

ROAD REPAIR AND ACCOUNTABILITY ACT OF 2017
PROJECT BASELINE AGREEMENT

Trancas Creek Bridge Replacement (EA 07-29140)

Resolution SHOPP-P-1819-04B
(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 *Trancas Creek Bridge Replacement (EA 07-29140)*, effective on, OCTOBER 17, 2018 (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 March 22, 2018 meeting the Commission approved the State Highway Operation and Protection Program, and included in this program of projects the *Trancas Creek Bridge Replacement (EA 07-29140)*, 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-18-13, "Adoption of Program of Projects for the State Highway Operation and Protection Program", dated March 22, 2018
 - 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

Trancas Creek Bridge Replacement (EA 07-29140)

Resolution SHOPP-P-1819-04B

Reza Fateh

Reza Fateh
Date 8-3-18
Project Manager
Project Applicant

Derek Higa

Derek Higa
Date 8/3/18
Interim SB I Program Manager
Implementing Agency

Shirley Choate

Shirley Choate, Interim
Date 8/3/2018
District Director
California Department of Transportation

Laune Berman

Laune Berman
Date 9/19/18
Director
California Department of Transportation

Susan Bransen

Susan Bransen
Date 10/26/18
Executive Director
California Transportation Commission

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

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

BASELINE AGREEMENT

Date:	09/18/18 10:48:11 AM
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District	EA	Project ID		PPNO	Project Manager
07	29140	0712000094		4498	FATEH, REZA
County	Route	Begin Postmile	End Postmile	Implementing Agency	
LA	1	56.5	56.9	PA&ED	Caltrans
				PS&E	Caltrans
				Right of Way	Caltrans
				Construction	Caltrans

Project Nickname
 TRANCAS CREEK BRIDGE

Location/Description
 In Malibu, from Guernsey Avenue to Trancas Canyon Road/Broad Beach Road. Replace bridge.

Legislative Districts

Assembly:	50	Senate:	27	Congressional:	33
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PERFORMANCE MEASURES

	Primary Asset	Good	Fair	Poor	New	Total	Units
Existing Condition	Bridge Health			8148		8148	Square feet of bridge deck
Programmed Condition	Bridge Health				26160	26160	Square feet of bridge deck

Project Milestone

	Actual	Planned
Project Approval and Environmental Document Milestone	06/30/17	
Right of Way Certification Milestone		08/21/20
Ready to List for Advertisement Milestone		09/30/20
Begin Construction Milestone (Approve Contract)		03/30/21

FUNDING (Allocated amounts are shaded)

Component	Fiscal Year	SHOPP				Total
PA&ED	17/18	2,737				2,737
PS&E	17/18	3,000				3,000
RW Support	17/18	2,000				2,000
Const Support	20/21	3,100				3,100
RW Capital	18/19	35,000				35,000
Const Capital	20/21	11,628				11,628
Total		57,465				57,465

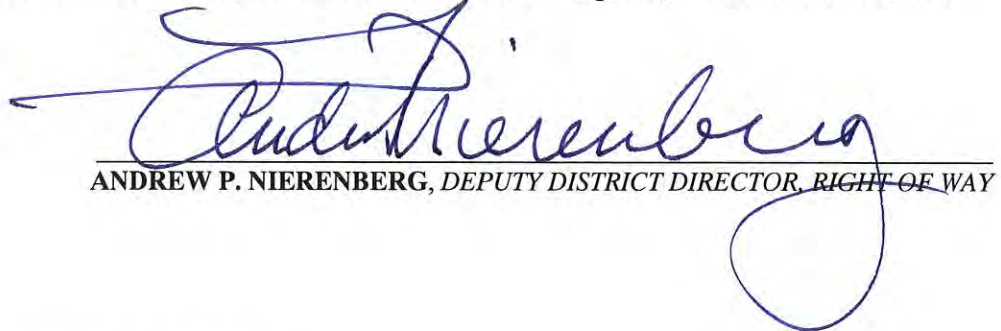
PROJECT REPORT

On Route LA-001

Between Guernsey Avenue (PM 56.5)

And Trancas Canyon—Broad Beach Road (PM 56.9)

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:



ANDREW P. NIERENBERG, DEPUTY DISTRICT DIRECTOR, RIGHT OF WAY

APPROVAL RECOMMENDED:



