride Only)	Good or Fair	Fair	Good
F6/F7	Fair (Rut/Fault Only)	Good or Fair	Good	Fair
F8	Fair (Cracking Only)	Fair	Good	Good
F9	Fair (Cracking & IRI)	Fair	Fair	Good
F10	Fair (Cracking and Rutting/Faulting Only)	Fair	Good	Fair
F11	Fair (IRI & Rut/Fault)	Good	Fair	Fair
F12	Fair (All Fair)	Fair	Fair	Fair

**Caltrans Pavement Program  
 Pavement Condition Summary Report (PaveM) By Lane  
 NORTHBOUND; LANE #1**

**District: 1; County: Mendocino (MEN); Route: 101  
 From PM: R33.730 To PM: R43.200  
 L-Length: 0.000. R-Length: 9.407  
 L-Lane Miles: 0.000. R-Lane Miles: 9.377 (Unknown lane miles: 0.000)**

Year/ Condition Lane Miles	Pavement Type	Traditional Condition (lane miles)					MAP-21 Condition (lane miles)			Total Lane Miles	Effectiveness (%)	
		Green	Yellow	Blue	Orange	Red	Good	Fair	Poor		SHOPP Effectiveness ((Red + Orange) /Total Lane Miles) %	Rehab Effectiveness (Red/Total Lane Miles) %
2015	Flexible	4.851	3.363	0.000	1.163	0.000	3.992	5.385	0.000	9.377	12.403	0.000
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2016	Flexible	0.964	5.780	0.000	1.435	1.163	1.962	7.380	0.000	9.342	27.810	12.449
	Rigid	0.035	0.000	0.000	0.000	0.000	0.035	0.000	0.000	0.035	0.000	0.000
2017	<i>No Data Available</i>											
2018	Flexible	2.455	6.047	0.000	0.840	0.000	2.926	6.416	0.000	9.342	8.992	0.000
	Rigid	0.035	0.000	0.000	0.000	0.000	0.035	0.000	0.000	0.035	0.000	0.000

*End Previous Years Actuals - Begin APCS Data Collection Year and Predicted Years*

2019	Flexible	3.053	6.289	0.000	0.000	0.000	3.766	5.576	0.000	9.342	0.000	0.000
	Rigid	0.035	0.000	0.000	0.000	0.000	0.035	0.000	0.000	0.035	0.000	0.000
2020	Flexible	2.089	7.253	0.000	0.000	0.000	2.926	6.416	0.000	9.342	0.000	0.000
	Rigid	0.035	0.000	0.000	0.000	0.000	0.035	0.000	0.000	0.035	0.000	0.000
2021	Flexible	0.000	9.342	0.000	0.000	0.000	2.926	6.416	0.000	9.342	0.000	0.000
	Rigid	0.035	0.000	0.000	0.000	0.000	0.035	0.000	0.000	0.035	0.000	0.000
2022	Flexible	0.000	9.342	0.000	0.000	0.000	1.962	7.380	0.000	9.342	0.000	0.000
	Rigid	0.035	0.000	0.000	0.000	0.000	0.035	0.000	0.000	0.035	0.000	0.000
2023	Flexible	0.000	9.342	0.000	0.000	0.000	0.000	9.342	0.000	9.342	0.000	0.000
	Rigid	0.035	0.000	0.000	0.000	0.000	0.035	0.000	0.000	0.035	0.000	0.000
2024	Flexible	0.000	4.544	0.000	4.798	0.000	0.000	9.342	0.000	9.342	51.359	0.000
	Rigid	0.035	0.000	0.000	0.000	0.000	0.035	0.000	0.000	0.035	0.000	0.000
2025	Flexible	0.000	2.654	0.000	6.688	0.000	0.000	9.342	0.000	9.342	71.591	0.000
	Rigid	0.035	0.000	0.000	0.000	0.000	0.035	0.000	0.000	0.035	0.000	0.000
2026	Flexible	0.000	0.000	0.000	9.342	0.000	0.000	9.342	0.000	9.342	100.000	0.000
	Rigid	0.035	0.000	0.000	0.000	0.000	0.035	0.000	0.000	0.035	0.000	0.000
2027	Flexible	0.000	0.000	0.000	9.342	0.000	0.000	9.342	0.000	9.342	100.000	0.000
	Rigid	0.035	0.000	0.000	0.000	0.000	0.035	0.000	0.000	0.035	0.000	0.000
2028	Flexible	0.000	0.000	0.000	9.342	0.000	0.000	9.342	0.000	9.342	100.000	0.000
	Rigid	0.035	0.000	0.000	0.000	0.000	0.035	0.000	0.000	0.035	0.000	0.000
2029	Flexible	0.000	0.000	0.000	9.342	0.000	0.000	9.342	0.000	9.342	100.000	0.000
	Rigid	0.035	0.000	0.000	0.000	0.000	0.035	0.000	0.000	0.035	0.000	0.000
2030	Flexible	0.000	0.000	0.000	4.544	4.798	0.000	9.342	0.000	9.342	100.000	51.359
	Rigid	0.035	0.000	0.000	0.000	0.000	0.035	0.000	0.000	0.035	0.000	0.000
2031	Flexible	0.000	0.000	0.000	4.544	4.798	0.000	9.342	0.000	9.342	100.000	51.359
	Rigid	0.035	0.000	0.000	0.000	0.000	0.035	0.000	0.000	0.035	0.000	0.000
2032	Flexible	0.000	0.000	0.000	1.163	8.179	0.000	8.781	0.561	9.342	100.000	87.551
	Rigid	0.035	0.000	0.000	0.000	0.000	0.000	0.035	0.000	0.035	0.000	0.000
2033	Flexible	0.000	0.000	0.000	0.000	9.342	0.000	8.781	0.561	9.342	100.000	100.000
	Rigid	0.035	0.000	0.000	0.000	0.000	0.000	0.035	0.000	0.035	0.000	0.000

Detailed Breakdown of MAP-21 Fair Condition (lane miles)												
Year/ Condition Lane Miles	Pavement Type	Fair (Poor Crack)	Fair (Poor Ride)	Fair (Poor Rut/Fault)	Fair (Fair Ride Only)	Fair (Rut/Fault Only)	Fair (Cracking Only)	Fair (Cracking & IRI)	Fair (Cracking & Rutting/ Faulting Only)	Fair (IRI & Rut/Fault)	Fair (All Fair)	Fair Total Lane Miles
		F1	F2	F3/F4	F5	F6/F7	F8	F9	F10	F11	F12	
2015	Flexible	0.000	0.000	0.000	4.222	0.000	0.000	1.163	0.000	0.000	0.000	5.385
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2016	Flexible	0.888	0.000	0.000	4.782	0.000	0.000	1.710	0.000	0.000	0.000	7.380
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2017	No Data Available											
2018	Flexible	0.000	0.000	0.000	5.576	0.000	0.840	0.000	0.000	0.000	0.000	6.416
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

*End Previous Years Actuals - Begin APCS Data Collection Year and Predicted Years*

2019	Flexible	0.000	0.000	0.000	5.576	0.000	0.000	0.000	0.000	0.000	0.000	5.576
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2020	Flexible	0.000	0.000	0.000	6.416	0.000	0.000	0.000	0.000	0.000	0.000	6.416
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2021	Flexible	0.000	0.000	0.000	6.416	0.000	0.000	0.000	0.000	0.000	0.000	6.416
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2022	Flexible	0.000	0.000	0.000	7.380	0.000	0.000	0.000	0.000	0.000	0.000	7.380
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2023	Flexible	0.000	0.000	0.000	7.380	0.000	0.000	1.962	0.000	0.000	0.000	9.342
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2024	Flexible	0.000	0.000	0.000	4.544	0.000	0.000	4.798	0.000	0.000	0.000	9.342
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2025	Flexible	0.000	0.000	0.000	1.163	0.000	0.000	8.179	0.000	0.000	0.000	9.342
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2026	Flexible	0.000	0.000	0.000	0.000	0.000	0.000	9.342	0.000	0.000	0.000	9.342
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2027	Flexible	0.000	0.275	0.000	0.000	0.000	0.000	9.067	0.000	0.000	0.000	9.342
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2028	Flexible	0.000	0.275	0.000	0.000	0.000	0.000	9.067	0.000	0.000	0.000	9.342
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2029	Flexible	0.000	0.275	0.000	0.000	0.000	0.000	9.067	0.000	0.000	0.000	9.342
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2030	Flexible	0.000	0.836	0.000	0.000	0.000	0.000	8.506	0.000	0.000	0.000	9.342
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2031	Flexible	0.000	0.836	0.000	0.000	0.000	0.000	8.506	0.000	0.000	0.000	9.342
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2032	Flexible	4.237	1.201	0.000	0.000	0.000	0.000	3.343	0.000	0.000	0.000	8.781
	Rigid	0.000	0.000	0.000	0.000	0.000	0.035	0.000	0.000	0.000	0.000	0.035
2033	Flexible	4.237	2.089	0.000	0.000	0.000	0.000	2.455	0.000	0.000	0.000	8.781
	Rigid	0.000	0.000	0.000	0.000	0.000	0.035	0.000	0.000	0.000	0.000	0.035

ID	Pavement Condition Rating	Description		
		Crack	Ride	Rutting or Faulting
F1	Fair (Poor Crack)	Poor	Good or Fair	Good or Fair
F2	Fair (Poor Ride)	Good or Fair	Poor	Good or Fair
F3/F4	Fair (Poor Rut/Fault)	Good or Fair	Good or Fair	Poor
F5	Fair (Fair Ride Only)	Good or Fair	Fair	Good
F6/F7	Fair (Rut/Fault Only)	Good or Fair	Good	Fair
F8	Fair (Cracking Only)	Fair	Good	Good
F9	Fair (Cracking & IRI)	Fair	Fair	Good
F10	Fair (Cracking and Rutting/Faulting Only)	Fair	Good	Fair
F11	Fair (IRI & Rut/Fault)	Good	Fair	Fair
F12	Fair (All Fair)	Fair	Fair	Fair

**Caltrans Pavement Program  
 Pavement Condition Summary Report (PaveM) By Lane  
 NORTHBOUND; LANE #2**

**District: 1; County: Mendocino (MEN); Route: 101**  
**From PM: R33.730 To PM: R43.200**  
 L-Length: 0.000. R-Length: 9.407  
 L-Lane Miles: 0.000. R-Lane Miles: 9.377 (Unknown lane miles: 0.000)

Year/ Condition Lane Miles	Pavement Type	Traditional Condition (lane miles)					MAP-21 Condition (lane miles)			Total Lane Miles	Effectiveness (%)	
		Green	Yellow	Blue	Orange	Red	Good	Fair	Poor		SHOPP Effectiveness ((Red + Orange) /Total Lane Miles) %	Rehab Effectiveness (Red/Total Lane Miles) %
2015	Flexible	0.000	6.688	0.000	2.689	0.000	1.469	7.908	0.000	9.377	28.677	0.000
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2016	Flexible	0.964	1.962	0.000	5.253	1.163	0.000	9.342	0.000	9.342	68.679	12.449
	Rigid	0.000	0.035	0.000	0.000	0.000	0.000	0.035	0.000	0.035	0.000	0.000
2017	No Data Available											
2018	Flexible	2.327	5.580	0.000	1.435	0.000	0.561	8.781	0.000	9.342	15.361	0.000
	Rigid	0.000	0.035	0.000	0.000	0.000	0.000	0.035	0.000	0.035	0.000	0.000

*End Previous Years Actuals - Begin APCS Data Collection Year and Predicted Years*

2019	Flexible	4.141	5.201	0.000	0.000	0.000	0.000	9.342	0.000	9.342	0.000	0.000
	Rigid	0.000	0.035	0.000	0.000	0.000	0.000	0.035	0.000	0.035	0.000	0.000
2020	Flexible	1.762	7.580	0.000	0.000	0.000	0.000	9.342	0.000	9.342	0.000	0.000
	Rigid	0.000	0.035	0.000	0.000	0.000	0.000	0.035	0.000	0.035	0.000	0.000
2021	Flexible	0.561	8.781	0.000	0.000	0.000	0.000	9.342	0.000	9.342	0.000	0.000
	Rigid	0.000	0.035	0.000	0.000	0.000	0.000	0.035	0.000	0.035	0.000	0.000
2022	Flexible	0.000	9.342	0.000	0.000	0.000	0.000	9.342	0.000	9.342	0.000	0.000
	Rigid	0.000	0.000	0.000	0.000	0.035	0.000	0.035	0.000	0.035	100.000	100.000
2023	Flexible	0.000	9.342	0.000	0.000	0.000	0.000	9.342	0.000	9.342	0.000	0.000
	Rigid	0.000	0.000	0.000	0.000	0.035	0.000	0.035	0.000	0.035	100.000	100.000
2024	Flexible	0.000	7.380	0.000	1.962	0.000	0.000	9.342	0.000	9.342	21.002	0.000
	Rigid	0.000	0.000	0.000	0.000	0.035	0.000	0.035	0.000	0.035	100.000	100.000
2025	Flexible	0.000	0.000	0.000	9.342	0.000	0.000	9.342	0.000	9.342	100.000	0.000
	Rigid	0.000	0.000	0.000	0.000	0.035	0.000	0.035	0.000	0.035	100.000	100.000
2026	Flexible	0.000	0.000	0.000	9.342	0.000	0.000	9.342	0.000	9.342	100.000	0.000
	Rigid	0.000	0.000	0.000	0.000	0.035	0.000	0.035	0.000	0.035	100.000	100.000
2027	Flexible	0.000	0.000	0.000	9.342	0.000	0.000	9.342	0.000	9.342	100.000	0.000
	Rigid	0.000	0.000	0.000	0.000	0.035	0.000	0.035	0.000	0.035	100.000	100.000
2028	Flexible	0.000	0.000	0.000	9.342	0.000	0.000	9.342	0.000	9.342	100.000	0.000
	Rigid	0.000	0.000	0.000	0.000	0.035	0.000	0.035	0.000	0.035	100.000	100.000
2029	Flexible	0.000	0.000	0.000	9.342	0.000	0.000	9.342	0.000	9.342	100.000	0.000
	Rigid	0.000	0.000	0.000	0.000	0.035	0.000	0.035	0.000	0.035	100.000	100.000
2030	Flexible	0.000	0.000	0.000	5.945	3.397	0.000	9.342	0.000	9.342	100.000	36.363
	Rigid	0.000	0.000	0.000	0.000	0.035	0.000	0.035	0.000	0.035	100.000	100.000
2031	Flexible	0.000	0.000	0.000	0.000	9.342	0.000	9.342	0.000	9.342	100.000	100.000
	Rigid	0.000	0.000	0.000	0.000	0.035	0.000	0.035	0.000	0.035	100.000	100.000
2032	Flexible	0.000	0.000	0.000	0.000	9.342	0.000	5.945	3.397	9.342	100.000	100.000
	Rigid	0.000	0.000	0.000	0.000	0.035	0.000	0.035	0.000	0.035	100.000	100.000
2033	Flexible	0.000	0.000	0.000	0.000	9.342	0.000	0.000	9.342	9.342	100.000	100.000
	Rigid	0.000	0.000	0.000	0.000	0.035	0.000	0.035	0.000	0.035	100.000	100.000



Detailed Breakdown of MAP-21 Fair Condition (lane miles)												
Year/ Condition Lane Miles	Pavement Type	Fair (Poor Crack)	Fair (Poor Ride)	Fair (Poor Rut/Fault)	Fair (Fair Ride Only)	Fair (Rut/Fault Only)	Fair (Cracking Only)	Fair (Cracking & IRI)	Fair (Cracking & Rutting/ Faulting Only)	Fair (IRI & Rut/Fault)	Fair (All Fair)	Fair Total Lane Miles
		F1	F2	F3/F4	F5	F6/F7	F8	F9	F10	F11	F12	
2015	Flexible	0.000	0.000	0.000	3.728	0.000	0.000	4.180	0.000	0.000	0.000	7.908
	Rigid	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2016	Flexible	1.163	0.000	0.000	1.962	0.964	0.000	3.762	0.000	0.000	1.491	9.342
	Rigid	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.035
2017	No Data Available											
2018	Flexible	0.000	0.000	0.000	7.346	0.000	0.000	1.435	0.000	0.000	0.000	8.781
	Rigid	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.035

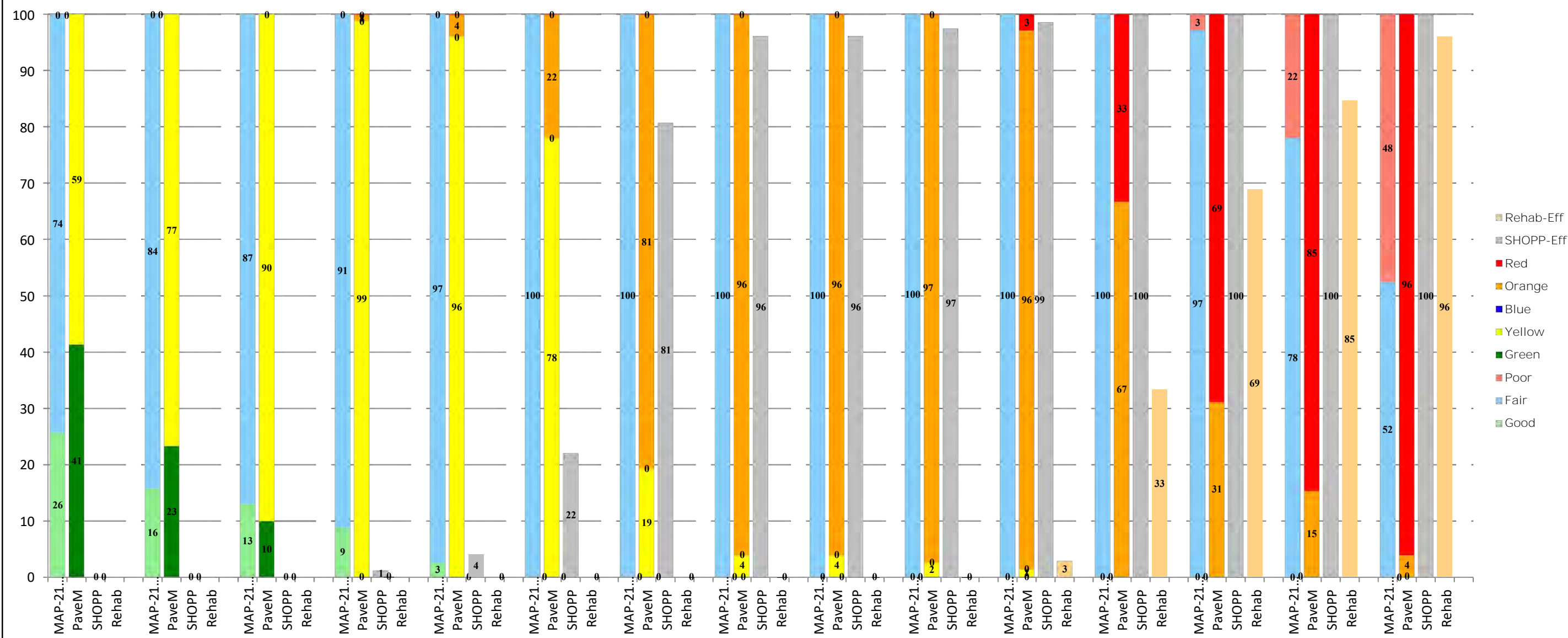
*End Previous Years Actuals - Begin APCS Data Collection Year and Predicted Years*

2019	Flexible	0.000	0.000	0.000	9.342	0.000	0.000	0.000	0.000	0.000	0.000	9.342
	Rigid	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.035
2020	Flexible	0.000	0.000	0.000	9.342	0.000	0.000	0.000	0.000	0.000	0.000	9.342
	Rigid	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.035
2021	Flexible	0.000	0.000	0.000	9.342	0.000	0.000	0.000	0.000	0.000	0.000	9.342
	Rigid	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.035
2022	Flexible	0.000	0.000	0.000	9.342	0.000	0.000	0.000	0.000	0.000	0.000	9.342
	Rigid	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.035
2023	Flexible	0.000	0.000	0.000	9.342	0.000	0.000	0.000	0.000	0.000	0.000	9.342
	Rigid	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.035
2024	Flexible	0.000	0.000	0.000	4.981	0.000	0.000	4.361	0.000	0.000	0.000	9.342
	Rigid	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.035
2025	Flexible	0.000	0.000	0.000	0.000	0.000	0.000	9.342	0.000	0.000	0.000	9.342
	Rigid	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.035
2026	Flexible	0.000	0.275	0.000	0.000	0.000	0.000	9.067	0.000	0.000	0.000	9.342
	Rigid	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.035
2027	Flexible	0.000	0.275	0.000	0.000	0.000	0.000	9.067	0.000	0.000	0.000	9.342
	Rigid	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.035
2028	Flexible	0.000	1.201	0.000	0.000	0.000	0.000	8.141	0.000	0.000	0.000	9.342
	Rigid	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.035
2029	Flexible	0.000	4.085	0.000	0.000	0.000	0.000	5.257	0.000	0.000	0.000	9.342
	Rigid	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.035
2030	Flexible	0.000	5.576	0.000	0.000	0.000	0.000	3.766	0.000	0.000	0.000	9.342
	Rigid	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.035
2031	Flexible	0.000	6.540	0.000	0.000	0.000	0.000	2.802	0.000	0.000	0.000	9.342
	Rigid	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.035
2032	Flexible	0.000	5.945	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.945
	Rigid	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.035
2033	Flexible	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Rigid	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.035

ID	Pavement Condition Rating	Description		
		Crack	Ride	Rutting or Faulting
F1	Fair (Poor Crack)	Poor	Good or Fair	Good or Fair
F2	Fair (Poor Ride)	Good or Fair	Poor	Good or Fair
F3/F4	Fair (Poor Rut/Fault)	Good or Fair	Good or Fair	Poor
F5	Fair (Fair Ride Only)	Good or Fair	Fair	Good
F6/F7	Fair (Rut/Fault Only)	Good or Fair	Good	Fair
F8	Fair (Cracking Only)	Fair	Good	Good
F9	Fair (Cracking & IRI)	Fair	Fair	Good
F10	Fair (Cracking and Rutting/Faulting Only)	Fair	Good	Fair
F11	Fair (IRI & Rut/Fault)	Good	Fair	Fair
F12	Fair (All Fair)	Fair	Fair	Fair



PCR Summary Chart: MAP-21 and Traditional Condition (lane miles) & SHOPP and Rehab Effectiveness (%) for: Mendocino (MEN) - 101 - from 2019 to 2033



PaveM Scenario Used: #3299  
 APCS Data Year: 2019  
 Using: Prior-Treatment Distresses

**Caltrans Pavement Program  
 Pavement Condition Detailed Report (PaveM)**

**District: 1; County: Mendocino (MEN); Route: 101  
 From PM: R33.730 To PM: R43.200**

**Year: 2019 (Current)**  
 R-Length: 9.407. L-Length: 9.407  
 R-Lane Miles: 18.754. L-Lane Miles: 18.754 (Unknown lane miles: 0.000)