SHAHRIAR YADEGARI, PROJECT MANAGER

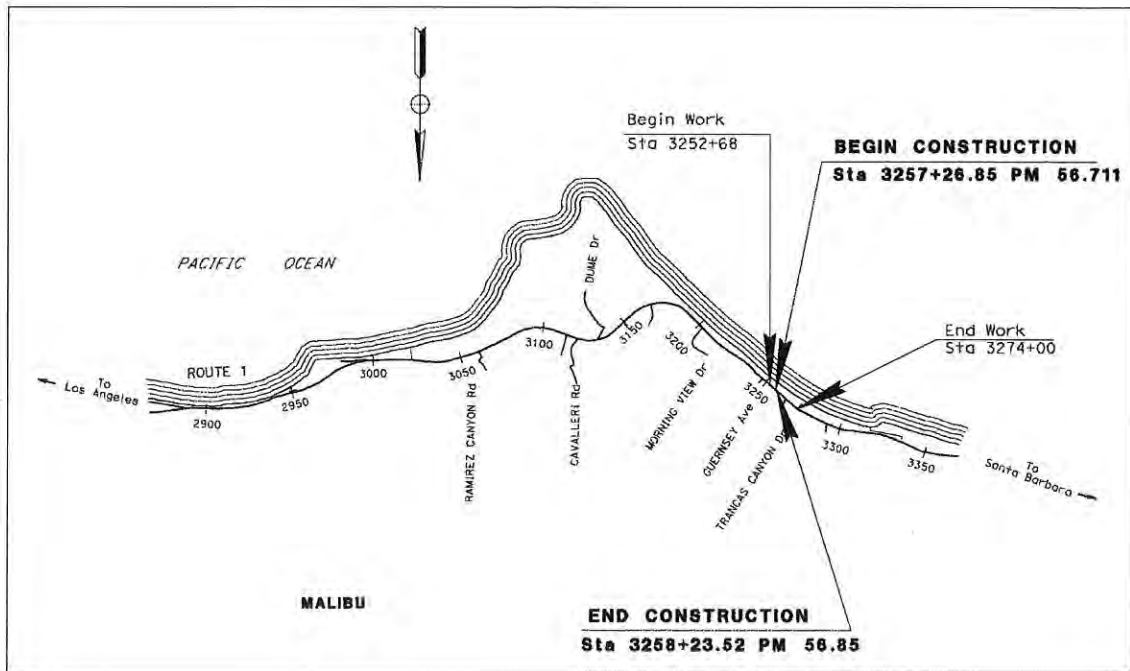
APPROVED:



JERREL KAM, DEPUTY DISTRICT DIRECTOR, DESIGN

6/30/17
DATE

Vicinity Map



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.



Barnabas F. Vorreiter, REGISTERED CIVIL ENGINEER

June 29, 2017
DATE



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1. INTRODUCTION

California Department of Transportation is proposing to replace Trancas Creek Bridge (Bridge No. 53-0027) on Pacific Coast Highway (LA-1) in Los Angeles County. The proposed bridge will replace the 90 year old bridge which is subject to scour under a 10 year storm event. In addition to replacing the bridge, project improvements include constructing a wider bridge by 14 foot and widening of the roadway pavement by as much as 9 foot, within the project limit, on the southbound side outside shoulder of LA-1. Widening of the bridge and roadway pavement will provide room for future 6 foot wide bicycle/pedestrian walkway. Additional work such as reconstructing of the raised median island and roadway pavement reconstruction of affected areas to facilitate bridge replacement are included as part of the project scope work.

Adjacent to Trancas Creek Bridge, a plan to restore Trancas lagoon has been undertaken by the National Park Service (NPS) and the Resource Conservation District of the Santa Monica Mountains (RCD-SMM), who is the lead agency in charge to restore the lagoon as practicable as possible.

Restoration of the lagoon's goals is to provide essential habitat and passage improvement for numerous coastal fish species, including endangered tidewater gobies and southern steelhead trout; improve flood control while increasing fish passage opportunities; reduce sedimentation and erosion; reduce water quality problems related to nutrient loading; restore wetland and riparian vegetation and remove invasive exotics; restore transitional upland and coastal sage scrub vegetation and to provide opportunities for public access, trail connections to the upper watershed and educational outreach opportunities.

Restoration of the lagoon entails acquiring a seven (7) acres of land to establish the lagoon including for access to flood control channel and for trails from beach to market and to inland trails across the restored lagoon area. Lagoon design is to accommodate and allow fish passage from ocean to headwaters of system. Lagoon footprint with natural channel design restoration for increased recreation and improved flood control demands a longer bridge.