Pavement Segment	Lane	Type	Concrete			Asphalt			IRI in/mi	MAP-21 Condition	Traditional Condition	Road Class	Estimated Lane Miles
			1st%	3rd%	Fault%	Alligator		Rut (in)					
						A%	B%						
Post Mile: R33.730 to R34.152 Length: 0.422 Estimated Lane Mileage: 0.844	L1	Flexible				33.00	0.00	0.19	82	Good	Yellow	1	0.422
	L2	Flexible				0.60	4.40	0.23	160	Fair	Yellow	1	0.422
Post Mile: R33.730 to R33.765 Length: 0.035 Estimated Lane Mileage: 0.070	R1	JPC		0.00	0.00				48	Good	Green	1	0.035
	R2	JPC		8.60	2.86				106	Fair	Yellow	1	0.035
Post Mile: R33.765 to R35.200 Length: 1.435 Estimated Lane Mileage: 2.870	R1	Flexible				12.10	1.10	0.16	106	Fair	Yellow	1	1.435
	R2	Flexible				9.00	0.10	0.18	116	Fair	Yellow	1	1.435
Post Mile: R34.152 to R35.200 Length: 1.048 Estimated Lane Mileage: 2.096	L1	Flexible				13.60	0.00	0.16	91	Good	Yellow	1	1.048
	L2	Flexible				6.70	1.80	0.21	121	Fair	Yellow	1	1.048
Post Mile: R35.200 to R36.164 Length: 0.964 Estimated Lane Mileage: 3.856	L1	Flexible				14.50	0.00	0.15	111	Fair	Yellow	1	0.964
	L2	Flexible				13.60	0.10	0.17	121	Fair	Yellow	1	0.964
	R1	Flexible				4.20	0.20	0.11	87	Good	Green	1	0.964
	R2	Flexible				7.50	0.30	0.20	109	Fair	Yellow	1	0.964
Post Mile: 36.164 to 37.147 Length: 0.983 Estimated Lane Mileage: 1.966	L1	Flexible				2.10	0.10	0.13	126	Fair	Green	1	0.983
	L2	Flexible				4.50	0.10	0.18	127	Fair	Green	1	0.983
Post Mile: 36.164 to 37.655 Length: 1.491 Estimated Lane Mileage: 2.982	R1	Flexible				5.00	0.10	0.12	106	Fair	Yellow	1	1.491
	R2	Flexible				2.20	0.00	0.16	115	Fair	Green	1	1.491
Post Mile: 37.147 to 37.655 Length: 0.508 Estimated Lane Mileage: 1.016	L1	Flexible				1.00	0.00	0.11	109	Fair	Green	1	0.508
	L2	Flexible				1.20	0.00	0.12	106	Fair	Green	1	0.508
Post Mile: 37.655 to 38.216 Length: 0.561 Estimated Lane Mileage: 2.244	L1	Flexible				0.00	0.00	0.10	87	Good	Green	1	0.561
	L2	Flexible				2.00	0.00	0.12	100	Fair	Green	1	0.561
	R1	Flexible				8.60	1.00	0.12	132	Fair	Yellow	1	0.561
	R2	Flexible				0.00	0.00	0.10	120	Fair	Green	1	0.561
Post Mile: R38.216 to R39.142 Length: 0.926 Estimated Lane Mileage: 3.704	L1	Flexible				0.00	0.00	0.12	94	Good	Green	1	0.926
	L2	Flexible				0.20	0.00	0.10	73	Good	Green	1	0.926
	R1	Flexible				0.20	0.00	0.09	124	Fair	Green	1	0.926
	R2	Flexible				0.70	0.00	0.13	121	Fair	Green	1	0.926
Post Mile: 39.205 to 39.480 Length: 0.275 Estimated Lane Mileage: 1.100	L1	Flexible				0.00	0.00	0.12	102	Fair	Green	1	0.275
	L2	Flexible				1.60	0.00	0.18	105	Fair	Green	1	0.275
	R1	Flexible				0.60	0.00	0.14	142	Fair	Green	1	0.275
	R2	Flexible				0.70	0.00	0.14	134	Fair	Green	1	0.275
Post Mile: 39.480 to 40.368 Length: 0.888 Estimated Lane Mileage: 3.552	L1	Flexible				0.20	0.00	0.16	129	Fair	Green	1	0.888
	L2	Flexible				2.60	0.00	0.24	138	Fair	Green	1	0.888
	R1	Flexible				1.10	0.00	0.13	118	Fair	Green	1	0.888
	R2	Flexible				2.20	0.00	0.19	118	Fair	Green	1	0.888
Post Mile: 40.368 to 42.360 Length: 1.992 Estimated Lane Mileage: 7.848	L1	Flexible				22.60	0.10	0.13	93	Good	Yellow	1	1.962
	L2	Flexible				28.30	0.10	0.17	104	Fair	Yellow	1	1.962
	R1	Flexible				15.00	1.60	0.10	82	Good	Yellow	1	1.962
	R2	Flexible				37.20	0.40	0.17	103	Fair	Yellow	1	1.962
Post Mile: 42.360 to R43.200 Length: 0.840 Estimated Lane Mileage: 3.360	L1	Flexible				26.20	0.30	0.13	113	Fair	Yellow	1	0.840
	L2	Flexible				34.80	0.20	0.14	102	Fair	Yellow	1	0.840
	R1	Flexible				27.90	0.90	0.07	94	Good	Yellow	1	0.840
	R2	Flexible				29.10	0.00	0.14	104	Fair	Yellow	1	0.840
			<b>4.30</b>	<b>1.43</b>	<b>11.67</b>	<b>0.33</b>	<b>0.15</b>	<b>108</b>					<b>37.508</b>
Lane Weighted Average												Total	

PaveM Scenario Used: #3299  
 APCS Data Year: 2019  
 Using: Prior-Treatment Distresses

**Caltrans Pavement Program  
 Pavement Condition Detailed Report (PaveM)**

**District: 1; County: Mendocino (MEN); Route: 101  
 From PM: R33.730 To PM: R43.200**

**Year: 2020 (Predicted)**  
 R-Length: 9.407. L-Length: 9.407  
 R-Lane Miles: 18.754. L-Lane Miles: 18.754 (Unknown lane miles: 0.000)

Pavement Segment	Lane	Type	Concrete			Asphalt			IRI in/mi	MAP-21 Condition	Traditional Condition	Road Class	Estimated Lane Miles
			1st%	3rd%	Fault%	Alligator		Rut (in)					
						A%	B%						
Post Mile: R33.730 to R34.152 Length: 0.422 Estimated Lane Mileage: 0.844	L1	Flexible				36.30	0.20	0.19	85	Good	Yellow	1	0.422
	L2	Flexible				2.00	6.20	0.23	164	Fair	Yellow	1	0.422
Post Mile: R33.730 to R33.765 Length: 0.035 Estimated Lane Mileage: 0.070	R1	JPC		0.00	0.03				61	Good	Green	1	0.035
	R2	JPC		9.10	3.63				109	Fair	Yellow	1	0.035
Post Mile: R33.765 to R35.200 Length: 1.435 Estimated Lane Mileage: 2.870	R1	Flexible				15.80	2.50	0.16	109	Fair	Yellow	1	1.435
	R2	Flexible				13.20	1.00	0.18	121	Fair	Yellow	1	1.435
Post Mile: R34.152 to R35.200 Length: 1.048 Estimated Lane Mileage: 2.096	L1	Flexible				18.30	0.50	0.16	94	Good	Yellow	1	1.048
	L2	Flexible				10.00	3.50	0.21	126	Fair	Yellow	1	1.048
Post Mile: R35.200 to R36.164 Length: 0.964 Estimated Lane Mileage: 3.856	L1	Flexible				18.70	0.50	0.15	114	Fair	Yellow	1	0.964
	L2	Flexible				18.10	0.90	0.17	126	Fair	Yellow	1	0.964
	R1	Flexible				7.00	0.90	0.11	91	Good	Yellow	1	0.964
	R2	Flexible				11.10	1.30	0.20	114	Fair	Yellow	1	0.964
Post Mile: 36.164 to 37.147 Length: 0.983 Estimated Lane Mileage: 1.966	L1	Flexible				4.30	0.70	0.13	130	Fair	Yellow	1	0.983
	L2	Flexible				7.70	0.90	0.18	132	Fair	Yellow	1	0.983
Post Mile: 36.164 to 37.655 Length: 1.491 Estimated Lane Mileage: 2.982	R1	Flexible				7.90	0.80	0.12	110	Fair	Yellow	1	1.491
	R2	Flexible				4.60	0.70	0.16	120	Fair	Yellow	1	1.491
Post Mile: 37.147 to 37.655 Length: 0.508 Estimated Lane Mileage: 1.016	L1	Flexible				2.10	0.20	0.11	113	Fair	Green	1	0.508
	L2	Flexible				2.80	0.30	0.12	111	Fair	Green	1	0.508
Post Mile: 37.655 to 38.216 Length: 0.561 Estimated Lane Mileage: 2.244	L1	Flexible				0.70	0.50	0.10	90	Good	Green	1	0.561
	L2	Flexible				4.80	0.50	0.12	105	Fair	Yellow	1	0.561
	R1	Flexible				12.00	2.40	0.12	135	Fair	Yellow	1	0.561
	R2	Flexible				0.80	0.50	0.10	125	Fair	Green	1	0.561
Post Mile: R38.216 to R39.142 Length: 0.926 Estimated Lane Mileage: 3.704	L1	Flexible				0.70	0.50	0.12	98	Fair	Green	1	0.926
	L2	Flexible				1.70	0.50	0.10	78	Good	Green	1	0.926
	R1	Flexible				1.50	0.50	0.09	127	Fair	Green	1	0.926
	R2	Flexible				2.70	0.50	0.13	127	Fair	Green	1	0.926
Post Mile: 39.205 to 39.480 Length: 0.275 Estimated Lane Mileage: 1.100	L1	Flexible				0.60	0.50	0.12	105	Fair	Green	1	0.275
	L2	Flexible				4.00	0.50	0.18	110	Fair	Green	1	0.275
	R1	Flexible				2.20	0.50	0.14	145	Fair	Green	1	0.275
	R2	Flexible				2.60	0.50	0.14	139	Fair	Green	1	0.275
Post Mile: 39.480 to 40.368 Length: 0.888 Estimated Lane Mileage: 3.552	L1	Flexible				1.40	0.50	0.16	132	Fair	Green	1	0.888
	L2	Flexible				5.50	0.50	0.24	143	Fair	Yellow	1	0.888
	R1	Flexible				2.90	0.50	0.13	122	Fair	Green	1	0.888
	R2	Flexible				4.90	0.50	0.19	123	Fair	Yellow	1	0.888
Post Mile: 40.368 to 42.360 Length: 1.992 Estimated Lane Mileage: 7.848	L1	Flexible				27.60	0.80	0.13	96	Fair	Yellow	1	1.962
	L2	Flexible				33.80	1.00	0.17	109	Fair	Yellow	1	1.962
	R1	Flexible				18.90	3.10	0.10	86	Good	Yellow	1	1.962
	R2	Flexible				42.40	1.50	0.17	108	Fair	Yellow	1	1.962
Post Mile: 42.360 to R43.200 Length: 0.840 Estimated Lane Mileage: 3.360	L1	Flexible				30.80	1.40	0.13	117	Fair	Yellow	1	0.840
	L2	Flexible				40.30	1.10	0.14	107	Fair	Yellow	1	0.840
	R1	Flexible				32.40	2.20	0.07	98	Fair	Yellow	1	0.840
	R2	Flexible				35.00	0.50	0.14	109	Fair	Yellow	1	0.840
				<b>4.55</b>	<b>1.83</b>	<b>15.02</b>	<b>1.14</b>	<b>0.15</b>	<b>112</b>				<b>37.508</b>
Lane Weighted Average												Total	

PaveM Scenario Used: #3299  
 APCS Data Year: 2019  
 Using: Prior-Treatment Distresses

### Caltrans Pavement Program Pavement Condition Detailed Report (PaveM)

**District: 1; County: Mendocino (MEN); Route: 101**  
**From PM: R33.730 To PM: R43.200**

**Year: 2021 (Predicted)**  
 R-Length: 9.407. L-Length: 9.407  
 R-Lane Miles: 18.754. L-Lane Miles: 18.754 (Unknown lane miles: 0.000)

Pavement Segment	Lane	Type	Concrete			Asphalt			IRI in/mi	MAP-21 Condition	Traditional Condition	Road Class	Estimated Lane Miles
			1st%	3rd%	Fault%	Alligator		Rut (in)					
						A%	B%						
Post Mile: R33.730 to R34.152 Length: 0.422 Estimated Lane Mileage: 0.844	L1	Flexible				39.40	0.70	0.19	89	Good	Yellow	1	0.422
	L2	Flexible				3.70	8.20	0.23	169	Fair	Yellow	1	0.422
Post Mile: R33.730 to R33.765 Length: 0.035 Estimated Lane Mileage: 0.070	R1	JPC		0.10	0.10				62	Good	Green	1	0.035
	R2	JPC		9.70	4.46				111	Fair	Yellow	1	0.035
Post Mile: R33.765 to R35.200 Length: 1.435 Estimated Lane Mileage: 2.870	R1	Flexible				19.50	4.30	0.16	113	Fair	Yellow	1	1.435
	R2	Flexible				17.40	2.50	0.18	127	Fair	Yellow	1	1.435
Post Mile: R34.152 to R35.200 Length: 1.048 Estimated Lane Mileage: 2.096	L1	Flexible				22.70	1.60	0.16	98	Fair	Yellow	1	1.048
	L2	Flexible				13.50	5.70	0.21	132	Fair	Yellow	1	1.048
Post Mile: R35.200 to R36.164 Length: 0.964 Estimated Lane Mileage: 3.856	L1	Flexible				22.70	1.50	0.15	118	Fair	Yellow	1	0.964
	L2	Flexible				22.40	2.30	0.17	132	Fair	Yellow	1	0.964
	R1	Flexible				9.70	2.20	0.11	95	Good	Yellow	1	0.964
	R2	Flexible				14.80	2.80	0.20	119	Fair	Yellow	1	0.964
Post Mile: 36.164 to 37.147 Length: 0.983 Estimated Lane Mileage: 1.966	L1	Flexible				6.70	1.90	0.13	134	Fair	Yellow	1	0.983
	L2	Flexible				11.00	2.30	0.18	137	Fair	Yellow	1	0.983
Post Mile: 36.164 to 37.655 Length: 1.491 Estimated Lane Mileage: 2.982	R1	Flexible				10.90	2.00	0.12	114	Fair	Yellow	1	1.491
	R2	Flexible				7.50	2.00	0.16	126	Fair	Yellow	1	1.491
Post Mile: 37.147 to 37.655 Length: 0.508 Estimated Lane Mileage: 1.016	L1	Flexible				3.30	0.70	0.11	117	Fair	Green	1	0.508
	L2	Flexible				4.50	1.00	0.12	116	Fair	Yellow	1	0.508
Post Mile: 37.655 to 38.216 Length: 0.561 Estimated Lane Mileage: 2.244	L1	Flexible				2.20	1.60	0.10	94	Good	Green	1	0.561
	L2	Flexible				7.90	1.80	0.12	111	Fair	Yellow	1	0.561
	R1	Flexible				15.40	4.20	0.12	139	Fair	Yellow	1	0.561
	R2	Flexible				2.40	1.80	0.10	130	Fair	Green	1	0.561
Post Mile: R38.216 to R39.142 Length: 0.926 Estimated Lane Mileage: 3.704	L1	Flexible				2.20	1.60	0.12	102	Fair	Green	1	0.926
	L2	Flexible				3.80	1.80	0.10	83	Good	Yellow	1	0.926
	R1	Flexible				3.40	1.60	0.09	131	Fair	Yellow	1	0.926
	R2	Flexible				5.20	1.80	0.13	132	Fair	Yellow	1	0.926
Post Mile: 39.205 to 39.480 Length: 0.275 Estimated Lane Mileage: 1.100	L1	Flexible				2.00	1.50	0.12	109	Fair	Green	1	0.275
	L2	Flexible				6.70	1.70	0.18	116	Fair	Yellow	1	0.275
	R1	Flexible				4.20	1.50	0.14	149	Fair	Yellow	1	0.275
	R2	Flexible				5.00	1.70	0.14	145	Fair	Yellow	1	0.275
Post Mile: 39.480 to 40.368 Length: 0.888 Estimated Lane Mileage: 3.552	L1	Flexible				3.20	1.50	0.16	136	Fair	Green	1	0.888
	L2	Flexible				8.60	1.70	0.24	148	Fair	Yellow	1	0.888
	R1	Flexible				5.10	1.50	0.13	126	Fair	Yellow	1	0.888
	R2	Flexible				7.80	1.70	0.19	128	Fair	Yellow	1	0.888
Post Mile: 40.368 to 42.360 Length: 1.992 Estimated Lane Mileage: 7.848	L1	Flexible				32.00	2.10	0.13	100	Fair	Yellow	1	1.962
	L2	Flexible				38.80	2.40	0.17	115	Fair	Yellow	1	1.962
	R1	Flexible				22.50	5.10	0.10	90	Good	Yellow	1	1.962
	R2	Flexible				46.90	3.20	0.17	114	Fair	Yellow	1	1.962
Post Mile: 42.360 to R43.200 Length: 0.840 Estimated Lane Mileage: 3.360	L1	Flexible				35.10	2.90	0.13	121	Fair	Yellow	1	0.840
	L2	Flexible				45.00	2.60	0.14	112	Fair	Yellow	1	0.840
	R1	Flexible				36.30	4.00	0.07	102	Fair	Yellow	1	0.840
	R2	Flexible				40.00	1.80	0.14	115	Fair	Yellow	1	0.840
			<b>4.90</b>	<b>2.28</b>	<b>18.36</b>	<b>2.52</b>	<b>0.15</b>	<b>117</b>					<b>37.508</b>
Lane Weighted Average												Total	

PaveM Scenario Used: #3299  
 APCS Data Year: 2019  
 Using: Prior-Treatment Distresses

**Caltrans Pavement Program  
 Pavement Condition Detailed Report (PaveM)**

**District: 1; County: Mendocino (MEN); Route: 101  
 From PM: R33.730 To PM: R43.200**

**Year: 2022 (Predicted)  
 R-Length: 9.407. L-Length: 9.407  
 R-Lane Miles: 18.754. L-Lane Miles: 18.754 (Unknown lane miles: 0.000)**

Pavement Segment	Lane	Type	Concrete			Asphalt			IRI in/mi	MAP-21 Condition	Traditional Condition	Road Class	Estimated Lane Miles
			1st%	3rd%	Fault%	Alligator		Rut (in)					
						A%	B%						
Post Mile: R33.730 to R34.152 Length: 0.422 Estimated Lane Mileage: 0.844	L1	Flexible				42.20	1.40	0.19	92	Good	Yellow	1	0.422
	L2	Flexible				5.70	10.30	0.23	173	Fair	Orange	1	0.422
Post Mile: R33.730 to R33.765 Length: 0.035 Estimated Lane Mileage: 0.070	R1	JPC		0.20	0.21				63	Good	Green	1	0.035
	R2	JPC		10.20	5.34				113	Fair	Red	1	0.035
Post Mile: R33.765 to R35.200 Length: 1.435 Estimated Lane Mileage: 2.870	R1	Flexible				23.00	6.50	0.16	117	Fair	Yellow	1	1.435
	R2	Flexible				21.50	4.50	0.18	132	Fair	Yellow	1	1.435
Post Mile: R34.152 to R35.200 Length: 1.048 Estimated Lane Mileage: 2.096	L1	Flexible				26.80	3.20	0.16	102	Fair	Yellow	1	1.048
	L2	Flexible				17.00	8.30	0.21	137	Fair	Yellow	1	1.048
Post Mile: R35.200 to R36.164 Length: 0.964 Estimated Lane Mileage: 3.856	L1	Flexible				26.40	2.90	0.15	122	Fair	Yellow	1	0.964
	L2	Flexible				26.50	4.10	0.17	137	Fair	Yellow	1	0.964
	R1	Flexible				12.70	3.80	0.11	98	Fair	Yellow	1	0.964
	R2	Flexible				18.50	4.70	0.20	125	Fair	Yellow	1	0.964
Post Mile: 36.164 to 37.147 Length: 0.983 Estimated Lane Mileage: 1.966	L1	Flexible				9.40	3.40	0.13	137	Fair	Yellow	1	0.983
	L2	Flexible				14.50	4.10	0.18	143	Fair	Yellow	1	0.983
Post Mile: 36.164 to 37.655 Length: 1.491 Estimated Lane Mileage: 2.982	R1	Flexible				13.90	3.60	0.12	117	Fair	Yellow	1	1.491
	R2	Flexible				10.60	3.70	0.16	131	Fair	Yellow	1	1.491
Post Mile: 37.147 to 37.655 Length: 0.508 Estimated Lane Mileage: 1.016	L1	Flexible				4.60	1.40	0.11	120	Fair	Yellow	1	0.508
	L2	Flexible				6.60	1.90	0.12	122	Fair	Yellow	1	0.508
Post Mile: 37.655 to 38.216 Length: 0.561 Estimated Lane Mileage: 2.244	L1	Flexible				4.30	3.20	0.10	98	Fair	Yellow	1	0.561
	L2	Flexible				11.40	3.50	0.12	116	Fair	Yellow	1	0.561
	R1	Flexible				18.80	6.30	0.12	143	Fair	Yellow	1	0.561
	R2	Flexible				4.80	3.50	0.10	136	Fair	Yellow	1	0.561
Post Mile: R38.216 to R39.142 Length: 0.926 Estimated Lane Mileage: 3.704	L1	Flexible				4.30	3.20	0.12	106	Fair	Yellow	1	0.926
	L2	Flexible				6.50	3.50	0.10	89	Good	Yellow	1	0.926
	R1	Flexible				5.80	3.20	0.09	135	Fair	Yellow	1	0.926
	R2	Flexible				8.30	3.50	0.13	138	Fair	Yellow	1	0.926
Post Mile: 39.205 to 39.480 Length: 0.275 Estimated Lane Mileage: 1.100	L1	Flexible				3.80	2.90	0.12	113	Fair	Yellow	1	0.275
	L2	Flexible				9.80	3.30	0.18	121	Fair	Yellow	1	0.275
	R1	Flexible				6.50	2.90	0.14	153	Fair	Yellow	1	0.275
	R2	Flexible				7.80	3.30	0.14	150	Fair	Yellow	1	0.275
Post Mile: 39.480 to 40.368 Length: 0.888 Estimated Lane Mileage: 3.552	L1	Flexible				5.30	2.90	0.16	140	Fair	Yellow	1	0.888
	L2	Flexible				12.00	3.30	0.24	154	Fair	Yellow	1	0.888
	R1	Flexible				7.60	2.90	0.13	129	Fair	Yellow	1	0.888
	R2	Flexible				11.10	3.30	0.19	134	Fair	Yellow	1	0.888
Post Mile: 40.368 to 42.360 Length: 1.992 Estimated Lane Mileage: 7.848	L1	Flexible				36.10	3.80	0.13	104	Fair	Yellow	1	1.962
	L2	Flexible				43.00	4.40	0.17	120	Fair	Yellow	1	1.962
	R1	Flexible				26.00	7.40	0.10	94	Good	Yellow	1	1.962
	R2	Flexible				50.60	5.30	0.17	119	Fair	Yellow	1	1.962
Post Mile: 42.360 to R43.200 Length: 0.840 Estimated Lane Mileage: 3.360	L1	Flexible				38.90	4.80	0.13	124	Fair	Yellow	1	0.840
	L2	Flexible				49.00	4.60	0.14	118	Fair	Yellow	1	0.840
	R1	Flexible				39.90	6.10	0.07	105	Fair	Yellow	1	0.840
	R2	Flexible				44.50	3.50	0.14	120	Fair	Yellow	1	0.840
				<b>5.20</b>	<b>2.78</b>	<b>21.68</b>	<b>4.29</b>	<b>0.15</b>	<b>122</b>				<b>37.508</b>
Lane Weighted Average												Total	

PaveM Scenario Used: #3299  
 APCS Data Year: 2019  
 Using: Prior-Treatment Distresses

**Caltrans Pavement Program  
 Pavement Condition Detailed Report (PaveM)**

**District: 1; County: Mendocino (MEN); Route: 101  
 From PM: R33.730 To PM: R43.200**

**Year: 2023 (Predicted)**  
 R-Length: 9.407. L-Length: 9.407  
 R-Lane Miles: 18.754. L-Lane Miles: 18.754 (Unknown lane miles: 0.000)

Pavement Segment	Lane	Type	Concrete			Asphalt			IRI in/mi	MAP-21 Condition	Traditional Condition	Road Class	Estimated Lane Miles
			1st%	3rd%	Fault%	Alligator		Rut (in)					
						A%	B%						
Post Mile: R33.730 to R34.152 Length: 0.422 Estimated Lane Mileage: 0.844	L1	Flexible				44.70	2.30	0.19	96	Fair	Yellow	1	0.422
	L2	Flexible				7.90	12.60	0.23	178	Fair	Orange	1	0.422
Post Mile: R33.730 to R33.765 Length: 0.035 Estimated Lane Mileage: 0.070	R1	JPC		0.30	0.36				64	Good	Green	1	0.035
	R2	JPC		10.80	6.26				115	Fair	Red	1	0.035
Post Mile: R33.765 to R35.200 Length: 1.435 Estimated Lane Mileage: 2.870	R1	Flexible				26.30	9.00	0.16	121	Fair	Yellow	1	1.435
	R2	Flexible				25.50	6.90	0.18	138	Fair	Yellow	1	1.435
Post Mile: R34.152 to R35.200 Length: 1.048 Estimated Lane Mileage: 2.096	L1	Flexible				30.60	5.20	0.16	106	Fair	Yellow	1	1.048
	L2	Flexible				20.40	11.20	0.21	143	Fair	Orange	1	1.048
Post Mile: R35.200 to R36.164 Length: 0.964 Estimated Lane Mileage: 3.856	L1	Flexible				29.80	4.70	0.15	126	Fair	Yellow	1	0.964
	L2	Flexible				30.20	6.30	0.17	143	Fair	Yellow	1	0.964
	R1	Flexible				15.60	5.70	0.11	102	Fair	Yellow	1	0.964
	R2	Flexible				22.10	7.00	0.20	130	Fair	Yellow	1	0.964
Post Mile: 36.164 to 37.147 Length: 0.983 Estimated Lane Mileage: 1.966	L1	Flexible				12.10	5.30	0.13	141	Fair	Yellow	1	0.983
	L2	Flexible				18.10	6.20	0.18	148	Fair	Yellow	1	0.983
Post Mile: 36.164 to 37.655 Length: 1.491 Estimated Lane Mileage: 2.982	R1	Flexible				17.00	5.40	0.12	121	Fair	Yellow	1	1.491
	R2	Flexible				13.80	5.90	0.16	137	Fair	Yellow	1	1.491
Post Mile: 37.147 to 37.655 Length: 0.508 Estimated Lane Mileage: 1.016	L1	Flexible				6.10	2.20	0.11	124	Fair	Yellow	1	0.508
	L2	Flexible				8.70	3.20	0.12	127	Fair	Yellow	1	0.508
Post Mile: 37.655 to 38.216 Length: 0.561 Estimated Lane Mileage: 2.244	L1	Flexible				6.70	5.20	0.10	102	Fair	Yellow	1	0.561
	L2	Flexible				15.00	5.70	0.12	122	Fair	Yellow	1	0.561
	R1	Flexible				22.00	8.80	0.12	147	Fair	Yellow	1	0.561
	R2	Flexible				7.60	5.70	0.10	141	Fair	Yellow	1	0.561
Post Mile: R38.216 to R39.142 Length: 0.926 Estimated Lane Mileage: 3.704	L1	Flexible				6.70	5.20	0.12	110	Fair	Yellow	1	0.926
	L2	Flexible				9.60	5.70	0.10	94	Good	Yellow	1	0.926
	R1	Flexible				8.40	5.20	0.09	139	Fair	Yellow	1	0.926
	R2	Flexible				11.50	5.70	0.13	143	Fair	Yellow	1	0.926
Post Mile: 39.205 to 39.480 Length: 0.275 Estimated Lane Mileage: 1.100	L1	Flexible				5.90	4.70	0.12	117	Fair	Yellow	1	0.275
	L2	Flexible				13.00	5.40	0.18	127	Fair	Yellow	1	0.275
	R1	Flexible				9.00	4.70	0.14	157	Fair	Yellow	1	0.275
	R2	Flexible				10.80	5.40	0.14	156	Fair	Yellow	1	0.275
Post Mile: 39.480 to 40.368 Length: 0.888 Estimated Lane Mileage: 3.552	L1	Flexible				7.60	4.70	0.16	144	Fair	Yellow	1	0.888
	L2	Flexible				15.30	5.40	0.24	159	Fair	Yellow	1	0.888
	R1	Flexible				10.20	4.70	0.13	133	Fair	Yellow	1	0.888
	R2	Flexible				14.40	5.40	0.19	139	Fair	Yellow	1	0.888
Post Mile: 40.368 to 42.360 Length: 1.992 Estimated Lane Mileage: 7.848	L1	Flexible				39.70	5.80	0.13	108	Fair	Yellow	1	1.962
	L2	Flexible				46.60	6.80	0.17	126	Fair	Yellow	1	1.962
	R1	Flexible				29.30	9.90	0.10	98	Fair	Yellow	1	1.962
	R2	Flexible				53.70	7.80	0.17	125	Fair	Yellow	1	1.962
Post Mile: 42.360 to R43.200 Length: 0.840 Estimated Lane Mileage: 3.360	L1	Flexible				42.20	7.00	0.13	128	Fair	Yellow	1	0.840
	L2	Flexible				52.30	7.00	0.14	123	Fair	Yellow	1	0.840
	R1	Flexible				42.90	8.50	0.07	109	Fair	Yellow	1	0.840
	R2	Flexible				48.30	5.70	0.14	126	Fair	Yellow	1	0.840
				<b>5.55</b>	<b>3.31</b>	<b>24.86</b>	<b>6.44</b>	<b>0.15</b>	<b>126</b>				<b>37.508</b>
Lane Weighted Average												Total	

PaveM Scenario Used: #3299  
 APCS Data Year: 2019  
 Using: Prior-Treatment Distresses

**Caltrans Pavement Program  
 Pavement Condition Detailed Report (PaveM)**

**District: 1; County: Mendocino (MEN); Route: 101  
 From PM: R33.730 To PM: R43.200**

**Year: 2024 (Predicted)**  
 R-Length: 9.407. L-Length: 9.407  
 R-Lane Miles: 18.754. L-Lane Miles: 18.754 (Unknown lane miles: 0.000)

Pavement Segment	Lane	Type	Concrete			Asphalt			IRI in/mi	MAP-21 Condition	Traditional Condition	Road Class	Estimated Lane Miles
			1st%	3rd%	Fault%	Alligator		Rut (in)					
						A%	B%						
Post Mile: R33.730 to R34.152 Length: 0.422 Estimated Lane Mileage: 0.844	L1	Flexible				47.00	3.40	0.19	100	Fair	Yellow	1	0.422
	L2	Flexible				10.00	15.10	0.23	182	Fair	Orange	1	0.422
Post Mile: R33.730 to R33.765 Length: 0.035 Estimated Lane Mileage: 0.070	R1	JPC		0.40	0.55				65	Good	Green	1	0.035
	R2	JPC		11.40	7.22				118	Fair	Red	1	0.035
Post Mile: R33.765 to R35.200 Length: 1.435 Estimated Lane Mileage: 2.870	R1	Flexible				29.30	11.70	0.16	125	Fair	Orange	1	1.435
	R2	Flexible				29.20	9.60	0.18	143	Fair	Yellow	1	1.435
Post Mile: R34.152 to R35.200 Length: 1.048 Estimated Lane Mileage: 2.096	L1	Flexible				34.00	7.50	0.16	110	Fair	Yellow	1	1.048
	L2	Flexible				23.60	14.40	0.21	148	Fair	Orange	1	1.048
Post Mile: R35.200 to R36.164 Length: 0.964 Estimated Lane Mileage: 3.856	L1	Flexible				33.00	6.70	0.15	130	Fair	Yellow	1	0.964
	L2	Flexible				33.70	8.80	0.17	148	Fair	Yellow	1	0.964
	R1	Flexible				18.60	7.80	0.11	106	Fair	Yellow	1	0.964
	R2	Flexible				25.50	9.60	0.20	136	Fair	Yellow	1	0.964
Post Mile: 36.164 to 37.147 Length: 0.983 Estimated Lane Mileage: 1.966	L1	Flexible				14.90	7.40	0.13	145	Fair	Yellow	1	0.983
	L2	Flexible				21.40	8.70	0.18	154	Fair	Yellow	1	0.983
Post Mile: 36.164 to 37.655 Length: 1.491 Estimated Lane Mileage: 2.982	R1	Flexible				19.90	7.50	0.12	125	Fair	Yellow	1	1.491
	R2	Flexible				17.10	8.30	0.16	142	Fair	Yellow	1	1.491
Post Mile: 37.147 to 37.655 Length: 0.508 Estimated Lane Mileage: 1.016	L1	Flexible				7.60	3.20	0.11	128	Fair	Yellow	1	0.508
	L2	Flexible				11.00	4.60	0.12	133	Fair	Yellow	1	0.508
Post Mile: 37.655 to 38.216 Length: 0.561 Estimated Lane Mileage: 2.244	L1	Flexible				9.40	7.50	0.10	106	Fair	Yellow	1	0.561
	L2	Flexible				18.50	8.30	0.12	127	Fair	Yellow	1	0.561
	R1	Flexible				25.10	11.50	0.12	151	Fair	Orange	1	0.561
	R2	Flexible				10.60	8.30	0.10	147	Fair	Yellow	1	0.561
Post Mile: R38.216 to R39.142 Length: 0.926 Estimated Lane Mileage: 3.704	L1	Flexible				9.40	7.50	0.12	114	Fair	Yellow	1	0.926
	L2	Flexible				12.80	8.30	0.10	100	Fair	Yellow	1	0.926
	R1	Flexible				11.20	7.50	0.09	143	Fair	Yellow	1	0.926
	R2	Flexible				14.90	8.30	0.13	149	Fair	Yellow	1	0.926
Post Mile: 39.205 to 39.480 Length: 0.275 Estimated Lane Mileage: 1.100	L1	Flexible				8.30	6.70	0.12	121	Fair	Yellow	1	0.275
	L2	Flexible				16.40	7.70	0.18	132	Fair	Yellow	1	0.275
	R1	Flexible				11.70	6.70	0.14	161	Fair	Yellow	1	0.275
	R2	Flexible				14.00	7.70	0.14	161	Fair	Yellow	1	0.275
Post Mile: 39.480 to 40.368 Length: 0.888 Estimated Lane Mileage: 3.552	L1	Flexible				10.10	6.70	0.16	148	Fair	Yellow	1	0.888
	L2	Flexible				18.80	7.70	0.24	165	Fair	Yellow	1	0.888
	R1	Flexible				12.90	6.70	0.13	137	Fair	Yellow	1	0.888
	R2	Flexible				17.80	7.70	0.19	145	Fair	Yellow	1	0.888
Post Mile: 40.368 to 42.360 Length: 1.992 Estimated Lane Mileage: 7.848	L1	Flexible				42.80	8.20	0.13	112	Fair	Yellow	1	1.962
	L2	Flexible				49.60	9.50	0.17	131	Fair	Yellow	1	1.962
	R1	Flexible				32.10	12.70	0.10	102	Fair	Orange	1	1.962
	R2	Flexible				55.90	10.70	0.17	130	Fair	Orange	1	1.962
Post Mile: 42.360 to R43.200 Length: 0.840 Estimated Lane Mileage: 3.360	L1	Flexible				45.10	9.50	0.13	132	Fair	Yellow	1	0.840
	L2	Flexible				54.80	9.70	0.14	129	Fair	Yellow	1	0.840
	R1	Flexible				45.40	11.20	0.07	113	Fair	Orange	1	0.840
	R2	Flexible				51.40	8.30	0.14	131	Fair	Yellow	1	0.840
				<b>5.90</b>	<b>3.89</b>	<b>27.83</b>	<b>8.87</b>	<b>0.15</b>	<b>131</b>				<b>37.508</b>
Lane Weighted Average												Total	

PaveM Scenario Used: #3299  
 APCS Data Year: 2019  
 Using: Prior-Treatment Distresses

**Caltrans Pavement Program  
 Pavement Condition Detailed Report (PaveM)**

**District: 1; County: Mendocino (MEN); Route: 101  
 From PM: R33.730 To PM: R43.200**

**Year: 2025 (Predicted)**  
 R-Length: 9.407. L-Length: 9.407  
 R-Lane Miles: 18.754. L-Lane Miles: 18.754 (Unknown lane miles: 0.000)

Pavement Segment	Lane	Type	Concrete			Asphalt			IRI in/mi	MAP-21 Condition	Traditional Condition	Road Class	Estimated Lane Miles
			1st%	3rd%	Fault%	Alligator		Rut (in)					
						A%	B%						
Post Mile: R33.730 to R34.152 Length: 0.422 Estimated Lane Mileage: 0.844	L1	Flexible				49.10	4.60	0.19	103	Fair	Yellow	1	0.422
	L2	Flexible				12.20	17.70	0.23	187	Fair	Orange	1	0.422
Post Mile: R33.730 to R33.765 Length: 0.035 Estimated Lane Mileage: 0.070	R1	JPC		0.60	0.78				66	Good	Green	1	0.035
	R2	JPC		12.00	8.22				120	Fair	Red	1	0.035
Post Mile: R33.765 to R35.200 Length: 1.435 Estimated Lane Mileage: 2.870	R1	Flexible				32.10	14.60	0.16	128	Fair	Orange	1	1.435
	R2	Flexible				32.40	12.70	0.18	149	Fair	Orange	1	1.435
Post Mile: R34.152 to R35.200 Length: 1.048 Estimated Lane Mileage: 2.096	L1	Flexible				37.00	10.10	0.16	113	Fair	Orange	1	1.048
	L2	Flexible				26.50	17.80	0.21	154	Fair	Orange	1	1.048
Post Mile: R35.200 to R36.164 Length: 0.964 Estimated Lane Mileage: 3.856	L1	Flexible				35.80	8.90	0.15	133	Fair	Yellow	1	0.964
	L2	Flexible				36.60	11.60	0.17	154	Fair	Orange	1	0.964
	R1	Flexible				21.30	10.20	0.11	110	Fair	Orange	1	0.964
	R2	Flexible				28.50	12.50	0.20	141	Fair	Orange	1	0.964
Post Mile: 36.164 to 37.147 Length: 0.983 Estimated Lane Mileage: 1.966	L1	Flexible				17.70	9.70	0.13	149	Fair	Yellow	1	0.983
	L2	Flexible				24.60	11.50	0.18	159	Fair	Orange	1	0.983
Post Mile: 36.164 to 37.655 Length: 1.491 Estimated Lane Mileage: 2.982	R1	Flexible				22.70	9.90	0.12	129	Fair	Yellow	1	1.491
	R2	Flexible				20.30	11.10	0.16	148	Fair	Orange	1	1.491
Post Mile: 37.147 to 37.655 Length: 0.508 Estimated Lane Mileage: 1.016	L1	Flexible				9.20	4.30	0.11	132	Fair	Yellow	1	0.508
	L2	Flexible				13.40	6.20	0.12	138	Fair	Yellow	1	0.508
Post Mile: 37.655 to 38.216 Length: 0.561 Estimated Lane Mileage: 2.244	L1	Flexible				12.20	10.10	0.10	109	Fair	Orange	1	0.561
	L2	Flexible				22.00	11.20	0.12	133	Fair	Orange	1	0.561
	R1	Flexible				27.90	14.40	0.12	154	Fair	Orange	1	0.561
	R2	Flexible				13.80	11.20	0.10	152	Fair	Orange	1	0.561
Post Mile: R38.216 to R39.142 Length: 0.926 Estimated Lane Mileage: 3.704	L1	Flexible				12.20	10.10	0.12	117	Fair	Orange	1	0.926
	L2	Flexible				16.10	11.20	0.10	105	Fair	Orange	1	0.926
	R1	Flexible				14.10	10.10	0.09	146	Fair	Orange	1	0.926
	R2	Flexible				18.30	11.20	0.13	154	Fair	Orange	1	0.926
Post Mile: 39.205 to 39.480 Length: 0.275 Estimated Lane Mileage: 1.100	L1	Flexible				10.80	8.90	0.12	124	Fair	Yellow	1	0.275
	L2	Flexible				19.60	10.40	0.18	138	Fair	Orange	1	0.275
	R1	Flexible				14.40	8.90	0.14	164	Fair	Yellow	1	0.275
	R2	Flexible				17.10	10.40	0.14	167	Fair	Orange	1	0.275
Post Mile: 39.480 to 40.368 Length: 0.888 Estimated Lane Mileage: 3.552	L1	Flexible				12.80	8.90	0.16	151	Fair	Yellow	1	0.888
	L2	Flexible				22.00	10.40	0.24	170	Fair	Orange	1	0.888
	R1	Flexible				15.70	8.90	0.13	141	Fair	Yellow	1	0.888
	R2	Flexible				21.00	10.40	0.19	150	Fair	Orange	1	0.888
Post Mile: 40.368 to 42.360 Length: 1.992 Estimated Lane Mileage: 7.848	L1	Flexible				45.30	10.90	0.13	115	Fair	Orange	1	1.962
	L2	Flexible				51.90	12.50	0.17	137	Fair	Orange	1	1.962
	R1	Flexible				34.60	15.70	0.10	105	Fair	Orange	1	1.962
	R2	Flexible				57.40	13.80	0.17	136	Fair	Orange	1	1.962
Post Mile: 42.360 to R43.200 Length: 0.840 Estimated Lane Mileage: 3.360	L1	Flexible				47.30	12.30	0.13	136	Fair	Orange	1	0.840
	L2	Flexible				56.70	12.70	0.14	134	Fair	Orange	1	0.840
	R1	Flexible				47.50	14.00	0.07	117	Fair	Orange	1	0.840
	R2	Flexible				53.70	11.20	0.14	137	Fair	Orange	1	0.840
				<b>6.30</b>	<b>4.50</b>	<b>30.53</b>	<b>11.58</b>	<b>0.15</b>	<b>136</b>				<b>37.508</b>
Lane Weighted Average												Total	



PaveM Scenario Used: #3299  
 APCS Data Year: 2019  
 Using: Prior-Treatment Distresses

**Caltrans Pavement Program  
 Pavement Condition Detailed Report (PaveM)**

**District: 1; County: Mendocino (MEN); Route: 101  
 From PM: R33.730 To PM: R43.200**

**Year: 2026 (Predicted)**  
 R-Length: 9.407. L-Length: 9.407  
 R-Lane Miles: 18.754. L-Lane Miles: 18.754 (Unknown lane miles: 0.000)

Pavement Segment	Lane	Type	Concrete			Asphalt			IRI in/mi	MAP-21 Condition	Traditional Condition	Road Class	Estimated Lane Miles
			1st%	3rd%	Fault%	Alligator		Rut (in)					
						A%	B%						
Post Mile: R33.730 to R34.152 Length: 0.422 Estimated Lane Mileage: 0.844	L1	Flexible				50.90	5.90	0.19	107	Fair	Yellow	1	0.422
	L2	Flexible				14.40	20.40	0.23	192	Fair	Orange	1	0.422
Post Mile: R33.730 to R33.765 Length: 0.035 Estimated Lane Mileage: 0.070	R1	JPC		0.80	1.05				67	Good	Green	1	0.035
	R2	JPC		12.60	9.26				122	Fair	Red	1	0.035
Post Mile: R33.765 to R35.200 Length: 1.435 Estimated Lane Mileage: 2.870	R1	Flexible				34.40	17.70	0.16	132	Fair	Orange	1	1.435
	R2	Flexible				35.30	15.90	0.18	154	Fair	Orange	1	1.435
Post Mile: R34.152 to R35.200 Length: 1.048 Estimated Lane Mileage: 2.096	L1	Flexible				39.60	12.90	0.16	117	Fair	Orange	1	1.048
	L2	Flexible				29.20	21.30	0.21	159	Fair	Orange	1	1.048
Post Mile: R35.200 to R36.164 Length: 0.964 Estimated Lane Mileage: 3.856	L1	Flexible				38.30	11.40	0.15	137	Fair	Orange	1	0.964
	L2	Flexible				39.20	14.60	0.17	159	Fair	Orange	1	0.964
	R1	Flexible				24.00	12.70	0.11	114	Fair	Orange	1	0.964
	R2	Flexible				31.20	15.60	0.20	147	Fair	Orange	1	0.964
Post Mile: 36.164 to 37.147 Length: 0.983 Estimated Lane Mileage: 1.966	L1	Flexible				20.30	12.20	0.13	153	Fair	Orange	1	0.983
	L2	Flexible				27.50	14.50	0.18	165	Fair	Orange	1	0.983
Post Mile: 36.164 to 37.655 Length: 1.491 Estimated Lane Mileage: 2.982	R1	Flexible				25.40	12.40	0.12	133	Fair	Orange	1	1.491
	R2	Flexible				23.30	14.00	0.16	153	Fair	Orange	1	1.491
Post Mile: 37.147 to 37.655 Length: 0.508 Estimated Lane Mileage: 1.016	L1	Flexible				10.90	5.50	0.11	135	Fair	Yellow	1	0.508
	L2	Flexible				15.80	8.00	0.12	144	Fair	Yellow	1	0.508
Post Mile: 37.655 to 38.216 Length: 0.561 Estimated Lane Mileage: 2.244	L1	Flexible				15.10	12.90	0.10	113	Fair	Orange	1	0.561
	L2	Flexible				25.20	14.40	0.12	138	Fair	Orange	1	0.561
	R1	Flexible				30.50	17.40	0.12	158	Fair	Orange	1	0.561
	R2	Flexible				16.90	14.40	0.10	158	Fair	Orange	1	0.561
Post Mile: R38.216 to R39.142 Length: 0.926 Estimated Lane Mileage: 3.704	L1	Flexible				15.10	12.90	0.12	121	Fair	Orange	1	0.926
	L2	Flexible				19.30	14.40	0.10	111	Fair	Orange	1	0.926
	R1	Flexible				17.00	12.90	0.09	150	Fair	Orange	1	0.926
	R2	Flexible				21.50	14.40	0.13	160	Fair	Orange	1	0.926
Post Mile: 39.205 to 39.480 Length: 0.275 Estimated Lane Mileage: 1.100	L1	Flexible				13.30	11.40	0.12	128	Fair	Orange	1	0.275
	L2	Flexible				22.60	13.30	0.18	143	Fair	Orange	1	0.275
	R1	Flexible				17.00	11.40	0.14	168	Fair	Orange	1	0.275
	R2	Flexible				20.10	13.30	0.14	172	Fair	Orange	1	0.275
Post Mile: 39.480 to 40.368 Length: 0.888 Estimated Lane Mileage: 3.552	L1	Flexible				15.40	11.40	0.16	155	Fair	Orange	1	0.888
	L2	Flexible				25.10	13.30	0.24	176	Fair	Orange	1	0.888
	R1	Flexible				18.30	11.40	0.13	145	Fair	Orange	1	0.888
	R2	Flexible				24.10	13.30	0.19	156	Fair	Orange	1	0.888
Post Mile: 40.368 to 42.360 Length: 1.992 Estimated Lane Mileage: 7.848	L1	Flexible				47.40	13.70	0.13	119	Fair	Orange	1	1.962
	L2	Flexible				53.50	15.80	0.17	142	Fair	Orange	1	1.962
	R1	Flexible				36.70	18.90	0.10	109	Fair	Orange	1	1.962
	R2	Flexible				58.20	17.20	0.17	141	Fair	Orange	1	1.962
Post Mile: 42.360 to R43.200 Length: 0.840 Estimated Lane Mileage: 3.360	L1	Flexible				49.10	15.20	0.13	140	Fair	Orange	1	0.840
	L2	Flexible				57.80	16.00	0.14	140	Fair	Orange	1	0.840
	R1	Flexible				49.00	17.10	0.07	121	Fair	Orange	1	0.840
	R2	Flexible				55.30	14.40	0.14	142	Fair	Orange	1	0.840
			<b>6.70</b>	<b>5.16</b>	<b>32.93</b>	<b>14.49</b>	<b>0.15</b>	<b>140</b>					<b>37.508</b>
Lane Weighted Average												Total	

PaveM Scenario Used: #3299  
 APCS Data Year: 2019  
 Using: Prior-Treatment Distresses

**Caltrans Pavement Program  
 Pavement Condition Detailed Report (PaveM)**

**District: 1; County: Mendocino (MEN); Route: 101  
 From PM: R33.730 To PM: R43.200**

**Year: 2027 (Predicted)**  
 R-Length: 9.407. L-Length: 9.407  
 R-Lane Miles: 18.754. L-Lane Miles: 18.754 (Unknown lane miles: 0.000)

Pavement Segment	Lane	Type	Concrete			Asphalt			IRI in/mi	MAP-21 Condition	Traditional Condition	Road Class	Estimated Lane Miles
			1st%	3rd%	Fault%	Alligator		Rut (in)					
						A%	B%						
Post Mile: R33.730 to R34.152 Length: 0.422 Estimated Lane Mileage: 0.844	L1	Flexible				52.60	7.30	0.19	110	Fair	Yellow	1	0.422
	L2	Flexible				16.50	23.20	0.23	196	Fair	Orange	1	0.422
Post Mile: R33.730 to R33.765 Length: 0.035 Estimated Lane Mileage: 0.070	R1	JPC		1.00	1.35				68	Good	Green	1	0.035
	R2	JPC		13.20	10.33				124	Fair	Red	1	0.035
Post Mile: R33.765 to R35.200 Length: 1.435 Estimated Lane Mileage: 2.870	R1	Flexible				36.30	20.90	0.16	136	Fair	Orange	1	1.435
	R2	Flexible				37.60	19.40	0.18	160	Fair	Orange	1	1.435
Post Mile: R34.152 to R35.200 Length: 1.048 Estimated Lane Mileage: 2.096	L1	Flexible				41.80	15.90	0.16	121	Fair	Orange	1	1.048
	L2	Flexible				31.30	25.00	0.21	165	Fair	Orange	1	1.048
Post Mile: R35.200 to R36.164 Length: 0.964 Estimated Lane Mileage: 3.856	L1	Flexible				40.40	14.00	0.15	141	Fair	Orange	1	0.964
	L2	Flexible				41.20	17.80	0.17	165	Fair	Orange	1	0.964
	R1	Flexible				26.40	15.50	0.11	117	Fair	Orange	1	0.964
	R2	Flexible				33.60	18.80	0.20	152	Fair	Orange	1	0.964
Post Mile: 36.164 to 37.147 Length: 0.983 Estimated Lane Mileage: 1.966	L1	Flexible				22.80	14.90	0.13	156	Fair	Orange	1	0.983
	L2	Flexible				30.10	17.70	0.18	170	Fair	Orange	1	0.983
Post Mile: 36.164 to 37.655 Length: 1.491 Estimated Lane Mileage: 2.982	R1	Flexible				27.80	15.10	0.12	136	Fair	Orange	1	1.491
	R2	Flexible				26.00	17.20	0.16	159	Fair	Orange	1	1.491
Post Mile: 37.147 to 37.655 Length: 0.508 Estimated Lane Mileage: 1.016	L1	Flexible				12.50	6.80	0.11	139	Fair	Yellow	1	0.508
	L2	Flexible				18.10	10.00	0.12	149	Fair	Yellow	1	0.508
Post Mile: 37.655 to 38.216 Length: 0.561 Estimated Lane Mileage: 2.244	L1	Flexible				17.80	15.90	0.10	117	Fair	Orange	1	0.561
	L2	Flexible				28.20	17.70	0.12	144	Fair	Orange	1	0.561
	R1	Flexible				32.60	20.70	0.12	162	Fair	Orange	1	0.561
	R2	Flexible				20.00	17.70	0.10	163	Fair	Orange	1	0.561
Post Mile: R38.216 to R39.142 Length: 0.926 Estimated Lane Mileage: 3.704	L1	Flexible				17.80	15.90	0.12	125	Fair	Orange	1	0.926
	L2	Flexible				22.40	17.70	0.10	116	Fair	Orange	1	0.926
	R1	Flexible				19.80	15.90	0.09	154	Fair	Orange	1	0.926
	R2	Flexible				24.60	17.70	0.13	165	Fair	Orange	1	0.926
Post Mile: 39.205 to 39.480 Length: 0.275 Estimated Lane Mileage: 1.100	L1	Flexible				15.90	14.00	0.12	132	Fair	Orange	1	0.275
	L2	Flexible				25.40	16.50	0.18	149	Fair	Orange	1	0.275
	R1	Flexible				19.60	14.00	0.14	172	Fair	Orange	1	0.275
	R2	Flexible				22.90	16.50	0.14	178	Fair	Orange	1	0.275
Post Mile: 39.480 to 40.368 Length: 0.888 Estimated Lane Mileage: 3.552	L1	Flexible				17.90	14.00	0.16	159	Fair	Orange	1	0.888
	L2	Flexible				27.80	16.50	0.24	181	Fair	Orange	1	0.888
	R1	Flexible				20.90	14.00	0.13	148	Fair	Orange	1	0.888
	R2	Flexible				26.80	16.50	0.19	161	Fair	Orange	1	0.888
Post Mile: 40.368 to 42.360 Length: 1.992 Estimated Lane Mileage: 7.848	L1	Flexible				48.90	16.80	0.13	123	Fair	Orange	1	1.962
	L2	Flexible				54.50	19.20	0.17	148	Fair	Orange	1	1.962
	R1	Flexible				38.40	22.10	0.10	113	Fair	Orange	1	1.962
	R2	Flexible				58.50	20.70	0.17	147	Fair	Orange	1	1.962
Post Mile: 42.360 to R43.200 Length: 0.840 Estimated Lane Mileage: 3.360	L1	Flexible				50.20	18.40	0.13	144	Fair	Orange	1	0.840
	L2	Flexible				58.20	19.50	0.14	145	Fair	Orange	1	0.840
	R1	Flexible				50.00	20.30	0.07	125	Fair	Orange	1	0.840
	R2	Flexible				56.40	17.70	0.14	148	Fair	Orange	1	0.840
			<b>7.10</b>	<b>5.84</b>	<b>5.84</b>	<b>34.97</b>	<b>17.57</b>	<b>0.15</b>	<b>145</b>				<b>37.508</b>
Lane Weighted Average												Total	

PaveM Scenario Used: #3299  
 APCS Data Year: 2019  
 Using: Prior-Treatment Distresses

### Caltrans Pavement Program Pavement Condition Detailed Report (PaveM)

**District: 1; County: Mendocino (MEN); Route: 101**  
**From PM: R33.730 To PM: R43.200**

**Year: 2028 (Predicted)**  
**R-Length: 9.407. L-Length: 9.407**  
**R-Lane Miles: 18.754. L-Lane Miles: 18.754 (Unknown lane miles: 0.000)**

Pavement Segment	Lane	Type	Concrete			Asphalt			IRI in/mi	MAP-21 Condition	Traditional Condition	Road Class	Estimated Lane Miles
			1st%	3rd%	Fault%	Alligator		Rut (in)					
						A%	B%						
Post Mile: R33.730 to R34.152 Length: 0.422 Estimated Lane Mileage: 0.844	L1	Flexible				53.90	8.90	0.19	114	Fair	Yellow	1	0.422
	L2	Flexible				18.50	26.00	0.23	201	Fair	Orange	1	0.422
Post Mile: R33.730 to R33.765 Length: 0.035 Estimated Lane Mileage: 0.070	R1	JPC		1.20	1.69				69	Good	Green	1	0.035
	R2	JPC		13.80	11.42				127	Fair	Red	1	0.035
Post Mile: R33.765 to R35.200 Length: 1.435 Estimated Lane Mileage: 2.870	R1	Flexible				37.90	24.20	0.16	140	Fair	Orange	1	1.435
	R2	Flexible				39.40	23.00	0.18	165	Fair	Orange	1	1.435
Post Mile: R34.152 to R35.200 Length: 1.048 Estimated Lane Mileage: 2.096	L1	Flexible				43.40	19.10	0.16	125	Fair	Orange	1	1.048
	L2	Flexible				33.00	28.80	0.21	170	Fair	Orange	1	1.048
Post Mile: R35.200 to R36.164 Length: 0.964 Estimated Lane Mileage: 3.856	L1	Flexible				42.10	16.80	0.15	145	Fair	Orange	1	0.964
	L2	Flexible				42.90	21.10	0.17	170	Fair	Orange	1	0.964
	R1	Flexible				28.60	18.30	0.11	121	Fair	Orange	1	0.964
	R2	Flexible				35.60	22.20	0.20	158	Fair	Orange	1	0.964
Post Mile: 36.164 to 37.147 Length: 0.983 Estimated Lane Mileage: 1.966	L1	Flexible				25.20	17.70	0.13	160	Fair	Orange	1	0.983
	L2	Flexible				32.40	21.00	0.18	176	Fair	Orange	1	0.983
Post Mile: 36.164 to 37.655 Length: 1.491 Estimated Lane Mileage: 2.982	R1	Flexible				30.00	17.90	0.12	140	Fair	Orange	1	1.491
	R2	Flexible				28.50	20.50	0.16	164	Fair	Orange	1	1.491
Post Mile: 37.147 to 37.655 Length: 0.508 Estimated Lane Mileage: 1.016	L1	Flexible				14.20	8.20	0.11	143	Fair	Yellow	1	0.508
	L2	Flexible				20.30	12.10	0.12	155	Fair	Orange	1	0.508
Post Mile: 37.655 to 38.216 Length: 0.561 Estimated Lane Mileage: 2.244	L1	Flexible				20.40	19.10	0.10	121	Fair	Orange	1	0.561
	L2	Flexible				30.60	21.30	0.12	149	Fair	Orange	1	0.561
	R1	Flexible				34.40	24.00	0.12	166	Fair	Orange	1	0.561
	R2	Flexible				22.70	21.30	0.10	169	Fair	Orange	1	0.561
Post Mile: R38.216 to R39.142 Length: 0.926 Estimated Lane Mileage: 3.704	L1	Flexible				20.40	19.10	0.12	129	Fair	Orange	1	0.926
	L2	Flexible				25.00	21.30	0.10	122	Fair	Orange	1	0.926
	R1	Flexible				22.40	19.10	0.09	158	Fair	Orange	1	0.926
	R2	Flexible				27.20	21.30	0.13	171	Fair	Orange	1	0.926
Post Mile: 39.205 to 39.480 Length: 0.275 Estimated Lane Mileage: 1.100	L1	Flexible				18.20	16.80	0.12	136	Fair	Orange	1	0.275
	L2	Flexible				28.00	19.70	0.18	154	Fair	Orange	1	0.275
	R1	Flexible				22.00	16.80	0.14	176	Fair	Orange	1	0.275
	R2	Flexible				25.60	19.70	0.14	183	Fair	Orange	1	0.275
Post Mile: 39.480 to 40.368 Length: 0.888 Estimated Lane Mileage: 3.552	L1	Flexible				20.30	16.80	0.16	163	Fair	Orange	1	0.888
	L2	Flexible				30.30	19.70	0.24	187	Fair	Orange	1	0.888
	R1	Flexible				23.30	16.80	0.13	152	Fair	Orange	1	0.888
	R2	Flexible				29.30	19.70	0.19	167	Fair	Orange	1	0.888
Post Mile: 40.368 to 42.360 Length: 1.992 Estimated Lane Mileage: 7.848	L1	Flexible				50.00	20.00	0.13	127	Fair	Orange	1	1.962
	L2	Flexible				54.80	22.80	0.17	153	Fair	Orange	1	1.962
	R1	Flexible				39.70	25.50	0.10	117	Fair	Orange	1	1.962
	R2	Flexible				58.10	24.40	0.17	152	Fair	Orange	1	1.962
Post Mile: 42.360 to R43.200 Length: 0.840 Estimated Lane Mileage: 3.360	L1	Flexible				51.00	21.60	0.13	147	Fair	Orange	1	0.840
	L2	Flexible				58.10	23.10	0.14	151	Fair	Orange	1	0.840
	R1	Flexible				50.60	23.60	0.07	128	Fair	Orange	1	0.840
	R2	Flexible				56.70	21.30	0.14	153	Fair	Orange	1	0.840
				<b>7.50</b>	<b>6.56</b>	<b>36.65</b>	<b>20.80</b>	<b>0.15</b>	<b>149</b>				<b>37.508</b>
Lane Weighted Average												Total	

PaveM Scenario Used: #3299  
 APCS Data Year: 2019  
 Using: Prior-Treatment Distresses

**Caltrans Pavement Program  
 Pavement Condition Detailed Report (PaveM)**

**District: 1; County: Mendocino (MEN); Route: 101  
 From PM: R33.730 To PM: R43.200**

**Year: 2029 (Predicted)**  
 R-Length: 9.407. L-Length: 9.407  
 R-Lane Miles: 18.754. L-Lane Miles: 18.754 (Unknown lane miles: 0.000)

Pavement Segment	Lane	Type	Concrete			Asphalt			IRI in/mi	MAP-21 Condition	Traditional Condition	Road Class	Estimated Lane Miles
			1st%	3rd%	Fault%	Alligator		Rut (in)					
						A%	B%						
Post Mile: R33.730 to R34.152 Length: 0.422 Estimated Lane Mileage: 0.844	L1	Flexible				55.10	10.50	0.19	118	Fair	Orange	1	0.422
	L2	Flexible				20.40	28.90	0.23	205	Fair	Orange	1	0.422
Post Mile: R33.730 to R33.765 Length: 0.035 Estimated Lane Mileage: 0.070	R1	JPC		1.50	2.06				70	Good	Green	1	0.035
	R2	JPC		14.40	12.54				129	Fair	Red	1	0.035
Post Mile: R33.765 to R35.200 Length: 1.435 Estimated Lane Mileage: 2.870	R1	Flexible				38.90	27.70	0.16	144	Fair	Orange	1	1.435
	R2	Flexible				40.70	26.80	0.18	171	Fair	Orange	1	1.435
Post Mile: R34.152 to R35.200 Length: 1.048 Estimated Lane Mileage: 2.096	L1	Flexible				44.70	22.30	0.16	129	Fair	Orange	1	1.048
	L2	Flexible				34.30	32.60	0.21	176	Fair	Red	1	1.048
Post Mile: R35.200 to R36.164 Length: 0.964 Estimated Lane Mileage: 3.856	L1	Flexible				43.50	19.70	0.15	149	Fair	Orange	1	0.964
	L2	Flexible				43.90	24.60	0.17	176	Fair	Orange	1	0.964
	R1	Flexible				30.50	21.20	0.11	125	Fair	Orange	1	0.964
	R2	Flexible				37.20	25.60	0.20	163	Fair	Orange	1	0.964
Post Mile: 36.164 to 37.147 Length: 0.983 Estimated Lane Mileage: 1.966	L1	Flexible				27.20	20.60	0.13	164	Fair	Orange	1	0.983
	L2	Flexible				34.20	24.50	0.18	181	Fair	Orange	1	0.983
Post Mile: 36.164 to 37.655 Length: 1.491 Estimated Lane Mileage: 2.982	R1	Flexible				31.80	20.90	0.12	144	Fair	Orange	1	1.491
	R2	Flexible				30.60	23.90	0.16	170	Fair	Orange	1	1.491
Post Mile: 37.147 to 37.655 Length: 0.508 Estimated Lane Mileage: 1.016	L1	Flexible				15.80	9.70	0.11	147	Fair	Yellow	1	0.508
	L2	Flexible				22.50	14.30	0.12	160	Fair	Orange	1	0.508
Post Mile: 37.655 to 38.216 Length: 0.561 Estimated Lane Mileage: 2.244	L1	Flexible				22.90	22.30	0.10	125	Fair	Orange	1	0.561
	L2	Flexible				32.70	25.00	0.12	155	Fair	Orange	1	0.561
	R1	Flexible				35.80	27.40	0.12	170	Fair	Orange	1	0.561
	R2	Flexible				25.20	25.00	0.10	174	Fair	Orange	1	0.561
Post Mile: R38.216 to R39.142 Length: 0.926 Estimated Lane Mileage: 3.704	L1	Flexible				22.90	22.30	0.12	133	Fair	Orange	1	0.926
	L2	Flexible				27.40	25.00	0.10	127	Fair	Orange	1	0.926
	R1	Flexible				24.80	22.30	0.09	162	Fair	Orange	1	0.926
	R2	Flexible				29.40	25.00	0.13	176	Fair	Orange	1	0.926
Post Mile: 39.205 to 39.480 Length: 0.275 Estimated Lane Mileage: 1.100	L1	Flexible				20.50	19.70	0.12	140	Fair	Orange	1	0.275
	L2	Flexible				30.00	23.20	0.18	160	Fair	Orange	1	0.275
	R1	Flexible				24.20	19.70	0.14	180	Fair	Orange	1	0.275
	R2	Flexible				27.70	23.20	0.14	189	Fair	Orange	1	0.275
Post Mile: 39.480 to 40.368 Length: 0.888 Estimated Lane Mileage: 3.552	L1	Flexible				22.60	19.70	0.16	167	Fair	Orange	1	0.888
	L2	Flexible				32.30	23.20	0.24	192	Fair	Orange	1	0.888
	R1	Flexible				25.50	19.70	0.13	156	Fair	Orange	1	0.888
	R2	Flexible				31.40	23.20	0.19	172	Fair	Orange	1	0.888
Post Mile: 40.368 to 42.360 Length: 1.992 Estimated Lane Mileage: 7.848	L1	Flexible				50.60	23.30	0.13	131	Fair	Orange	1	1.962
	L2	Flexible				54.50	26.60	0.17	159	Fair	Orange	1	1.962
	R1	Flexible				40.60	28.90	0.10	121	Fair	Orange	1	1.962
	R2	Flexible				57.30	28.10	0.17	158	Fair	Orange	1	1.962
Post Mile: 42.360 to R43.200 Length: 0.840 Estimated Lane Mileage: 3.360	L1	Flexible				51.30	25.00	0.13	151	Fair	Orange	1	0.840
	L2	Flexible				57.40	26.90	0.14	156	Fair	Orange	1	0.840
	R1	Flexible				50.70	27.00	0.07	132	Fair	Orange	1	0.840
	R2	Flexible				56.50	25.00	0.14	159	Fair	Orange	1	0.840
			<b>7.95</b>	<b>7.30</b>	<b>37.94</b>	<b>24.14</b>	<b>0.15</b>	<b>154</b>					<b>37.508</b>
Lane Weighted Average												Total	

PaveM Scenario Used: #3299  
 APCS Data Year: 2019  
 Using: Prior-Treatment Distresses

**Caltrans Pavement Program  
 Pavement Condition Detailed Report (PaveM)**

**District: 1; County: Mendocino (MEN); Route: 101  
 From PM: R33.730 To PM: R43.200**

**Year: 2030 (Predicted)**  
 R-Length: 9.407. L-Length: 9.407  
 R-Lane Miles: 18.754. L-Lane Miles: 18.754 (Unknown lane miles: 0.000)

Pavement Segment	Lane	Type	Concrete			Asphalt			IRI in/mi	MAP-21 Condition	Traditional Condition	Road Class	Estimated Lane Miles
			1st%	3rd%	Fault%	Alligator		Rut (in)					
						A%	B%						
Post Mile: R33.730 to R34.152 Length: 0.422 Estimated Lane Mileage: 0.844	L1	Flexible				56.00	12.30	0.19	121	Fair	Orange	1	0.422
	L2	Flexible				22.00	31.80	0.23	210	Fair	Red	1	0.422
Post Mile: R33.730 to R33.765 Length: 0.035 Estimated Lane Mileage: 0.070	R1	JPC		1.80	2.47				71	Good	Green	1	0.035
	R2	JPC		15.00	13.68				131	Fair	Red	1	0.035
Post Mile: R33.765 to R35.200 Length: 1.435 Estimated Lane Mileage: 2.870	R1	Flexible				39.70	31.10	0.16	147	Fair	Red	1	1.435
	R2	Flexible				41.50	30.60	0.18	176	Fair	Red	1	1.435
Post Mile: R34.152 to R35.200 Length: 1.048 Estimated Lane Mileage: 2.096	L1	Flexible				45.40	25.70	0.16	132	Fair	Orange	1	1.048
	L2	Flexible				35.00	36.50	0.21	181	Fair	Red	1	1.048
Post Mile: R35.200 to R36.164 Length: 0.964 Estimated Lane Mileage: 3.856	L1	Flexible				44.40	22.70	0.15	152	Fair	Orange	1	0.964
	L2	Flexible				44.60	28.10	0.17	181	Fair	Orange	1	0.964
	R1	Flexible				32.20	24.20	0.11	129	Fair	Orange	1	0.964
	R2	Flexible				38.20	29.20	0.20	169	Fair	Orange	1	0.964
Post Mile: 36.164 to 37.147 Length: 0.983 Estimated Lane Mileage: 1.966	L1	Flexible				29.10	23.60	0.13	168	Fair	Orange	1	0.983
	L2	Flexible				35.60	28.00	0.18	187	Fair	Orange	1	0.983
Post Mile: 36.164 to 37.655 Length: 1.491 Estimated Lane Mileage: 2.982	R1	Flexible				33.40	23.90	0.12	148	Fair	Orange	1	1.491
	R2	Flexible				32.30	27.40	0.16	175	Fair	Orange	1	1.491
Post Mile: 37.147 to 37.655 Length: 0.508 Estimated Lane Mileage: 1.016	L1	Flexible				17.50	11.20	0.11	151	Fair	Orange	1	0.508
	L2	Flexible				24.60	16.60	0.12	166	Fair	Orange	1	0.508
Post Mile: 37.655 to 38.216 Length: 0.561 Estimated Lane Mileage: 2.244	L1	Flexible				24.90	25.70	0.10	128	Fair	Orange	1	0.561
	L2	Flexible				34.30	28.80	0.12	160	Fair	Orange	1	0.561
	R1	Flexible				36.80	30.80	0.12	173	Fair	Red	1	0.561
	R2	Flexible				27.30	28.80	0.10	180	Fair	Orange	1	0.561
Post Mile: R38.216 to R39.142 Length: 0.926 Estimated Lane Mileage: 3.704	L1	Flexible				24.90	25.70	0.12	136	Fair	Orange	1	0.926
	L2	Flexible				29.30	28.80	0.10	133	Fair	Orange	1	0.926
	R1	Flexible				26.80	25.70	0.09	165	Fair	Orange	1	0.926
	R2	Flexible				31.20	28.80	0.13	182	Fair	Orange	1	0.926
Post Mile: 39.205 to 39.480 Length: 0.275 Estimated Lane Mileage: 1.100	L1	Flexible				22.60	22.70	0.12	143	Fair	Orange	1	0.275
	L2	Flexible				31.90	26.60	0.18	165	Fair	Orange	1	0.275
	R1	Flexible				26.10	22.70	0.14	183	Fair	Orange	1	0.275
	R2	Flexible				29.80	26.60	0.14	194	Fair	Orange	1	0.275
Post Mile: 39.480 to 40.368 Length: 0.888 Estimated Lane Mileage: 3.552	L1	Flexible				24.60	22.70	0.16	170	Fair	Orange	1	0.888
	L2	Flexible				34.00	26.60	0.24	198	Fair	Orange	1	0.888
	R1	Flexible				27.40	22.70	0.13	160	Fair	Orange	1	0.888
	R2	Flexible				33.20	26.60	0.19	178	Fair	Orange	1	0.888
Post Mile: 40.368 to 42.360 Length: 1.992 Estimated Lane Mileage: 7.848	L1	Flexible				50.70	26.70	0.13	134	Fair	Orange	1	1.962
	L2	Flexible				53.80	30.40	0.17	164	Fair	Red	1	1.962
	R1	Flexible				41.00	32.40	0.10	124	Fair	Red	1	1.962
	R2	Flexible				56.10	31.90	0.17	163	Fair	Red	1	1.962
Post Mile: 42.360 to R43.200 Length: 0.840 Estimated Lane Mileage: 3.360	L1	Flexible				51.20	28.40	0.13	155	Fair	Orange	1	0.840
	L2	Flexible				56.30	30.70	0.14	162	Fair	Red	1	0.840
	R1	Flexible				50.30	30.50	0.07	136	Fair	Red	1	0.840
	R2	Flexible				55.70	28.80	0.14	164	Fair	Orange	1	0.840
			<b>8.40</b>	<b>8.08</b>	<b>38.85</b>	<b>27.55</b>	<b>0.15</b>	<b>159</b>					<b>37.508</b>
Lane Weighted Average												Total	

PaveM Scenario Used: #3299  
 APCS Data Year: 2019  
 Using: Prior-Treatment Distresses

**Caltrans Pavement Program  
 Pavement Condition Detailed Report (PaveM)**

**District: 1; County: Mendocino (MEN); Route: 101  
 From PM: R33.730 To PM: R43.200**

**Year: 2031 (Predicted)**  
 R-Length: 9.407. L-Length: 9.407  
 R-Lane Miles: 18.754. L-Lane Miles: 18.754 (Unknown lane miles: 0.000)

Pavement Segment	Lane	Type	Concrete			Asphalt			IRI in/mi	MAP-21 Condition	Traditional Condition	Road Class	Estimated Lane Miles
			1st%	3rd%	Fault%	Alligator		Rut (in)					
						A%	B%						
Post Mile: R33.730 to R34.152 Length: 0.422 Estimated Lane Mileage: 0.844	L1	Flexible				56.80	14.10	0.19	125	Fair	Orange	1	0.422
	L2	Flexible				23.40	34.80	0.23	215	Fair	Red	1	0.422
Post Mile: R33.730 to R33.765 Length: 0.035 Estimated Lane Mileage: 0.070	R1	JPC		2.00	2.91				72	Good	Green	1	0.035
	R2	JPC		15.60	14.84				134	Fair	Red	1	0.035
Post Mile: R33.765 to R35.200 Length: 1.435 Estimated Lane Mileage: 2.870	R1	Flexible				40.00	34.60	0.16	151	Fair	Red	1	1.435
	R2	Flexible				41.80	34.40	0.18	182	Fair	Red	1	1.435
Post Mile: R34.152 to R35.200 Length: 1.048 Estimated Lane Mileage: 2.096	L1	Flexible				45.80	29.10	0.16	136	Fair	Orange	1	1.048
	L2	Flexible				35.40	40.30	0.21	187	Poor	Red	1	1.048
Post Mile: R35.200 to R36.164 Length: 0.964 Estimated Lane Mileage: 3.856	L1	Flexible				45.10	25.70	0.15	156	Fair	Orange	1	0.964
	L2	Flexible				44.70	31.70	0.17	187	Fair	Red	1	0.964
	R1	Flexible				33.50	27.30	0.11	133	Fair	Orange	1	0.964
	R2	Flexible				38.90	32.80	0.20	174	Fair	Red	1	0.964
Post Mile: 36.164 to 37.147 Length: 0.983 Estimated Lane Mileage: 1.966	L1	Flexible				30.60	26.70	0.13	172	Fair	Orange	1	0.983
	L2	Flexible				36.60	31.60	0.18	192	Fair	Red	1	0.983
Post Mile: 36.164 to 37.655 Length: 1.491 Estimated Lane Mileage: 2.982	R1	Flexible				34.80	26.90	0.12	152	Fair	Orange	1	1.491
	R2	Flexible				33.60	31.00	0.16	181	Fair	Red	1	1.491
Post Mile: 37.147 to 37.655 Length: 0.508 Estimated Lane Mileage: 1.016	L1	Flexible				19.10	12.80	0.11	154	Fair	Orange	1	0.508
	L2	Flexible				26.50	19.00	0.12	171	Fair	Orange	1	0.508
Post Mile: 37.655 to 38.216 Length: 0.561 Estimated Lane Mileage: 2.244	L1	Flexible				26.80	29.10	0.10	132	Fair	Orange	1	0.561
	L2	Flexible				35.50	32.60	0.12	166	Fair	Red	1	0.561
	R1	Flexible				37.40	34.30	0.12	177	Fair	Red	1	0.561
	R2	Flexible				29.00	32.60	0.10	185	Fair	Red	1	0.561
Post Mile: R38.216 to R39.142 Length: 0.926 Estimated Lane Mileage: 3.704	L1	Flexible				26.80	29.10	0.12	140	Fair	Orange	1	0.926
	L2	Flexible				30.90	32.60	0.10	138	Fair	Red	1	0.926
	R1	Flexible				28.50	29.10	0.09	169	Fair	Orange	1	0.926
	R2	Flexible				32.60	32.60	0.13	187	Fair	Red	1	0.926
Post Mile: 39.205 to 39.480 Length: 0.275 Estimated Lane Mileage: 1.100	L1	Flexible				24.50	25.70	0.12	147	Fair	Orange	1	0.275
	L2	Flexible				33.30	30.20	0.18	171	Fair	Red	1	0.275
	R1	Flexible				27.90	25.70	0.14	187	Fair	Orange	1	0.275
	R2	Flexible				31.30	30.20	0.14	200	Fair	Red	1	0.275
Post Mile: 39.480 to 40.368 Length: 0.888 Estimated Lane Mileage: 3.552	L1	Flexible				26.40	25.70	0.16	174	Fair	Orange	1	0.888
	L2	Flexible				35.20	30.20	0.24	203	Fair	Red	1	0.888
	R1	Flexible				29.10	25.70	0.13	164	Fair	Orange	1	0.888
	R2	Flexible				34.40	30.20	0.19	183	Fair	Red	1	0.888
Post Mile: 40.368 to 42.360 Length: 1.992 Estimated Lane Mileage: 7.848	L1	Flexible				50.50	30.10	0.13	138	Fair	Red	1	1.962
	L2	Flexible				52.70	34.20	0.17	170	Fair	Red	1	1.962
	R1	Flexible				41.10	35.90	0.10	128	Fair	Red	1	1.962
	R2	Flexible				54.30	35.80	0.17	169	Fair	Red	1	1.962
Post Mile: 42.360 to R43.200 Length: 0.840 Estimated Lane Mileage: 3.360	L1	Flexible				50.70	31.80	0.13	159	Fair	Red	1	0.840
	L2	Flexible				54.80	34.50	0.14	167	Fair	Red	1	0.840
	R1	Flexible				49.70	33.90	0.07	140	Fair	Red	1	0.840
	R2	Flexible				54.60	32.60	0.14	170	Fair	Red	1	0.840
			<b>8.80</b>	<b>8.88</b>	<b>39.41</b>	<b>30.99</b>	<b>0.15</b>	<b>163</b>					<b>37.508</b>
Lane Weighted Average												Total	

PaveM Scenario Used: #3299  
 APCS Data Year: 2019  
 Using: Prior-Treatment Distresses

**Caltrans Pavement Program  
 Pavement Condition Detailed Report (PaveM)**

**District: 1; County: Mendocino (MEN); Route: 101  
 From PM: R33.730 To PM: R43.200**

**Year: 2032 (Predicted)**  
 R-Length: 9.407. L-Length: 9.407  
 R-Lane Miles: 18.754. L-Lane Miles: 18.754 (Unknown lane miles: 0.000)

Pavement Segment	Lane	Type	Concrete			Asphalt			IRI in/mi	MAP-21 Condition	Traditional Condition	Road Class	Estimated Lane Miles
			1st%	3rd%	Fault%	Alligator		Rut (in)					
						A%	B%						
Post Mile: R33.730 to R34.152 Length: 0.422 Estimated Lane Mileage: 0.844	L1	Flexible				57.20	16.00	0.19	129	Fair	Orange	1	0.422
	L2	Flexible				24.60	37.70	0.23	219	Poor	Red	1	0.422
Post Mile: R33.730 to R33.765 Length: 0.035 Estimated Lane Mileage: 0.070	R1	JPC		2.40	3.38				73	Fair	Green	1	0.035
	R2	JPC		16.30	16.02				136	Fair	Red	1	0.035
Post Mile: R33.765 to R35.200 Length: 1.435 Estimated Lane Mileage: 2.870	R1	Flexible				40.10	38.00	0.16	155	Fair	Red	1	1.435
	R2	Flexible				41.70	38.20	0.18	187	Poor	Red	1	1.435
Post Mile: R34.152 to R35.200 Length: 1.048 Estimated Lane Mileage: 2.096	L1	Flexible				45.70	32.60	0.16	140	Fair	Red	1	1.048
	L2	Flexible				35.30	44.10	0.21	192	Poor	Red	1	1.048
Post Mile: R35.200 to R36.164 Length: 0.964 Estimated Lane Mileage: 3.856	L1	Flexible				45.40	28.80	0.15	160	Fair	Orange	1	0.964
	L2	Flexible				44.50	35.30	0.17	192	Fair	Red	1	0.964
	R1	Flexible				34.50	30.40	0.11	137	Fair	Red	1	0.964
	R2	Flexible				39.20	36.30	0.20	180	Fair	Red	1	0.964
Post Mile: 36.164 to 37.147 Length: 0.983 Estimated Lane Mileage: 1.966	L1	Flexible				31.80	29.80	0.13	176	Fair	Orange	1	0.983
	L2	Flexible				37.20	35.20	0.18	198	Fair	Red	1	0.983
Post Mile: 36.164 to 37.655 Length: 1.491 Estimated Lane Mileage: 2.982	R1	Flexible				35.70	30.00	0.12	156	Fair	Red	1	1.491
	R2	Flexible				34.50	34.60	0.16	186	Fair	Red	1	1.491
Post Mile: 37.147 to 37.655 Length: 0.508 Estimated Lane Mileage: 1.016	L1	Flexible				20.60	14.50	0.11	158	Fair	Orange	1	0.508
	L2	Flexible				28.30	21.40	0.12	176	Fair	Orange	1	0.508
Post Mile: 37.655 to 38.216 Length: 0.561 Estimated Lane Mileage: 2.244	L1	Flexible				28.20	32.60	0.10	136	Fair	Red	1	0.561
	L2	Flexible				36.20	36.40	0.12	171	Fair	Red	1	0.561
	R1	Flexible				37.60	37.80	0.12	181	Poor	Red	1	0.561
	R2	Flexible				30.30	36.40	0.10	191	Fair	Red	1	0.561
Post Mile: R38.216 to R39.142 Length: 0.926 Estimated Lane Mileage: 3.704	L1	Flexible				28.20	32.60	0.12	144	Fair	Red	1	0.926
	L2	Flexible				32.00	36.40	0.10	144	Fair	Red	1	0.926
	R1	Flexible				29.90	32.60	0.09	173	Fair	Red	1	0.926
	R2	Flexible				33.60	36.40	0.13	193	Fair	Red	1	0.926
Post Mile: 39.205 to 39.480 Length: 0.275 Estimated Lane Mileage: 1.100	L1	Flexible				26.10	28.80	0.12	151	Fair	Orange	1	0.275
	L2	Flexible				34.30	33.80	0.18	176	Fair	Red	1	0.275
	R1	Flexible				29.40	28.80	0.14	191	Fair	Orange	1	0.275
	R2	Flexible				32.40	33.80	0.14	205	Fair	Red	1	0.275
Post Mile: 39.480 to 40.368 Length: 0.888 Estimated Lane Mileage: 3.552	L1	Flexible				27.90	28.80	0.16	178	Fair	Orange	1	0.888
	L2	Flexible				36.00	33.80	0.24	209	Fair	Red	1	0.888
	R1	Flexible				30.50	28.80	0.13	168	Fair	Orange	1	0.888
	R2	Flexible				35.30	33.80	0.19	189	Fair	Red	1	0.888
Post Mile: 40.368 to 42.360 Length: 1.992 Estimated Lane Mileage: 7.848	L1	Flexible				49.80	33.60	0.13	142	Fair	Red	1	1.962
	L2	Flexible				51.10	38.10	0.17	175	Poor	Red	1	1.962
	R1	Flexible				40.90	39.30	0.10	132	Fair	Red	1	1.962
	R2	Flexible				52.30	39.60	0.17	174	Poor	Red	1	1.962
Post Mile: 42.360 to R43.200 Length: 0.840 Estimated Lane Mileage: 3.360	L1	Flexible				49.80	35.30	0.13	163	Fair	Red	1	0.840
	L2	Flexible				52.80	38.40	0.14	173	Poor	Red	1	0.840
	R1	Flexible				48.60	37.40	0.07	144	Fair	Red	1	0.840
	R2	Flexible				53.00	36.40	0.14	175	Fair	Red	1	0.840
			<b>9.35</b>	<b>9.70</b>	<b>39.58</b>	<b>34.46</b>	<b>0.15</b>	<b>168</b>					<b>37.508</b>
Lane Weighted Average												Total	

PaveM Scenario Used: #3299  
 APCS Data Year: 2019  
 Using: Prior-Treatment Distresses

**Caltrans Pavement Program  
 Pavement Condition Detailed Report (PaveM)**

**District: 1; County: Mendocino (MEN); Route: 101  
 From PM: R33.730 To PM: R43.200**

**Year: 2033 (Predicted)**  
 R-Length: 9.407. L-Length: 9.407  
 R-Lane Miles: 18.754. L-Lane Miles: 18.754 (Unknown lane miles: 0.000)

Pavement Segment	Lane	Type	Concrete			Asphalt			IRI in/mi	MAP-21 Condition	Traditional Condition	Road Class	Estimated Lane Miles
			1st%	3rd%	Fault%	Alligator		Rut (in)					
						A%	B%						
Post Mile: R33.730 to R34.152 Length: 0.422 Estimated Lane Mileage: 0.844	L1	Flexible				57.60	17.90	0.19	132	Fair	Orange	1	0.422
	L2	Flexible				25.60	40.60	0.23	224	Poor	Red	1	0.422
Post Mile: R33.730 to R33.765 Length: 0.035 Estimated Lane Mileage: 0.070	R1	JPC		2.70	3.88				75	Fair	Green	1	0.035
	R2	JPC		16.90	17.22				138	Fair	Red	1	0.035
Post Mile: R33.765 to R35.200 Length: 1.435 Estimated Lane Mileage: 2.870	R1	Flexible				39.60	41.50	0.16	159	Fair	Red	1	1.435
	R2	Flexible				41.00	42.10	0.18	193	Poor	Red	1	1.435
Post Mile: R34.152 to R35.200 Length: 1.048 Estimated Lane Mileage: 2.096	L1	Flexible				45.40	36.00	0.16	144	Fair	Red	1	1.048
	L2	Flexible				34.90	47.80	0.21	198	Poor	Red	1	1.048
Post Mile: R35.200 to R36.164 Length: 0.964 Estimated Lane Mileage: 3.856	L1	Flexible				45.40	31.90	0.15	164	Fair	Red	1	0.964
	L2	Flexible				44.00	38.80	0.17	198	Poor	Red	1	0.964
	R1	Flexible				35.30	33.50	0.11	140	Fair	Red	1	0.964
	R2	Flexible				39.10	39.90	0.20	185	Poor	Red	1	0.964
Post Mile: 36.164 to 37.147 Length: 0.983 Estimated Lane Mileage: 1.966	L1	Flexible				32.80	32.90	0.13	179	Fair	Red	1	0.983
	L2	Flexible				37.50	38.70	0.18	203	Poor	Red	1	0.983
Post Mile: 36.164 to 37.655 Length: 1.491 Estimated Lane Mileage: 2.982	R1	Flexible				36.40	33.10	0.12	159	Fair	Red	1	1.491
	R2	Flexible				35.00	38.20	0.16	192	Poor	Red	1	1.491
Post Mile: 37.147 to 37.655 Length: 0.508 Estimated Lane Mileage: 1.016	L1	Flexible				22.10	16.20	0.11	162	Fair	Orange	1	0.508
	L2	Flexible				29.70	24.00	0.12	182	Fair	Orange	1	0.508
Post Mile: 37.655 to 38.216 Length: 0.561 Estimated Lane Mileage: 2.244	L1	Flexible				29.40	36.00	0.10	140	Fair	Red	1	0.561
	L2	Flexible				36.40	40.30	0.12	177	Poor	Red	1	0.561
	R1	Flexible				37.60	41.20	0.12	185	Poor	Red	1	0.561
	R2	Flexible				31.00	40.30	0.10	196	Poor	Red	1	0.561
Post Mile: R38.216 to R39.142 Length: 0.926 Estimated Lane Mileage: 3.704	L1	Flexible				29.40	36.00	0.12	148	Fair	Red	1	0.926
	L2	Flexible				32.60	40.30	0.10	149	Fair	Red	1	0.926
	R1	Flexible				31.00	36.00	0.09	177	Fair	Red	1	0.926
	R2	Flexible				34.10	40.30	0.13	198	Poor	Red	1	0.926
Post Mile: 39.205 to 39.480 Length: 0.275 Estimated Lane Mileage: 1.100	L1	Flexible				27.50	31.90	0.12	155	Fair	Red	1	0.275
	L2	Flexible				34.90	37.40	0.18	182	Poor	Red	1	0.275
	R1	Flexible				30.60	31.90	0.14	195	Fair	Red	1	0.275
	R2	Flexible				33.20	37.40	0.14	211	Poor	Red	1	0.275
Post Mile: 39.480 to 40.368 Length: 0.888 Estimated Lane Mileage: 3.552	L1	Flexible				29.20	31.90	0.16	182	Fair	Red	1	0.888
	L2	Flexible				36.50	37.40	0.24	214	Poor	Red	1	0.888
	R1	Flexible				31.60	31.90	0.13	171	Fair	Red	1	0.888
	R2	Flexible				35.80	37.40	0.19	194	Poor	Red	1	0.888
Post Mile: 40.368 to 42.360 Length: 1.992 Estimated Lane Mileage: 7.848	L1	Flexible				48.80	37.10	0.13	146	Fair	Red	1	1.962
	L2	Flexible				49.30	41.90	0.17	181	Poor	Red	1	1.962
	R1	Flexible				40.30	42.70	0.10	136	Fair	Red	1	1.962
	R2	Flexible				50.10	43.40	0.17	180	Poor	Red	1	1.962
Post Mile: 42.360 to R43.200 Length: 0.840 Estimated Lane Mileage: 3.360	L1	Flexible				48.60	38.80	0.13	166	Fair	Red	1	0.840
	L2	Flexible				50.70	42.20	0.14	178	Poor	Red	1	0.840
	R1	Flexible				47.40	40.80	0.07	147	Fair	Red	1	0.840
	R2	Flexible				51.10	40.30	0.14	181	Poor	Red	1	0.840
			<b>9.80</b>	<b>10.55</b>	<b>39.44</b>	<b>37.92</b>	<b>0.15</b>	<b>173</b>					<b>37.508</b>
Lane Weighted Average												Total	



	Good	Fair	Poor	Green	Yellow	Blue	Orange	Red	SHOPP-Eff	Rehab-Eff	White Fill
2019 MAP-21 PaveM SHOPP Rehab	25.72	74.28	0.00	41.35	58.65	0.00	0.00	0.00	0.00	0.00	105
2020 MAP-21 PaveM SHOPP Rehab	15.78	84.22	0.00	23.34	76.66	0.00	0.00	0.00	0.00	0.00	105
2021 MAP-21 PaveM SHOPP Rehab	12.98	87.02	0.00	10.01	89.99	0.00	0.00	0.00	0.00	0.00	105
2022 MAP-21 PaveM SHOPP Rehab	8.92	91.08	0.00	0.09	98.69	0.00	1.13	0.09	1.22	0.09	105
2023 MAP-21 PaveM SHOPP Rehab	2.56	97.44	0.00	0.09	95.89	0.00	3.92	0.09	4.01	0.09	105
2024 MAP-21 PaveM SHOPP Rehab	0.09	99.91	0.00	0.09	77.87	0.00	21.94	0.09	22.04	0.09	105
2025 MAP-21 PaveM SHOPP Rehab	0.09	99.91	0.00	0.09	19.20	0.00	80.61	0.09	80.71	0.09	105
2026 MAP-21 PaveM SHOPP Rehab	0.09	99.91	0.00	0.09	3.83	0.00	95.98	0.09	96.07	0.09	105
2027 MAP-21 PaveM SHOPP Rehab	0.09	99.91	0.00	0.09	3.83	0.00	95.98	0.09	96.07	0.09	105
2028 MAP-21 PaveM SHOPP Rehab	0.09	99.91	0.00	0.09	2.48	0.00	97.33	0.09	97.43	0.09	105
2029 MAP-21 PaveM SHOPP Rehab	0.09	99.91	0.00	0.09	1.35	0.00	95.66	2.89	98.55	2.89	105
2030 MAP-21 PaveM SHOPP Rehab	0.09	99.91	0.00	0.09	0.00	0.00	66.58	33.33	99.91	33.33	105
2031 MAP-21 PaveM SHOPP Rehab	0.09	97.11	2.79	0.09	0.00	0.00	31.00	68.91	99.91	68.91	105
2032 MAP-21 PaveM SHOPP Rehab	0.00	78.06	21.94	0.09	0.00	0.00	15.23	84.68	99.91	84.68	105
2033 MAP-21 PaveM SHOPP Rehab	0.00	52.42	47.58	0.09	0.00	0.00	3.83	96.07	99.91	96.07	105

# Attachment H Cost Estimate

**RIDGEWOOD CLASS 1 PAVEMENT**

**PRELIMINARY COST ESTIMATE©**

EA: 01-0H160 EFIS: 0117000117

EA: 01-0H160

EFIS: 0117000117

District-County-Route: 01-MEN-101

PM: 33.73/R43.20

Type of Estimate : Project Report (PA & ED)

Program Code : 20.XX.201.121

Project Limits : In Mendocino County near Willits from 1.1 miles north of West Road Overcrossing to 0.6 mile south of Haehl Creek Bridge 10-129

Project Description: The proposed project will improve Class I Asphalt Concrete (AC) pavement using a strategy consisting of cold-planning AC surfacing by spot milling (0.25'-0.33') existing AC and replacing with Type A Hot Mix Asphalt (HMA-A), placing an HMA leveling course, and placing Rubberized HMA (RHMA) overlay plus shoulder backing. Some existing concrete median barriers will be replaced with Portable Concrete Barriers (Type 60K). Existing Metal Beam Guardrail (MBGR) will be replaced with Midwest Guardrail System (MGS), and existing MGS will be raised. High Friction Surface Treatment (HFST) will be added. One drainage system at Post Mile 40.62 will be repaired by regrouting the inlet and outlet, repairing the inlet, and repairing the culvert liner. A census station will be upgraded, sign panels will be replaced, and one new highway lighting asset will be constructed.

Scope : Pavement Rehabilitation

Alternative : Alternative A

**SUMMARY OF PROJECT COST ESTIMATE**

	Current Year Cost	Escalated Cost
TOTAL ROADWAY COST	\$ 37,798,500	\$ 41,544,512
TOTAL STRUCTURES COST	\$ -	\$ -
SUBTOTAL CONSTRUCTION COST	\$ 37,799,000	\$ 41,545,000
TOTAL RIGHT OF WAY COST	\$ 11,000	\$ 12,000
<b>TOTAL CAPITAL OUTLAY COSTS</b>	<b>\$ 37,810,000</b>	<b>\$ 41,557,000</b>
PAVED SUPPORT	\$ 494,000	\$ 494,000
PS&E SUPPORT	\$ 815,000	\$ 822,000
RIGHT OF WAY SUPPORT	\$ 20,000	\$ 22,000
CONSTRUCTION SUPPORT	\$ 3,335,000	\$ 3,596,000
<b>TOTAL SUPPORT COST</b>	<b>\$ 4,664,000</b>	<b>\$ 4,934,000</b>

<b>TOTAL PROJECT COST</b>	<b>\$ 42,500,000</b>	<b>\$ 46,500,000</b>
---------------------------	----------------------	----------------------

Programmed Amount \$ 52,888,000

Date of Estimate (Month/Year) 8 / 2021

Estimated Construction Start (Month/Year) 6 / 2023

Number of Working Days = 190

Estimated Mid-Point of Construction (Month/Year) 9 / 2024

Estimated Construction End (Month/Year) 12 / 2025

Number of Plant Establishment Days

**Estimated Project Schedule**

PID Approval 6/18/2019  
 PA/ED Approval 9/22/2021  
 PS&E 8/15/2022  
 RTL 10/15/2022  
 Begin Construction 1/2/2023

Reviewed by District O.E. or Cost Estimate Certifier

*Ali Salehi* 8/18/2021 (530) 821-3956  
 Ali Salehi / Cost Estimate Certifier Date Phone

Approved by Project Manager

*Katie Everett* 8/18/2021 (707) 684-6998  
 Katie Everett, Project Manager Date Phone

# I. ROADWAY ITEMS SUMMARY

	Section	Cost
1	Earthwork	\$ 55,000
2	Pavement Structural Section	\$ 20,526,600
3	Drainage	\$ 188,500
4	Specialty Items	\$ 3,378,300
5	Environmental	\$ 531,000
6	Traffic Items	\$ 2,031,300
7	Detours	\$ -
8	Minor Items	\$ 1,234,000
9	Roadway Mobilization	\$ 2,591,400
10	Supplemental Work	\$ 789,000
11	State Furnished	\$ 512,400
12	Time-Related Overhead	\$ 1,295,700
13	Total Roadway Contingency	\$ 4,665,300

	<b>TOTAL ROADWAY ITEMS</b>	<b>\$ 37,798,500</b>
--	----------------------------	----------------------

Estimate Prepared By : Dino Khloth      8/18/2021      (530) 821-8029  
 Dino Khloth, Project Engineer      Date      Phone

Estimate Reviewed By : Steve Heryford      8/18/2021      (530) 812-6990  
 Steve Heryford, Design Senior      Date      Phone

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

**SECTION 1: EARTHWORK**

Item code	Unit	Quantity		Unit Price (\$)		Cost
190101 Roadway Excavation	CY	300	x	150.00	= \$	45,000
19010X Roadway Excavation (Insert Type) ADL	CY		x		= \$	-
19801X Imported Borrow	CY/TON		x		= \$	-
194001 Ditch Excavation	CY		x		= \$	-
192037 Structure Excavation (Retaining Wall)	CY		x		= \$	-
193013 Structure Backfill (Retaining Wall)	CY		x		= \$	-
193031 Pervious Backfill Material (Retaining Wall)	CY		x		= \$	-
17010X Clearing & Grubbing	LS/ACRE		x		= \$	-
100100 Develop Water Supply	LS	1	x	10,000.00	= \$	10,000
19801X Imported Borrow	CY/TON		x		= \$	-
21012X Duff	ACRE/SQFT		x		= \$	-
XXXXXX Some Item	Unit		x		= \$	-

<b>TOTAL EARTHWORK SECTION ITEMS</b>	<b>\$</b>	<b>55,000</b>
--------------------------------------	-----------	---------------

**SECTION 2: PAVEMENT STRUCTURAL SECTION**

Item code	Unit	Quantity		Unit Price (\$)		Cost
401050 Jointed Plain Concrete Pavement	CY		x		= \$	-
400050 Continuously Reinforced Concrete Pavement	CY		x		= \$	-
390132 Hot Mix Asphalt (Type A)	TON	30,000	x	165.00	= \$	4,950,000
260203 Class 2 Aggregate Base (CY)	CY	75	x	173.00	= \$	12,975
250401 Class 4 Aggregate Subbase	CY		x		= \$	-
414240 Isolation Joint Seal (Asphalt Rubber)	LF		x		= \$	-
414241 Isolation Joint Seal (Silicone)	LF		x		= \$	-
280010 Rapid Strength Concrete Base	CY		x		= \$	-
410096 Drill and Bond (Dowel Bar)	EA		x		= \$	-
390137 Rubberized Hot Mix Asphalt (Gap Graded)	TON	53,000	x	139.00	= \$	7,367,000
391006 Asphalt Binder (Geosynthetic Pavement Interlayer)	TON	12	x	404.00	= \$	4,848
290201 Asphalt Treated Permeable Base	CY		x		= \$	-
374002 Asphaltic Emulsion (Fog Seal Coat)	TON		x		= \$	-
397005 Tack Coat	TON	200	x	923.00	= \$	184,600
377501 Slurry Seal	TON		x		= \$	-
374493 Polymer Asphaltic Emulsion (Seal Coat)	TON		x		= \$	-
370001 Sand Cover (Seal)	TON		x		= \$	-
731530 Minor Concrete (Textured Paving)	CY		x		= \$	-
731502 Minor Concrete (Miscellaneous Construction)	CY		x		= \$	-
39407X Place Hot Mix Asphalt Dike (Insert Type)	LF		x		= \$	-
398100 Remove Asphalt Concrete Dike	LF	56,000	x	2.10	= \$	117,600
420201 Grind Existing Concrete Pavement	SQYD		x		= \$	-
398300 Remove Base and Surfacing	CY		x		= \$	-
390095 Replace Asphalt Concrete Surfacing	CY	3,000	x	360.00	= \$	1,080,000
41800X Remove Concrete Pavement	SQYD/CY		x		= \$	-
394090 Place Hot Mix Asphalt (Miscellaneous Area)	SQYD	6,000	x	56.00	= \$	336,000
398200 Cold Plane Asphalt Concrete Pavement	SQYD	370,000	x	3.40	= \$	1,258,000
846046 6" Rumble Strip (Asphalt Concrete Pavement)	STA	200	x	63.00	= \$	12,600
846049 6" Rumble Strip (Concrete Pavement)	STA		x		= \$	-
846051 12" Rumble Strip (Asphalt Concrete Pavement)	STA	1,500	x	49.00	= \$	73,500
846052 12" Rumble Strip (Concrete Pavement)	STA		x		= \$	-
420102 Groove Existing Concrete Pavement	SQYD		x		= \$	-
394095 Roadside Paving (Miscellaneous Areas)	SQYD		x		= \$	-
390136 Minor Hot Mix Asphalt	TON	1,300	x	410.00	= \$	533,000
395020 Rubberized Hot Mix Asphalt-Gap Graded (Bonded Wearing Course)	TON	25,000	x	140.00	= \$	3,500,000
394060 Data Core	LS	1	x	7,500.00	= \$	7,500
390151 Asphaltic Emulsion (Bonded Wearing Course)	TON	73	x	694.00	= \$	50,662
394074 Place Hot Mix Asphalt Dike (Type C)	LF	1,000	x	16.50	= \$	16,500
394076 Place Hot Mix Asphalt Dike (Type E)	LF	41,000	x	1.15	= \$	47,150
394077 Place Hot Mix Asphalt Dike (Type F)	LF	14,000	x	1.10	= \$	15,400
393004 Geosynthetic Pavement Interlayer (Paving Fabric)	SQYD	12,000	x	4	= \$	48,000
374207 Crack Treatment	LNMI	10	x	6,325.00	= \$	63,250
190185 Shoulder Backing	TON	4,600	x	80.00	= \$	368,000
390135 Hot Mix Asphalt (Leveling)	TON	2,400	x	200.00	= \$	480,000

<b>TOTAL PAVEMENT STRUCTURAL SECTION ITEMS</b>	<b>\$</b>	<b>20,526,600</b>
--	-----------	-------------------

**SECTION 3: DRAINAGE**

Item code	Unit	Quantity	Unit Price (\$)	Cost
XXXXXX Remove Culvert Liner (LF)	LF	115	x 50.00	= \$ 5,750
XXXXXX Culvert Liner	LF		x	= \$ -
710240 Modify Inlet	EA		x	= \$ -
710370 Sand Backfill	CY		x	= \$ -
71010X Abandon Culvert	EA/LF		x	= \$ -
710196 Adjust Inlet	LF		x	= \$ -
710262 Cap Inlet	EA		x	= \$ -
510501 Minor Concrete (grout liner)	CY	4	x 3,988.00	= \$ 15,952
510502 Minor Concrete (Minor Structure)	CY		x	= \$ -
731627 Minor Concrete (Curb, Sidewalk, and Curb Ramp)	CY		x	= \$ -
6101XX XX" Alternative Pipe Culvert (Insert Type)	LF		x	= \$ -
6411XX XX" Plastic Pipe	LF		x	= \$ -
65XXXX XX" Reinforced Concrete Pipe (Insert Type)	LF		x	= \$ -
6811XX XX" Plastic Pipe (Edge Drain)	LF		x	= \$ -
6901XX XX" Corrugated Steel Pipe Downdrain (0.XXX" Thick)	LF		x	= \$ -
7006XX XX" Corrugated Steel Pipe Inlet (0.XXX" Thick)	LF		x	= \$ -
7032XX XX" Corrugated Steel Pipe Riser (0.XXX" Thick)	LF		x	= \$ -
7050XX XX" Steel Flared End Section	EA		x	= \$ -
703233 Grated Line Drain	LF		x	= \$ -
72XXXX Rock Slope Protection (Type and Method)	CY/TON		x	= \$ -
72901X Rock Slope Protection Fabric (Insert Class)	SQYD		x	= \$ -
721420 Concrete (Ditch Lining)	CY		x	= \$ -
721430 Concrete (Channel Lining)	CY		x	= \$ -
750001 Miscellaneous Iron and Steel	LB		x	= \$ -
XXXXXX Additional Drainage	LS		x	= \$ -
XXXXXX Raise Drainage Inlets	LS	1	x 100,000.00	= \$ 100,000
XXXXXX Adjust Drainage Inlet Steps	LS	1	x 20,000.00	= \$ 20,000
XXXXXX Regrout Culvert Inlet/Outlet	CY	2	x 4,000.00	= \$ 8,000
XXXXXX Repair Culvert Inlet	EA	1	x 10,000.00	= \$ 10,000
710310 24" Alternative Pipeliner	LF	115	x 250.00	= \$ 28,750
Dewatering	LS	1	x 2,000.00	= \$ 2,000
<b>TOTAL DRAINAGE ITEMS</b>				<b>\$ 188,500</b>

**SECTION 4: SPECIALTY ITEMS**

Item code	Unit	Quantity	Unit Price (\$)	Cost
520103 Bar Reinforced Steel (Retaining Wall)	LB		x	= \$ -
5100XX Structural Concrete	CY		x	= \$ -
510060 Structural Concrete, Retaining Wall	CY		x	= \$ -
5201XX Bar Reinforcing Steel	LB		x	= \$ -
080050 Progress Schedule (Critical Path Method)	LS	1	x 10,000.00	= \$ 10,000
582001 Sound Wall (Masonry Block)	SQFT		x	= \$ -
510530 Minor Concrete (Wall)	CY		x	= \$ -
60005X Remove Sound Wall	LF/LS/SQFT		x	= \$ -
070030 Lead Compliance Plan	LS	1	x 5,000.00	= \$ 5,000
141120 Treated Wood Waste	LB	27,000	x 0.50	= \$ 13,500
839750 Remove Barrier	LF		x	= \$ -
839752 Remove Guardrail	LF		x	= \$ -
710167 Remove Flared End Section	EA		x	= \$ -
8000XX Chain Link Fence (Insert Type)	LF		x	= \$ -
80XXXX XX" Chain Link Gate (Type CL-X)	EA		x	= \$ -
8320XX Midwest Guardrail System (Insert Type)	LF		x	= \$ -
839301 Single Thrie Beam Barrier	LF		x	= \$ -
839310 Double Thrie Beam Barrier	LF		x	= \$ -
839521 Cable Railing	LF		x	= \$ -
839566 Terminal System (Type CAT)	EA		x	= \$ -
839584 Alternative In-line Terminal System	EA	1	x 5,200.00	= \$ 5,200
839585 Alternative Flared Terminal System	EA		x	= \$ -
4906XX XX" Cast-In-Drilled-Hole Concrete Piling	LF		x	= \$ -
8396XX Crash Cushion (Insert Type)	EA		x	= \$ -
8331XX Concrete Barrier (Insert Type)	LF		x	= \$ -
475010 Retaining Wall (Masonry Wall)	SQFT		x	= \$ -
511035 Architectural Treatment	SQFT		x	= \$ -
780460 Anti-Graffiti Coating	SQFT		x	= \$ -
780450 Rock Stain	SQFT		x	= \$ -
4730XX Reinforced Concrete Crib Wall (Insert Type)	SQFT		x	= \$ -
83954X Transition Railing (Insert Type)	EA		x	= \$ -
780440 Prepare and Stain Concrete	SQFT		x	= \$ -
839561 Rail Tensioning Assembly	EA		x	= \$ -
83958X End Anchor Assembly (Insert Type)	EA		x	= \$ -
839774 Remove Concrete Barrier	LF	13,250	x 23.00	= \$ 304,750
839752 Remove Guardrail	LF		x	= \$ -
832006 Midwest Guardrail System (Steel Post)	LF	2,000	x 28.00	= \$ 56,000
832070 Vegetation Control (Minor Concrete)	SQYD	110	x 88.00	= \$ 9,680
839581 End Anchor Assembly (Type SFT)	EA	2	x 1,063.00	= \$ 2,126
839775 Remove Concrete Barrier (Type K)	LF	750	x 6.00	= \$ 4,500
839698 Portable Concrete Barrier (Type 60K)	LF	14,000	x 158.00	= \$ 2,212,000
839765 Reconstruct Guardrail	LF	26,000	x 20.00	= \$ 520,000
XXXXXX High Friction Surface Treatment	SQYD	7,850	x 30.00	= \$ 235,500
<b>TOTAL SPECIALTY ITEMS</b>				<b>\$ 3,378,300</b>

**SECTION 5: ENVIRONMENTAL**

**5A - ENVIRONMENTAL MITIGATION**

Item code	Unit	Quantity	Unit Price (\$)	Cost
	LS	x	= \$	-
80010X Biological Mitigation (on-site)	LF	x	= \$	-
130670 Temporary Fence (Insert Type)	LF	x	= \$	-
<i>Subtotal Environmental Mitigation</i>				\$ -

**5B - LANDSCAPE AND IRRIGATION**

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

**5C - EROSION CONTROL**

Item code	Unit	Quantity	Unit Price (\$)	Cost
211111 Permanent Erosion Control Establishment Work	LS	x	= \$	-
210010 Move-In/Move-Out (Erosion Control)	EA	x	= \$	-
210350 Fiber Rolls	LF	500	x 12.00 = \$	6,000
210360 Compost Sock	LF	x	= \$	-
2102XX Rolled Erosion Control Product (Insert Type)	SQFT	x	= \$	-
21025X Bonded Fiber Matrix	SQFT/ACRE	x	= \$	-
210300 Hydromulch	SQFT	3,500	x 1.50 = \$	5,250
210420 Straw	SQFT	3,500	x 1.00 = \$	3,500
210430 Hydroseed	SQFT	3,500	x 1.50 = \$	5,250
210610 Compost	CY	x	= \$	-
210630 Incorporate Materials	SQFT			
<i>Subtotal Erosion Control</i>				\$ 20,000

**5D - NPDES**

Item code	Unit	Quantity	Unit Price (\$)	Cost
130300 Prepare SWPPP	LS	x	= \$	-
130200 Prepare WPCP	LS	1	x 3,000.00 = \$	3,000
130100 Job Site Management	LS	x	= \$	-
130330 Storm Water Annual Report	EA	x	= \$	-
130310 Rain Event Action Plan	EA	x	= \$	-
130320 Storm Water Sampling and Analysis Day	EA	x	= \$	-
130520 Temporary Hydraulic Mulch	SQYD	x	= \$	-
130550 Temporary Hydroseed	SQYD	x	= \$	-
130505 Move-In/Move-Out (Temporary Erosion Control)	EA	x	= \$	-
130640 Temporary Fiber Roll	LF	x	= \$	-
130900 Temporary Concrete Washout	LS	1	x 8,000.00 = \$	8,000
130710 Temporary Construction Entrance	EA	x	= \$	-
130610 Temporary Check Dam	LF	x	= \$	-
130620 Temporary Drainage Inlet Protection	EA	x	= \$	-
CBMP Estimate	LS	1	x 500,000.00 = \$	500,000
130730 Street Sweeping	LS	x	= \$	-
<i>Subtotal NPDES</i>				\$ 511,000

**Supplemental Work for NPDES**

066595 Water Pollution Control Maintenance Sharing*	LS	x	= \$	-
066596 Additional Water Pollution Control**	LS	1	x 2,000.00 = \$	2,000
066597 Storm Water Sampling and Analysis***	LS	x	= \$	-
XXXXXX Some Item	LS	x	= \$	-
<i>Subtotal Supplemental Work for NDPS</i>				\$ 2,000

<b>TOTAL ENVIRONMENTAL</b>	<b>\$ 531,000</b>
----------------------------	-------------------

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

\*\*Applies to both SWPPPs and WPCP projects.

\*\*\* Applies only to project with SWPPPs.

**SECTION 6: TRAFFIC ITEMS**

**6A - Traffic Electrical**

Item code	Unit	Quantity	Unit Price (\$)	Cost
870200 Lighting System	LS	x	= \$	-
870300 Sign Illumination System	LS	x	= \$	-
870400 Signal and Lighting System	LS	x	= \$	-
870510 Ramp Metering System	LS	x	= \$	-
87181X Interconnection Conduit and Cable	LF/LS	x	= \$	-
5602XX Furnish Sign Structure (Insert Type)	LB	x	= \$	-
5602XX Install Sign Structure (Insert Type)	LB	x	= \$	-
4980XX XX" CIDHC Pile (Sign Foundation)	LF	x	= \$	-
87011X Inductive Loop Detector	EA/LS	x	= \$	-
870600 Traffic Monitoring Station System	LS	x	= \$	-
56804X Remove Sign Structure	EA/LS	x	= \$	-
568054 Reconstruct Sign Structure	EA	x	= \$	-
568060 Modify Sign Structure	EA	x	= \$	-
870009 Maintaining Existing Traffic Management System Elements During Construction	LS	x	= \$	-
86XXXX Fiber Optic Conduit System	LS	x	= \$	-
860201 Signal and Lighting (new lighting Black Bart Rd)	LS	1 x	50,000.00 = \$	50,000
860090 Maintain Existing Traffic Management System Elements During Construction	LS	1 x	5,000.00 = \$	5,000
XXXXX TMS Elements (upgrade 1 Census Station to Vehicle Classification Station & loops)	LS	1 x	80,000 = \$	80,000
<b>Subtotal Traffic Electrical</b>				<b>\$ 135,000</b>

**6B - Traffic Signing and Striping**

Item code	Unit	Quantity	Unit Price (\$)	Cost
820840 Roadside Sign - One Post	EA	x	= \$	-
820850 Roadside Sign - Two Post	EA	x	= \$	-
5602XX Furnish Sign Structure (Insert Type)	SQFT	x	= \$	-
820890 Install Sign Panel on Existing Frame	SQFT	x	= \$	-
846020 Remove Painted Traffic Stripe	LF	x	= \$	-
141102 Remove Yellow Painted Traffic Stripe (Hazardous Waste)	LF	x	= \$	-
846025 Remove Painted Pavement Marking	SQFT	x	= \$	-
820250 Remove Roadside Sign	EA	x	= \$	-
820530 Reset Roadside Sign	EA	x	= \$	-
820610 Relocate Roadside Sign	EA	x	= \$	-
8101XX Delineator (Insert Class)	EA	x	= \$	-
840502 Thermoplastic Traffic Stripe (Enhanced Wet Night Visibility)	LF	x	= \$	-
846012 Thermoplastic Crosswalk and Pavement Marking (Enhanced Wet Night Visibility)	SQFT	x	= \$	-
120090 Construction Area Signs	LS	1 x	20,000.00 = \$	20,000
84XXXX Permanent Pavement Delineation	LS	x	= \$	-
141103 Remove Yellow Thermoplastic Traffic Stripe (Hazardous Waste)	LF	x	= \$	-
810120 Remove Pavement Marker	EA	x	= \$	-
810230 Pavement Marker (Retroreflective)	EA	1,000 x	5.28 = \$	5,280
810250 Pavement Marker (Retroreflective-Recessed)	EA	100 x	55.00 = \$	5,500
820360 Remove Sign Panel	EA	184 x	90.00 = \$	16,560
820510 Reset Roadside Sign (One Post)	EA	16 x	279.00 = \$	4,464
820520 Reset Roadside Sign (Two Post)	EA	2 x	478.00 = \$	956
820760 Furnish Single Sheet Aluminum Sign (0.080"-Unframed)	SQFT	880 x	12.00 = \$	10,560
820790 Furnish Single Sheet Aluminum Sign (0.080"-Framed)	SQFT	8 x	28.00 = \$	224
820790 FURNISH SINGLE SHEET ALUMINUM SIGN (0.080"-FRAMED) FOR RETROREFLECTIVE	SQFT	490.00 x	28.00 = \$	13,720
033968 FURNISH SINGLE SHEET ALUMINUM SIGN (0.080"-UNFRAMED) FOR RETROREFLECTIVE SHEETING (TYPE XI)	SQFT	1,100 x	14.00 = \$	15,400
820900 Install Roadside Sign Panel On Existing Post	SQFT	1,600 x	6.00 = \$	9,600
820910 Install Framed Sign Panel	EA	167 x	99.00 = \$	16,533
840516 Thermoplastic Pavement Marking (Enhanced Wet Night Visibility)	EA	17 x	1,000.00 = \$	17,000
840619 6" Thermoplastic Traffic Stripe (Enhanced Wet Night Visibility) (Broken 12-3)	SQFT	4,200 x	6.00 = \$	25,200
840623 6" Thermoplastic Traffic Stripe (Enhanced Wet Night Visibility) (Broken 36-12)	LF	1,600 x	0.50 = \$	800
846007 6" Thermoplastic Traffic Stripe (Enhanced Wet Night Visibility)	LF	100,000 x	0.46 = \$	46,000
846009 6" Thermoplastic Traffic Stripe (Enhanced Wet Night Visibility)	LF	300,000 x	0.80 = \$	240,000
846010 8" Thermoplastic Traffic Stripe (Enhanced Wet Night Visibility)	LF	8,200 x	1.50 = \$	12,300
846010 8" Thermoplastic Traffic Stripe (Enhanced Wet Night Visibility) (Broken 12-3)	LF	270 x	1.50 = \$	405
846030 Remove Thermoplastic Traffic Stripe	LF	x	= \$	-
846035 Remove Thermoplastic Pavement Marking	SQFT	x	= \$	-
820220 Remove Marker	EA	1 x	100.00 = \$	100
820112 Marker (Culvert)	EA	1 x	300.00 = \$	300
XXXXX Replace Roadside Sign Posts in Poor Condition	LS	1 x	50,000.00 = \$	50,000
<b>Subtotal Traffic Signing and Striping</b>				<b>\$ 510,902</b>

**6C - Traffic Management Plan**

Item code	Unit	Quantity	Unit Price (\$)	Cost
120100 Traffic Control System	LS	1 x	\$ 380,000 =	\$ 380,000
128652 Portable Changeable Message Sign	LS	1 x	\$ 40,000 =	\$ 40,000
120210A Portable Radar Speed Feedback Sign Systems	LS	1 x	\$ 60,000 =	\$ 60,000
<b>Subtotal Traffic Management Plan</b>				<b>\$ 480,000</b>

**6C - Stage Construction and Traffic Handling**

Item code	Unit	Quantity	Unit Price (\$)	Cost
120198 Plastic Traffic Drums	EA	x	= \$	-
12016X Channelizer (Insert Type)	EA	x	= \$	-
120116 Type II Barricade	EA	x	= \$	-
120120 Type III Barricade	EA	x	= \$	-
129100 Temporary Crash Cushion Module	EA	x	= \$	-
120100 Traffic Control System	LS	1 x	226,000.00 = \$	226,000
129110 Temporary Crash Cushion	EA	x	= \$	-
129000 Temporary Railing (Type K)	LF	28,000 x	20.00 = \$	560,000
120149 Temporary Pavement Marking (Paint)	SQFT	4,200 x	4.00 = \$	16,800
120152 Temporary Pavement Marking (Tape)	SQFT	x	= \$	-
120159 Temporary Traffic Stripe (Paint)	LF	410,070 x	0.25 = \$	102,518
8101XX Delineator (Insert Class)	EA	x	= \$	-
<b>Subtotal Stage Construction and Traffic Handling</b>				<b>\$ 905,318</b>

<b>TOTAL TRAFFIC ITEMS</b>	<b>\$ 2,031,300</b>
----------------------------	---------------------



**SECTION 7: DETOURS**

Includes constructing, maintaining, and removal

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

SUBTOTAL SECTIONS 1 through 7 \$ 24,679,400

**SECTION 8: MINOR ITEMS**

**8A - Americans with Disabilities Act Items**

ADA Items 1.0% \$ 246,794

**8B - Bike Path Items**

Bike Path Items 1.0% \$ 246,794

**8C - Other Minor Items**

Other Minor Items 3.0% \$ 740,382

Total of Section 1-7 \$ 24,679,400 x 5.0% = \$ 1,233,970

**TOTAL MINOR ITEMS \$ 1,234,000**

**SECTIONS 9: ROADWAY MOBILIZATION \***

Item code					
999990	Total Section 1-8	\$ 25,913,400	x 10%	= \$	2,591,340
<b>TOTAL ROADWAY MOBILIZATION \$</b>					<b>2,591,400</b>

**SECTION 10: SUPPLEMENTAL WORK**

Item code	Unit	Quantity	Unit Price (\$)	Cost	
066670 Payment Adjustments For Price Index Fluctuations	LS	1	x 373,500.00 = \$	373,500	
066094 Value Analysis	LS	1	x 10,000.00 = \$	10,000	
066070 Maintain Traffic	LS		x = \$	-	
066919 Dispute Resolution Board	LS	1	x 7,500.00 = \$	7,500	
066921 Dispute Resolution Advisor	LS		x = \$	-	
066015 Federal Trainee Program	LS		x = \$	-	
066610 Partnering	LS	1	x 50,000.00 = \$	50,000	
066204 Remove Rock and Debris	LS		x = \$	-	
066222 Locate Existing Crossover	LS		x = \$	-	
066395A Smoothness Incentive	LS	1	x 342,000.00 = \$	342,000	
070030 Lead Compliance Plan	LS	1	x 4,000.00 = \$	4,000	
XXXXXX Some Item	Unit		x = \$	-	
<i>Cost of NPDES Supplemental Work specified in Section 5D</i>				<u>= \$ 2,000</u>	
Total Section 1-8		\$ 25,913,400	0%	= \$	-
<b>TOTAL SUPPLEMENTAL WORK \$ 789,000</b>					

**SECTION 11: STATE FURNISHED MATERIALS AND EXPENSES**

Item code	Unit	Quantity		Unit Price (\$)	=	Cost
066105 Resident Engineers Office	LS	1	x	242,000.00	=	\$242,000
066063 Traffic Management Plan - Public Information	LS	1	x	2,000.00	=	\$2,000
066901 Water Expenses	LS		x		=	\$0
8609XX Traffic Monitoring Station (X)	LS		x		=	\$0
066841 Traffic Controller Assembly	LS		x		=	\$0
066840 Traffic Signal Controller Assembly	LS		x		=	\$0
066062 COZEEP Contract	LS	1	x	266,000.00	=	\$266,000
066838 Reflective Numbers and Edge Sealer	LS		x		=	\$0
066065 Tow Truck Service Patrol	LS		x		=	\$0
066916 Annual Construction General Permit Fee	LS	1	x	2,319.00	=	\$2,319
066070 Maintain Traffic	LS	1	x	4,000.00	=	\$0
Total Section 1-8		\$ 25,913,400		0%	=	\$ -

**TOTAL STATE FURNISHED \$512,400**

**SECTION 12: TIME-RELATED OVERHEAD**

Total of Roadway and Structures Contract Items excluding Mobilization \$25,913,400 (used to calculate total TRO)

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

Item code	Unit	Quantity		Unit Price (\$)	=	Cost
090100 Time-Related Overhead	WD	190	X	\$6,819	=	\$1,295,700

**TOTAL TIME-RELATED OVERHEAD \$1,295,700**

**SECTION 13: ROADWAY CONTINGENCY\***

Risk Amount from Risk Register		(for Known Risks)	0%	
Additional or Residual Contingency		(for Unknown/Undefined Risks)	15%	\$4,665,285
Total Section 1-12	\$ 31,101,900	x	<b>15%</b>	= \$4,665,285

**TOTAL CONTINGENCY\* \$4,665,300**

**II. STRUCTURE ITEMS**

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

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

	<b>TOTAL COST OF BRIDGES</b>	<b>\$0</b>
	<b>TOTAL COST OF BUILDINGS</b>	<b>\$0</b>
<b>Time-Related Overhead</b>	10%	<b>\$0</b>
<b>STRUCTURES MOBILIZATION</b>	10%	<b>\$0</b>
<b>STRUCTURES CONTINGENCY*</b>	25%	<b>\$0</b>
<b>TOTAL COST OF STRUCTURES</b>		<b>\$0</b>

Estimate Prepared By: \_\_\_\_\_  
 XXXXXXXXXXXXXXXXXXXX ----- Division of Structures

\_\_\_\_\_  
 Date

### III. RIGHT OF WAY

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

			<i>Current Value Future Use</i>		<i>Escalated Value</i>
A)	A1)	Acquisition, including Excess Land, Fees, Damages, Goodwill	\$ 0	\$	0
	A2)	Acquisition of Offsite Mitigation	\$ 0	\$	0
	A3)	Railroad Acquisition	\$ 0	\$	0
B)	B1)	Utility Relocation (State Share)	\$ 0	\$	0
	B2)	Potholing (Design Phase)	\$ 0	\$	0
C)		Project Development Permit Fees	\$ 10,500	\$	11,541
D)		RAP and/or Last Resort Housing	\$ 0	\$	0
E)		Clearance & Demolition	\$ 0	\$	0
F)		Relocation Assistance (RAP and/or Last Resort Housing Costs)	\$ 0	\$	0
G)		Title and Escrow	\$ 0	\$	0
H)		Environmental Review	\$ 0	\$	0
I)		Condemnation Settlements            0%	\$ 0	\$	0
J)		Design Appreciation Factor            0%	\$ 0	\$	0
K)		Utility Relocation (Construction Cost)	\$ 0	\$	0

L) **TOTAL RIGHT OF WAY ESTIMATE            \$11,000**

M) **TOTAL R/W ESTIMATE: Escalated            \$12,000**

N) **RIGHT OF WAY SUPPORT            \$22,000**

Support Cost Estimate  
Prepared By \_\_\_\_\_  
Project Coordinator<sup>1</sup> Phone \_\_\_\_\_

Utility Estimate Prepared  
By \_\_\_\_\_  
Utility Coordinator<sup>2</sup> Phone \_\_\_\_\_

R/W Acquisition Estimate  
Prepared By \_\_\_\_\_  
Right of Way Estimator<sup>3</sup> Phone \_\_\_\_\_

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

<sup>1</sup> When estimate has Support Costs only

<sup>2</sup> When estimate has Utility Relocation <sup>3</sup> When R/W Acquisition is required

Attachment I  
Initial Site Assessment

**Memorandum**

**To:** Cameron Muir  
Project Engineer  
1656 Union Street  
Eureka CA 95501

**Date:** December 4, 2018

**File No:** 01-Men-101  
PM R33.73/R43.2  
Ridgewood Pavement  
Improvement

**EA:** 01-0H160

**EFIS:** 0117000117

**From:** DEPARTMENT OF TRANSPORTATION  
Office of Environmental Engineering - South (OEES)

**Subject:** Initial Site Assessment (ISA)

An Initial Site Assessment (ISA) has been conducted regarding the above referenced project. The project, a pavement improvement project, includes planning and spot milling, placing HMA and/or RHMA, replacing concrete barriers, upgrading MBGR, repairing or replacing drainage systems and TMS upgrades. No new r/w will be required. Soil and vegetation will be disturbed during construction. Based on the proposed project scope and location, the following Hazardous Waste issues were considered:

**Naturally Occurring Asbestos (NOA)** - A geologic evaluation regarding Naturally Occurring Asbestos (NOA) was conducted within the project limits. This evaluation included a review of geologic maps and reports including data prepared by the California Geological Survey (CGS) and the United States Geological Survey (USGS), previous studies conducted by Caltrans and their consultants, and a field inspection of the geology in the project area. The evaluation **does** indicate the presence of altered ultramafic bedrock, alluvium derived from ultramafic rock, or other rock commonly associated with NOA. An NSSP for NOA will be required.

**Cortese List** - The Cortese List is a compilation of contaminated sites identified by the State of California- State Water Resource Control Board; active, closed, and inactive landfills identified by the Integrated Waste Management Board; and potential hazardous waste sites identified by the Department of Toxic Substance Control. This list was reviewed as part of the initial screening for this project. The list, or a property's presence on the list, has bearing on the local permitting process as well as on compliance with the California Environmental Quality Act (CEQA). The proposed project **is not** within or impacting any site on the Cortese List.


**Lead in Soil - Low levels of lead from combustion** Low levels of lead from historical combustion of leaded fuel is commonly associated with the highway system. To address this issue SSP 7-1.02K(6)U(iii) should be included in the final project PS&E and listing packages.

**Thermoplastic/Paint Stripe/Pavement Marking** - Thermoplastic paint may contain lead of varying concentrations depending upon color, type and year of manufacture. To address

this issue SSP 36-4 and/or SSP84-9.03C should be included in the final project PS&E and listing packages.

**Treated Wood Waste (TWW)** - TWW may not be relinquished to the contractor and must be disposed of at an appropriately permitted disposal facility or be reused on the originating project in a manner consistent with the original intended use. Additionally, regulations specify the manner in which TWW must be stored while awaiting disposal. If TWW will be generated during this project (from removal of old treated wood or from the placement of new treated wood) SSP 14-11.14 should be included in the final project PS&E and listing packages.

The project may be constructed without any other NSSP's, SSP's, or restrictions from OEES. If there are any significant changes to the project scope, or if new information is identified, please contact the OEES, as soon as reasonably possible so the significance of the information and the need for additional studies can be assessed. If you have any questions or comments, please feel free to call me at (530) 741-4556.



Mark Melani,  
Office of Environmental Engineering - South

cc: File  
Derek Salinas, Environmental Planner  
(Electronic copy only)

Attachment J  
Right of Way Datasheet



## MEMORANDUM

*Making Conservation  
A California Way of Life.*

To: STEVE HERYFORD  
Design Engineer  
Department of Transportation

Date: January 25, 2021

Attention: VINCENT MITCHELL  
Project Engineer

File: 01-MEN-101-R33.73/R43.2  
EFIS No.: 01 1700 0117  
EA: 0H1600  
Alternate: 1 of 1

From: MATTHEW PHILP  
Senior Right of Way Agent  
Project Delivery  
Eureka

Subject: CURRENT ESTIMATED RIGHT OF WAY COSTS

Project Description: In Mendocino County near Willits from 1.1 Miles North of West Road  
OC to 0.6 Mile South of Haehl Creek Br 10-129

Alternate Description: Ridgewood Class I Pavement

We have completed an estimate of the right of way costs for the above referenced  
project based on information received from you on December 2, 2020 .

Right of Way Lead Time will require a minimum of  3  months after  
receipt of appraisal maps, utility conflict maps, environmental clearances (HMDD)  
and Certificate of Sufficiency (COS). A minimum of  3  months prior to  
certification will be required from receipt of the last map revision. Shorter lead times  
may require additional support resources and may adversely affect delivery of Right of  
Way Certification.

*Matthew Philp*

---

MATTHEW PHILP  
Senior Right of Way Agent  
Project Delivery Branch  
EUREKA

Attachments:  
Right of Way Data Sheet

cc. Bryan Bet

State of California - Department of Transportation  
**RIGHT OF WAY DATASHEET**



EA: 0H1600  
 PROJECT NO.: 01 1700 0117  
 LOCATION: 01-MEN-101-R33.73/R43.2  
 Description: REHABILITATE PAVEMENT In  
 Mendocino County near Willits  
 from 1.1 Miles North of West  
 Road OC to 0.6 Mile South of  
 Haehl Creek Br 10-129

ALTERNATE: 1 of 1  
 DATE: 1/25/2021  
 Datasheet Type: Annual Update

1. Right of Way Cost Estimate:

	Current Value Future Use	Escalation Rate	Escalated Value
A. Total Acquisition Cost	\$0		\$0
B. Appraisal Fees Estimate	\$0	N/A	\$0
C. Mitigation Acquisition & Credits	\$0		\$0
D. Project Development Permit Fees	\$10,500	5%	\$11,541
Subtotal	\$10,500		\$11,541
E. Utility Relocation (State's Share)	\$0		\$0
(Owner's Share: _____ \$0)			
F. Relocation Assistance (RAP)	\$0		\$0
G. Clearance/Demolition	\$0		\$0
H. Title & Escrow	\$0		\$0
I. Total Estimated Right of Way Cost	\$10,500	Rounded	\$11,500 *
J. Construction Contract Work	\$0		

2. Current Date of Right of Way Certification January 2, 2023

3. Parcel Data:

Type	Dual/Appr	Utilities	Railroad
X <u>0</u>		U4 - 1 <u>0</u>	C&M Agreement <u>0</u>
A <u>0</u>		- 2 <u>0</u>	Service Contract <u>0</u>
B <u>0</u>		- 3 <u>0</u>	Easements <u>0</u>
C <u>0</u>	<u>0</u>	- 4 <u>0</u>	Rights of Entry <u>0</u>
D <u>0</u>	<u>0</u>	U5 - 7 <u>5</u>	Clauses <u>1</u>
RR <u>0</u>		- 8 <u>0</u>	
Total 0		- 9 <u>0</u>	

Excess 0

Areas:	Mitigation	Misc. R/W Work
R/W <u>N/A</u>	Impacts <u>0</u>	RAP Displacees <u>N/A</u>
TCE <u>N/A</u>	Parcels <u>0</u>	Clear/Demo <u>N/A</u>
Excess <u>N/A</u>	Credits <u>0</u>	Permit to Enters <u>N/A</u>
Mitigation <u>N/A</u>		Condemnation <u>N/A</u>
		USA Involvement <u>No</u>

4. Provide a general description of the right of way and excess lands required (zoning, use, major improvements, critical or sensitive parcels, etc.).  
All work will be performed within the existing RW.

5. Are any properties acquired for this project expected to be rented, leased, or sold?  
Yes \_\_\_\_\_ No X

6. Are RAP displacements required?  
Yes \_\_\_\_\_ No X

No. of single family N/A No. of business/nonprofit N/A  
No. of multi-family N/A No. of farms N/A

Based on Draft/Final Relocation Impact Statement/Study dated \_\_\_\_\_ N/A  
N/A Sufficient replacement housing will be available without last resort housing.  
N/A Sufficient replacement housing will not be available without last resort housing.

7. Is there an effect on assessed valuation?  
Yes \_\_\_\_\_ No X Not Significant \_\_\_\_\_

8. Are there any items of Construction Contract Work?  
Yes \_\_\_\_\_ No X

There is no Construction Contract Work associated with the project.

9. Are utility facilities or rights of way affected?  
Yes \_\_\_\_\_ No X Phase 4 Capital \$0

Names of Utility Companies requiring verification only:  
PG&E (electric), PG&E (gas), AT&T CA (telecommunications), City of Willits (water & sewer), Comcast (CATV)

Names of Utility Companies requiring involvements.

Additional information concerning Utility Involvement on this project.  
No need for potholing or conflicts estimated. Culvert liner at PM 40.62 will be repaired without impacting u/g utilities. As additional information becomes available, this estimate may need to be revised.

10. Are railroad facilities or rights of way affected?  
Yes \_\_\_\_\_ No X Phase 4 Capital \$0

11. Are USA Lands or Rights Affected?  
Yes \_\_\_\_\_ No X Phase 4 Capital \$0

Agencies Involved:

US Forest Service \_\_\_\_\_ BLM \_\_\_\_\_ Army Corps of Engineers \_\_\_\_\_  
National Parks \_\_\_\_\_ BIA \_\_\_\_\_ Veterans Administration \_\_\_\_\_  
US Fish & Wildlife \_\_\_\_\_ GSA \_\_\_\_\_

Rights or Permissions to acquire:

Easement \_\_\_\_\_ Special Use Permit \_\_\_\_\_ Courtesy Letter \_\_\_\_\_  
Right of Way Grant \_\_\_\_\_ Cooperative Work Agreement \_\_\_\_\_ Cost Recovery \_\_\_\_\_  
Mineral Agreement \_\_\_\_\_ Letter of Concurrence \_\_\_\_\_ Timber Sale \_\_\_\_\_

12. Is an RE Office required for the project?  
Yes X No \_\_\_\_\_

Type of RE Office

Modular \_\_\_\_\_ Move In \_\_\_\_\_

13. Were any previously unidentified sites with hazardous waste and/or material found?  
Yes \_\_\_\_\_ None Evident X

14. Are there material borrow and/or disposal sites required?  
No X Optional \_\_\_\_\_ Mandatory \_\_\_\_\_

15. Are there potential relinquishments and/or abandonments?  
Yes \_\_\_\_\_ No X

16. Are there any existing and/or potential airspace sites?  
Yes \_\_\_\_\_ No X

17. What type of mitigation is required for the project?  
Mitigation is not anticipated.

18. Is it anticipated that Caltrans will perform all Right of Way work?  
Yes X No \_\_\_\_\_

19. Indicate the anticipated Right of Way schedule and lead time requirements.

Right of Way Lead Time will require a minimum of 3 months after we receive first appraisal maps, utility conflict maps, necessary environmental clearances and freeway agreements have been approved and obtained. Additionally a minimum of 3 months will be required after receiving the last appraisal map to Right of Way for certification.

20. Assumptions and limiting Conditions: (Check boxes that apply.)

- \* Mapping provides insufficient detail to determine the limits of the right of way required.
- \* Transportation facilities have not been sufficiently designed to determine the damages to any of the remainder parcels affected by the project.
- \* Additional right of way requirements are anticipated, but are not defined due to the preliminary nature of the early design requirements.
- \* Design will secure necessary encroachment permits from local agencies.
- \* Project permits are not required for the project.
- \* Utility lead time begins after PA&ED is met and Utility Conflict Maps have been received.
- \* Requested lead time provides sufficient time to acquire Resolutions of Necessity if condemnations are required.
- \* Requested lead time provides insufficient time to acquire Orders of Possession if condemnations are required.

---

---

---

---

---

---

---

Evaluation Prepared By:

Right of Way Shalisa Gentle  
SHALISA GENTLE

Date 1/26/2021

Reviewed By  
RW Project Coordinator Yvonne Becker  
YVONNE BECKER

Date 1/26/2021

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

Matthew Philp  
MATTHEW PHILP  
Senior Right of Way Agent  
Project Delivery Branch  
Eureka

01/26/21  
Date

Attachment K  
Performance Measures

**SHOPP Project - Accomplishment - Performance Measures - Benefits**

District: 01 Tool ID: 18674 Project ID: 0117000117 EA: OH160 Co-Rte-PM: MEN-101-R33.73/R43.20(Primary Location) View/Print PIR (Performance) Report

Bridge
  Pavement **P**
 Drainage **D**
 Facilities
  Safety
  Mobility **TMS**
 Roadside
  Complete Streets
  Sustainability /Climate Change
  Advance Mitigation/Mitigation
  Major Damage
  Green-house Gases
  Relinquishment

Performance & Accomplishments ( **PPC** )

ActID	Activity Detail	Performance Objective	Unit of Measurement	Quantity	Assets in Good Cond	Assets in Fair Cond	Assets in Poor Cond	New Asset Added	Comment
1	B25 Asphalt Pavement Minor Rehab (CAPM)	Pavement Class I	Lane Miles	37.762	17.364	20.398			
2	C03 Slip Line Culvert (201.151)	No Performance Objective in the SHSMP	Each	1.000	1.000				
3	C04 Slip Line Culvert (201.151)	Drainage Restoration	Linear Feet	115.000	115.000				
4	C17 Fish Passage in the Priority List	Fish Passage	Each	0.000			0.000		
5	C18 Fish Passage Not in the Priority List	No Performance Objective in the SHSMP	Each	0.000					
6	E01 Median Barrier (201.010, .015)	No Performance Objective in the SHSMP	Linear Feet	14000.000			14000.000		
7	E07 Guard Rail (201.010, .015)	No Performance Objective in the SHSMP	Linear Feet	28000.000			28000.000		
8	E11 Lighting (201.010, .015)	No Performance Objective in the SHSMP	Each	1.000				1.000	Black Bart Rd. PM 40.77
9	E16 Rumble Strips (201.010, .015)	No Performance Objective in the SHSMP	Linear Feet	170000.000			170000.000		
10	E26 Sign Panel Replacement	Sign Panel Replacement	Each	184.000			184.000		
11	F01 Census Station (201.315)	No Performance Objective in the SHSMP	Each	1.000	1.000				
12	F46 TMS Technology Component	Transportation Management Systems	Each	1.000	1.000				
13	H32 Is any Location Within the Project Limits Ped/Bike Accessible?	No Performance Objective in the SHSMP	Yes/No	Yes				yes	
14	N02 Quantitative - Proposed Mitigated	No Performance Objective in the SHSMP	MTCO2e	374.000					
15	N03 Quantitative - Unmitigated	No Performance Objective in the SHSMP	MTCO2e	537.000					

(Last Saved - 08/18/21 @ 10:48 AM by Evelyn Lane)

Programming Performance Summary (All Locations)

Program Code	Activity Category	Asset Class	Asset	Performance Value	Performance Measure	Unit	Pre-Good	Pre-Fair	Pre-Poor	Pre-Total	Post Good	New	Post Good+New	Post-Fair	Post-Poor	Post-Total
201.121	Pavement	Primary	Pavement	37.8	Lane mile(s)	Lane mile(s)	17.4	20.4	0.0	37.8	37.8	0.000	37.8	0.0	0.0	37.8

- Notes:**
- The crosswalk for reporting performance in the "Programming Performance Summary" was developed to assist the districts on performance reporting requirements for CTC and PCRs. For discrepancies or errors, please notify AM Tool admins via e-mail at CT-TAM@dot.ca.gov.
  - The data summarized in the table represents the performance reported or to be reported in CTIPS.
  - Programming only requires the breakdown of Good, Fair and Poor for Primary and Supplementary Asset Classes.
  - Reporting of bridge pre and post conditions may contain errors if the project RTL is before 2024/25.

Attachment L  
Programming Sheet



AMS ID: 0117000117 EA: 01-0H160 COUNTY: ROUTE: 101 POSTMILE: R33.73/R43.2

Project Manager: EVERETT, KATIE M	PM Assistant: DEMCAK, MEGAN J	Project Nickname: Ridgewood Class 1 Pavement
Project Description - Long: IN MENDOCINO COUNTY NEAR WILLITS FROM 1.1 MILES NORTH OF WEST ROAD OC TO 0.6 MILE SOUTH OF HAEHL CREEK BR		
Work Description - Long: REHABILITATE PAVEMENT		
PPNO: 4677	Program: shopp	RPT: No
Open for Time: Yes	Subprogram: Pavement Rehabilitation	Funding No
10 Yr SHOPP: No	AADD: Yes	PROGRAM YR: 2023
		Working Days: 250
		CT Status: APL
		RMP: RMP Date:
		Dist: SHOPP MAJOR
		FED Aid Eligible:

MS	MS Description	MS Date	
M000	ID NEED	08/21/2018	(A)
M003	BEGIN FUNCT PID	11/27/2018	(A)
M006	DRAFT FOR DIST CIRC	02/22/2019	(A)
M009	FINAL DRAFT FOR	05/30/2019	(A)
M010	APPROVE PID	06/18/2019	(A)
M015	PROG PROJ	06/24/2020	(A)
M020	BEGIN ENVIRO	07/16/2020	(A)
M040	BEGIN PROJ	07/21/2020	(A)
M200	PA&ED	09/22/2021	(T)
M224	R/W REQTS	12/01/2021	(T)
M300	CIRC PLANS IN DIST	05/02/2022	(T)
M377	PS&E TO DOE	08/15/2022	(T)
M410	R/W CERT	10/03/2022	(T)
M430	DCR	10/03/2022	(T)
M460	RTL	10/15/2022	(T)
M470	FUND ALLOCATION	12/23/2022	(T)
M480	HQ ADVERT	11/15/2022	(T)
M495	AWARD	01/02/2023	(T)
M500	APPROVE CONTRACT	02/28/2023	(T)
M600	CONTRACT ACCEPT	12/01/2025	(T)
M700	FINAL REPORT	12/01/2026	(T)
M800	END PROJ EXP	02/01/2028	(T)
M900	FINAL PROJ	11/01/2029	(T)

Env	CE (CEQA), CE (NEPA)	
Capital Cost Estimates (\$k)		
	Amount \$k	EST Date
Roadway	37799	08/13/21
Structures	0	
Const Total	37799	
ROW	11	01/25/21
Total	37810	

Risk & Operating Expense Budget		
	Risk Bud. (\$k)	OE (\$k)
Phase 0 - PAED	\$0	\$0
Phase 1 - PS&E	\$0	\$0
Phase 2 - RW	\$0	\$0
Phase 3 - Con	\$0	\$0
Phase 4 - Con Cap	\$0	\$0
Phase 9 - RW Cap	\$0	\$0
Total	\$0	\$0

Note: For Phase 0, 1, 2 and 3, only enter Risk Budget amount if not already entered in PRSM

Funding Info (\$k)						
Fund Source	PA&ED	PS&E	ROW	CON	ROW CAP	CON CAP
4050201.315	0	0	0	0	0	0
2010201.121	561	910	33	3457	0	0
4050201.151	0	0	0	0	0	0
2020201.121	0	0	0	0	39	47888
4050201.015	0	0	0	0	0	0
4050201.122	0	0	0	0	0	0
4050201.121	0	0	0	0	0	0
4050201.170	0	0	0	0	0	0
<b>Total:</b>	<b>561</b>	<b>910</b>	<b>33</b>	<b>3,457</b>	<b>39</b>	<b>47,888</b>

	Capital Cost Est.(\$k)
FY Mid M500-M600	2025
CC Escalation %:	3.20%
CC Escalated \$:	41,545
ROW CAPITAL:	12
TOTAL:	41,557

PROJECT SUPPORT COSTS (\$k)									
Phase Esc. Rate	PRIOR ACT \$	FY21/22 ETC (0.00%)	FY22/23 (2.00%)	FY23/24 (3.00%)	FY24/25 (3.00%)	FY25/26 (3.00%)	Future (3.00%)	Total	Sup/Cap %
0	231	263	0	0	0	0	0	494	1.19%
1	0	461	361	0	0	0	0	822	1.98%
2	0	7	5	2	2	2	4	22	0.05%
3	0	0	354	1,095	1,125	670	352	3,596	8.65%
TOTAL SUPPORT COSTS:								4,934	11.87%
TOTAL PROJECT COSTS:								46,491	

PROJECT SUPPORT PYs									
Division	PRIOR ACT PYS	2021 ETC PYS	2022 ETC PYS	2023 ETC PYS	2024 ETC PYS	2025 ETC PYS	Future ETC PYS	Total ETC PYS	
01	ADMN	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.03
01	MTCE	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.06
01	PPM	0.10	0.17	0.10	0.04	0.04	0.04	0.06	0.55
01	TPLN	0.65	0.02	0.01	0.00	0.00	0.00	0.00	0.68
01	TROP	0.11	0.20	0.14	0.08	0.08	0.03	0.00	0.64
01	TOTALS :	0.90	0.42	0.25	0.12	0.12	0.07	0.06	1.96
Division	PRIOR ACT PYS	2021 ETC PYS	2022 ETC PYS	2023 ETC PYS	2024 ETC PYS	2025 ETC PYS	Future ETC PYS	Total ETC PYS	
03	CONS	0.03	0.20	1.77	4.67	4.65	2.43	0.66	14.41
03	ENVM	0.25	1.15	0.36	0.13	0.13	0.39	0.92	3.34
03	ESRV	0.07	0.36	0.26	0.01	0.01	0.01	0.02	0.73
03	PRJD	0.85	0.87	0.38	0.01	0.01	0.01	0.01	2.16
03	RWLS	0.07	0.06	0.02	0.01	0.01	0.01	0.00	0.19
03	SURV	0.05	0.32	0.11	0.07	0.07	0.04	0.02	0.66
03	TO2	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.06
03	TOTALS :	1.32	3.02	2.90	4.90	4.88	2.89	1.63	21.55

# Programming Sheet with Risk and OE



AMS ID: 0117000117      EA: 01-0H160      COUNTY:      ROUTE: 101      POSTMILE: R33.73/R43.2

Division	PRIOR ACT PYS	2021 ETC PYS	2022 ETC PYS	2023 ETC PYS	2024 ETC PYS	2025 ETC PYS	Future ETC PYS	Total ETC PYS
59    METS	0.00	0.04	0.02	0.06	0.06	0.02	0.00	0.21
59    PPM	0.01	0.01	0.16	0.00	0.00	0.00	0.00	0.20
59    SP&I	0.00	0.06	0.02	0.01	0.01	0.01	0.00	0.11
59    TOTALS :	0.01	0.11	0.20	0.07	0.07	0.03	0.00	0.52
Division	PRIOR ACT PYS	2021 ETC PYS	2022 ETC PYS	2023 ETC PYS	2024 ETC PYS	2025 ETC PYS	Future ETC PYS	Total ETC PYS
	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
TOTALS :	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
PROJECT TOTALS:	2.24	3.55	3.35	5.09	5.07	2.99	1.69	24.04

Comments: Escalated Construction Capital Cost calculated by PRSM.

AMS ID: 0117000117 EA: 01-0H160 COUNTY: ROUTE: 101 POSTMILE: R33.73/R43.2

Project Manager: EVERETT, KATIE M	PM Assistant: DEMCAK, MEGAN J	Project Nickname: Ridgewood Class 1 Pavement
Project Description - Long: IN MENDOCINO COUNTY NEAR WILLITS FROM 1.1 MILES NORTH OF WEST ROAD OC TO 0.6 MILE SOUTH OF HAEHL CREEK BR		
Work Description - Long: REHABILITATE PAVEMENT		
PPNO: 4677	Program: shopp	RPT: No
Open for Time: Yes	Subprogram: Pavement Rehabilitation	Funding: No
10 Yr SHOPP: No	AADD: Yes	Dist: SHOPP MAJOR
	CT Status: APL	PROGRAM YR: 2023
		Working Days: 250
		RMP: RMP Date:
		FED Aid Eligible:

MS	MS Description	MS Date	
M000	ID NEED	08/21/2018	(A)
M003	BEGIN FUNCT PID	11/27/2018	(A)
M006	DRAFT FOR DIST CIRC	02/22/2019	(A)
M009	FINAL DRAFT FOR	05/30/2019	(A)
M010	APPROVE PID	06/18/2019	(A)
M015	PROG PROJ	06/24/2020	(A)
M020	BEGIN ENVIRO	07/16/2020	(A)
M040	BEGIN PROJ	07/21/2020	(A)
M200	PA&ED	09/22/2021	(T)
M224	R/W REQTS	12/01/2021	(T)
M300	CIRC PLANS IN DIST	05/02/2022	(T)
M377	PS&E TO DOE	08/15/2022	(T)
M410	R/W CERT	10/03/2022	(T)
M430	DCR	10/03/2022	(T)
M460	RTL	10/15/2022	(T)
M470	FUND ALLOCATION	12/23/2022	(T)
M480	HQ ADVERT	11/15/2022	(T)
M495	AWARD	01/02/2023	(T)
M500	APPROVE CONTRACT	02/28/2023	(T)
M600	CONTRACT ACCEPT	12/01/2025	(T)
M700	FINAL REPORT	12/01/2026	(T)
M800	END PROJ EXP	02/01/2028	(T)
M900	FINAL PROJ	11/01/2029	(T)

Env	CE (CEQA), CE (NEPA)	
Capital Cost Estimates (\$k)		
	Amount \$k	EST Date
Roadway	37799	08/13/21
Structures	0	
Const Total	37799	
ROW	11	01/25/21
Total	37810	

Risk & Operating Expense Budget		
	Risk Bud. (\$k)	OE (\$k)
Phase 0 - PAED	\$0	\$0
Phase 1 - PS&E	\$0	\$0
Phase 2 - RW	\$0	\$0
Phase 3 - Con	\$0	\$0
Phase 4 - Con Cap	\$0	\$0
Phase 9 - RW Cap	\$0	\$0
Total	\$0	\$0

Note: For Phase 0, 1, 2 and 3, only enter Risk Budget amount if not already entered in PRSM

Funding Info (\$k)						
Fund Source	PA&ED	PS&E	ROW	CON	ROW CAP	CON CAP
4050201.315	0	0	0	0	0	0
2010201.121	561	910	33	3457	0	0
4050201.151	0	0	0	0	0	0
2020201.121	0	0	0	0	39	47888
4050201.015	0	0	0	0	0	0
4050201.122	0	0	0	0	0	0
4050201.121	0	0	0	0	0	0
4050201.170	0	0	0	0	0	0
<b>Total:</b>	<b>561</b>	<b>910</b>	<b>33</b>	<b>3,457</b>	<b>39</b>	<b>47,888</b>

	Capital Cost Est.(\$k)
FY Mid M500-M600	2025
CC Escalation %:	0.00%
CC Escalated \$:	37,799
ROW CAPITAL:	11
TOTAL:	37,810

PROJECT SUPPORT COSTS (\$k)									
Phase Esc. Rate	PRIOR ACT \$	FY21/22 ETC (0.00%)	FY22/23 (0.00%)	FY23/24 (0.00%)	FY24/25 (0.00%)	FY25/26 (0.00%)	Future (0.00%)	Total	Sup/Cap %
0	231	263	0	0	0	0	0	494	1.31%
1	0	461	354	0	0	0	0	815	2.16%
2	0	7	4	2	2	2	3	20	0.05%
3	0	0	347	1,042	1,039	601	306	3,335	8.82%
TOTAL SUPPORT COSTS:								4,664	12.34%
TOTAL PROJECT COSTS:								42,474	

PROJECT SUPPORT PYs									
Division	PRIOR ACT PYS	2021 ETC PYS	2022 ETC PYS	2023 ETC PYS	2024 ETC PYS	2025 ETC PYS	Future ETC PYS	Total ETC PYS	
01 ADMN	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.03	
01 MTCE	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.06	
01 PPM	0.10	0.17	0.10	0.04	0.04	0.04	0.06	0.55	
01 TPLN	0.65	0.02	0.01	0.00	0.00	0.00	0.00	0.68	
01 TROP	0.11	0.20	0.14	0.08	0.08	0.03	0.00	0.64	
01 TOTALS :	0.90	0.42	0.25	0.12	0.12	0.07	0.06	1.96	
Division	PRIOR ACT PYS	2021 ETC PYS	2022 ETC PYS	2023 ETC PYS	2024 ETC PYS	2025 ETC PYS	Future ETC PYS	Total ETC PYS	
03 CONS	0.03	0.20	1.77	4.67	4.65	2.43	0.66	14.41	
03 ENVM	0.25	1.15	0.36	0.13	0.13	0.39	0.92	3.34	
03 ESRV	0.07	0.36	0.26	0.01	0.01	0.01	0.02	0.73	
03 PRJD	0.85	0.87	0.38	0.01	0.01	0.01	0.01	2.16	
03 RWLS	0.07	0.06	0.02	0.01	0.01	0.01	0.00	0.19	
03 SURV	0.05	0.32	0.11	0.07	0.07	0.04	0.02	0.66	
03 TO2	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.06	
03 TOTALS :	1.32	3.02	2.90	4.90	4.88	2.89	1.63	21.55	

# Programming Sheet with Risk and OE



AMS ID: 0117000117      EA: 01-0H160      COUNTY:      ROUTE: 101      POSTMILE: R33.73/R43.2

Division	PRIOR ACT PYS	2021 ETC PYS	2022 ETC PYS	2023 ETC PYS	2024 ETC PYS	2025 ETC PYS	Future ETC PYS	Total ETC PYS
59 METS	0.00	0.04	0.02	0.06	0.06	0.02	0.00	0.21
59 PPM	0.01	0.01	0.16	0.00	0.00	0.00	0.00	0.20
59 SP&I	0.00	0.06	0.02	0.01	0.01	0.01	0.00	0.11
59 TOTALS :	0.01	0.11	0.20	0.07	0.07	0.03	0.00	0.52
Division	PRIOR ACT PYS	2021 ETC PYS	2022 ETC PYS	2023 ETC PYS	2024 ETC PYS	2025 ETC PYS	Future ETC PYS	Total ETC PYS
	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
TOTALS :	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
PROJECT TOTALS:	2.24	3.55	3.35	5.09	5.07	2.99	1.69	24.04

Comments:

Attachment M  
Transportation Management Plan

## TRANSPORTATION MANAGEMENT PLAN

To: DINO KHLOTH  
Project Engineer  
North Region Design M5

Date: June 17, 2021  
File: MEN-101 PM R33.73/  
R43.20  
EA: 01-0H1600  
EFIS: 01 1700 01170  
Ridgewood Class 1 Pavement

*SMR*  
From: SHERI RODRIGUEZ, Chief  
District 1 Office of Traffic Operations

### Project Information

Location: In Mendocino County near Willits, from 1.1 miles north of West Road OC to 0.6 miles south of Haehl Creek Bridge 10-129.

Type of Work: Pavement rehab. Additional work includes replacing barriers, reconstructing guardrail, repairing a drainage system, upgrading a census station, replacing signs, and constructing a new lighting asset.

Anticipated Traffic Control: Lane reduction traffic control  
Moving lane closure for striping  
Partial shoulder closures

Estimated Maximum Delay: Minimal

Peak Hour Traffic Volumes: 1200vph

Work Zone Speed Reduction: Required

Closure During Night Hours: Possible, but not anticipated

Number of Working Days: 190 days

PA&ED Date: August 1, 2021

RTL Date: January 16, 2023

District Traffic/TMP Mgr: Sheri Rodriguez (707) 498-5252

TMP Contact: Paul Hailey (707) 496-1562

### Anticipated Traffic Impacts

Significant traffic impacts are not anticipated provided the following recommendations and requirements are incorporated into the project. In

conformance with Deputy Directive-60, District Lane Closure Review Committee approval is not required for projects with anticipated traffic delay less than 30 min.

### Lane Requirements

- See Chart no. 1 “Expressway Lane Requirements” for lane closure hour restrictions.

### Public Notice

- At least 15 days before implementing proposed changes in vertical clearances, horizontal clearances (including shoulders) or both, notify the Transportation Permits Branch so annual permit holders can be notified of restrictions.
- The District Public Information Office, (707) 445-6444, must be contacted two weeks in advance of the start of construction.
- Each closure must be entered in the Lane Closure System (LCS; <https://lcs-new2.dot.ca.gov>).
  - To access the LCS you will need an account. Contact Jeannette Candalot at (707) 296-6368 to obtain an account.
  - Every Monday by noon, submit a schedule of planned closures for the next week period.
  - Closures must be statused daily. Status closures before the first advance warning sign is placed (1097) and after the last advance warning sign is picked up (1098) or if cancelled (1022). Statusing can be accomplished through:

Status With	Day	Time	URL/Contact Number
LCS Web Page	Any	Any	<a href="https://lcs-new2.dot.ca.gov">https://lcs-new2.dot.ca.gov</a>
LCS Mobile Web Page	Any	Any	<a href="https://lcsmobile.dot.ca.gov">https://lcsmobile.dot.ca.gov</a>
District 1 Dispatch	Monday-Friday	6:30am-6:30pm	(707) 441-5747
District 3 Dispatch	Monday-Friday	6:30pm-6:30am	(916) 859-7900
District 3 Dispatch	Saturday and Sunday	Any	(916) 859-7900

- The Resident Engineer must provide information to residents and businesses before and during project work that may represent a negative impact on commerce and travel surrounding the zone of construction.

- Bicyclists must be accommodated through the work zone.
  - Bicycle regulatory signs must be used to alert road users of potential motorist/bicyclist conflicts.
  - During lane reduction traffic control, bicyclists must be provided adequate space adjacent to the open traffic lane to safely traverse through the work zone where possible (e.g. 5 ft of delineated space).

### Traffic Control

- A maximum of one closure in each direction is allowed within the project limits.
- Work that requires a lane and/or shoulder closure on an expressway must be in conformance with Caltrans Standard Plan T10 “TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE ON FREEWAYS AND EXPRESSWAYS”.
  - A minimum of 17 ft of paved roadway in each direction of travel must be open for use by public traffic, where possible. When paving Lane #2, T12 may be needed to provide this width.
  - A minimum of 5 ft between the edge of traveled way and the cones for the shoulder closure must be maintained to allow bicycle passage.
  - Lane closures must also be in conformance with Caltrans Revised Standard Plan RSP T18 “TRAFFIC CONTROL SYSTEM CONSTRUCTION WORK ZONE SPEED LIMIT REDUCTION ON FREEWAYS AND EXPRESSWAYS”.
- Work that requires closing half the roadway must be in conformance with Caltrans Standard Plan T12 “TRAFFIC CONTROL SYSTEM FOR HALF ROAD CLOSURE ON MULTILANE CONVENTIONAL HIGHWAYS AND EXPRESSWAYS”.
  - A minimum of 17 ft of paved roadway in each direction of travel must be open for use by public traffic. Bicycles may need to be accommodated in the #1 lane while motor vehicles are using the opposite roadbed. This also provides a buffer and/or positive barrier between traffic and the work area. A traffic handling plan may be needed for closures containing the median barrier.
  - A minimum of 5 ft between the edge of traveled way and the devices used for the shoulder closure must be maintained to allow bicycle passage.



- Lane closures must also be in conformance with Caltrans Revised Standard Plan RSP T18 “TRAFFIC CONTROL SYSTEM CONSTRUCTION WORK ZONE SPEED LIMIT REDUCTION ON FREEWAYS AND EXPRESSWAYS”
- Keep the full width of the traveled way open to traffic when no active construction activities are occurring in the traveled way or within 6 ft of the traveled way.
- Work that requires a moving lane closure on a multilane facility must be in conformance with the Caltrans Revised Standard Plan RSP T15, “TRAFFIC CONTROL SYSTEM FOR MOVING LANE CLOSURES ON MULTILANE HIGHWAYS.”
- Portable Changeable Message Signs (PCMSs) are required to notify the public of closures related to this project.
  - Place PCMSs at the locations shown and in advance of the 1st warning sign for each stationary lane closure and speed reduction zone.
  - Start displaying the message on the PCMS 15 minutes before closing the lane.
  - The minimum height of the PCMS must be 7 ft.
- Access to businesses, side roads and residences must be maintained at all times. When work or traffic queues extend through an intersection, additional traffic control will be required at the intersection.
- The project engineer should assess the need for COZEEP. Consult with the area construction engineer or resident engineer to determine which specific construction operations should use COZEEP and use that as the basis of the initial funding (CA DOT Construction Manual Section 2-215C).

### Project Coordination

The following table lists projects that are anticipated having closures within this project’s work limits and must be added to section 5-1.20A of the 2018 Standard Specifications:

Contract No.	Co-Rte-PM	Location	Type of Work	Est. Delay
01-0K3104	MEN-101-30.8/33.8	Near Calpella	Cable Median Barrier	Minimal
01-0H6604	MEN-101-41.0/41.4	Near Willits	WIM/RWIS	Minimal

01-OK4104	MEN-101-41.2/42.8	Near Willits	Median Barrier	Minimal
-----------	-------------------	--------------	----------------	---------

TMP Elements Needed for Cost Estimate

Item Code	Item	Unit	Minimum Unit Price
066062	COZEEP Contract	LS	\$140/officer-hr <sup>1</sup>
066063	Traffic Management Plan – Public Information	LS	\$2,000
066070	Maintain Traffic	LS	0.75% of Traffic Items <sup>2</sup>
120100	Traffic Control System	LS	\$2,000/working day
128652	Portable Changeable Message Sign	LS	\$40,000
120210A	Portable Radar Speed Feedback Sign Systems <sup>3</sup>	LS	\$1,000/month

<sup>1</sup>Consult Construction for number of hours

<sup>2</sup>Traffic Items include 12XXXX items; round unit price to the nearest thousand.

<sup>3</sup>Need 2 total for each direction of travel (see Caltrans Revised Standard Plan T18).

Contingency Plan

The Contractor must prepare a contingency plan for reopening closures to public traffic. The Contractor must submit the contingency plan for a given operation to the Engineer within 1 working day of the Engineer’s request. Contingencies for unanticipated delays, emergencies, etc. must be coordinated between the Engineer and the Contractor.

SMR/pwh

CC: SHeryford  
 RKing  
 Traffic Safety  
 PIO

Chart no. 1 Expressway Lane Requirements																										
County: Mendocino					Route/Direction: 101 NB/SB										PM: R33.73/R43.20											
Closure limits:																										
From hour to hour		24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mondays through Thursdays		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Fridays		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Saturdays		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Sundays		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Legend:																										
1		Provide at least one through 17 ft expressway lane open in each direction of travel.																								
REMARKS:																										

Attachment N  
Drainage Report Exemption

## Memorandum

*Serious drought.  
Help Save Water!*

**To:** MR. Chris Rockey  
Hydraulics Branch Chief, (Marysville)  
Office of Engineering Services  
NR Division of Engineering

**Date:** August 9, 2021

**File:** 01-MEN-101-PM R33.73/R43.20  
01-0H160  
Project ID# 0117000117

**From:** MR. Dino Khloth  
Project Engineer  
Office of Design  
District 03 – North Region

**Subject:** DRAINAGE REPORT EXEMPTION

The Office of Design is currently preparing the PR for the above-referenced project, which has a scheduled RTL date of 01/16/2023.

The project proposes to rehabilitate the pavement in both fair and poor condition to extend service life of pavement and prevent future deterioration. The project will improve Class 1 asphalt concrete (AC) pavement using a strategy consisting of cold-planing AC surfacing by spot milling (0.25'-0.33') existing AC and replacing with Type A hot mix asphalt (HMA-A), placing an AC leveling course, and placing rubberized HMA (RHMA) overlay plus shoulder backing. Some existing concrete median barriers will be replaced with Type 60K barriers. Existing metal beam guardrail (MBGR) will be replaced with midwest guardrail system (MGS), and existing MGS will be raised. One drainage system at Post Mile 40.62 will be repaired by regrouting the inlet and outlet, repairing the inlet, and repairing the culvert liner. A census station will be upgraded, sign panels will be replaced, and one new highway lighting asset will be constructed.

There will not be any work performed that will alter existing drainage patterns or result in an increase in runoff. Existing flow lines will not be modified. Further, there will be no impact on, and, therefore, no modifications required to existing storm water run-off conveyance facilities, and there are no anticipated drainage impacts to properties outside of the State right-of-way. The nature of this project is such that the components of a Drainage Report do not apply for this project.

Due to the limited project scope and limited drainage impacts, we are requesting your concurrence that a Drainage Report is not required for this project.

Concur:   
(Signature - District Hydraulics Engineer)

8-10-2021  
(Date)

Attachment O  
Environmental Report



**CEQA EXEMPTION / NEPA CATEGORICAL EXCLUSION  
DETERMINATION FORM (rev. 04/2021)**

**Project Information**

**Project Name (if applicable):** Ridgewood Class 1 Pavement

**DIST-CO-RTE:** 01-MEN-101

**PM/PM:** 33.73/43.2

**EA:** 01-0H160

**Federal-Aid Project Number:** 01 1700 0117

**Project Description**

The project proposes to rehabilitate pavement in both fair and poor condition to extend service life of pavement and prevent future deterioration. The project will improve Class 1 asphalt concrete (AC) pavement using a strategy consisting of cold-planing AC surfacing by spot milling (0.25'-0.33') existing AC and replacing with Type A hot mix asphalt (HMA-A), placing an AC leveling course, and placing rubberized HMA (RHMA) overlay plus shoulder backing.

**Caltrans CEQA Determination** (Check one)

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

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

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

**Senior Environmental Planner or Environmental Branch Chief**

Dana York		7/22/2021
Print Name	Signature	Date

**Project Manager**

Jen Buck		7/26/2021
Print Name	Signature	Date



CEQA EXEMPTION / NEPA CATEGORICAL EXCLUSION DETERMINATION FORM

Caltrans NEPA Determination (Check one)

Not Applicable

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

23 USC 326: Caltrans has been assigned, and hereby certifies that it has carried out the responsibility to make this determination pursuant to 23 USC 326 and the Memorandum of Understanding dated April 18, 2019, executed between FHWA and Caltrans. Caltrans has determined that the project is a Categorical Exclusion under:

- 23 CFR 771.117(c): activity (c)(26)
23 CFR 771.117(d): activity (d)(Enter activity number)
Activity Enter activity number listed in Appendix A of the MOU between FHWA and Caltrans

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

Senior Environmental Planner or Environmental Branch Chief

Dana York Signature 7/22/2021
Print Name Signature Date

Project Manager/ DLA Engineer

Jen Buck Signature 7/26/2021
Print Name Signature Date

Date of Categorical Exclusion Checklist completion (if applicable): 7/23/21

Date of Environmental Commitment Record or equivalent: 7/23/21

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





**CEQA EXEMPTION / NEPA CATEGORICAL EXCLUSION  
DETERMINATION FORM**

**Continuation sheet:**

Additionally, some existing concrete median barriers will be replaced with Type 60K barriers. Existing metal beam guardrail (MBGR) will be replaced with midwest guardrail system (MGS), and existing MGS will be raised. One failing drainage system will be repaired by relining the culvert (PM 40.62), a census station will be upgraded, and sign panels will be replaced, and one new highway lighting asset will be constructed.

Air, noise, biological, cultural, hazardous waste, water quality and visual reviews have been completed. Impacts to resources are not anticipated. Caltrans Standard Specifications will be included in the project. **No permits are required to complete this work.**