Three alternatives have been proposed and evaluated: Alternative 1 – No Build, Alternative 2 – 120-ft long bridge, and Alternative 3 – 240-ft long bridge.

The two build Alternatives for most part will be taking place within the state right of way except for the slope grading and rock slope protection around the abutments area where additional right of way will be acquired necessitated by the project.

Furthermore, in addition to right of way necessitated by the project, additional right of way in excess of 19,300 square foot needs to be condemned due to lack of driveway access caused by higher bridge profile grade, for Alternative 2, dictated by Los Angeles County Department of Public Works to accommodate a 50 year burned and bulked storm flood requirement.

The total cost estimate including right of way and support cost varies from \$57.83 million (\$9.08 million construction cost, \$40.12 million right of way cost and \$8.63 million support cost) for Alternative 2 to \$60.34 million (\$10.34 million construction cost, \$41.37 million right of way cost and \$8.63 million support cost) for Alternative 3.

Project Limits	07-LA-001, PM 56.5/56.9	
Number of Alternatives	Three (3) Including No Build	
	Current Cost Estimate (217)	Escalated Cost Estimate (2019)
Capital Outlay Support (Alternative 2)	\$ 8,626,000	\$ 9,407,520
Capital Outlay Construction (Alternative 2)	\$ 9,081,330	\$ 9,626,210
Capital Outlay Right-of-Way (Alternative 2)	\$40,117,529	\$46,618,818
Capital Outlay Support (Alternative 3)	\$ 8,626,000	\$ 8,626,000
Capital Outlay Construction (Alternative 3)	\$10,337,350	\$10,956,330
Capital Outlay Right-of-Way (Alternative 3)	\$41,371,324	\$48,464,811
Funding Source	SHOPP (201.110, Bridge Rehabilitation)	
Funding Year	2017/2018	
Type of Facility	Four (4) lane conventional highway	
Number of Structures	One (1)	
SHOPP Project Output		
Environmental Determination or Document	ND/FONSI	
Legal Description	In Los Angeles County in Malibu from Guernsey Avenue (PM 56.5) to Trancas Canyon Road (PM 56.9)	
Project Development Category	Category 4	

2. RECOMMENDATION

It is recommended that Alternative 3 be adopted so that the project can proceed to the design phase. Local agencies and stakeholders have been consulted with respect to the alternatives presented, their views have been considered and are in general accord with the plan.

The selected alternative will consist 240-ft long, 90.5-ft wide and four (4) span bridge, with structural elements of 2.17-ft deep precast voided slab structure deck supported by six (6) 3.5-ft diameter column on a 4-foot diameter cast in steel-shell (CISS) piles for the piers and 2-ft diameter CISS piles for the abutments foundations. Total cost of this alternative is

\$60.34 million (\$10.34 million construction cost, \$41.37 million right of way cost and \$8.63 million support cost)

3. BACKGROUND

3A. Project History

Trancas Creek Bridge has a history of scour related issues. The channel approach behind the bridge's north wing wall at the east abutment was washed out in 1967. The channel was regraded in 1969 to allow the creek to flow under span 2 and the channel banks were graded and diked to divert water from the wing walls and abutment. In 1970 the fill behind the southwest wing wall was eroded and part of the shoulder was undermined and had to be refilled. In 1998, there was erosion documented behind the northeast wing wall most likely caused by the heavy rainstorm from El Nino of 1997/1998. An emergency contract was executed to mitigate the erosion by placing two (2) ton rock slope protection behind the wing wall and upstream of abutment four (4). Though, no scour problems have been reported since 1998, this 90 year old bridge has a National Bridge Inspection (NBI) code of 113=3, which means the bridge is scour critical.

A scour evaluation conducted by Caltrans Structure Maintenance & Investigation's (SM&I's) Hydraulic Unit in 2009 documented the potential for future scouring due in part to the bridge's location about 800-ft from the Pacific Ocean, contraction of the channel at the bridge and the hydraulic skew. That evaluation concluded that the bridge could settle during a 10 year storm event due to scour at the piers, as a result a project was initiated and project scope summary report (PSSR) (structure rehabilitation) to request programming in the 2014 SHOPP was approved on January 18, 2013.

The January 18, 2013 approved PSSR had only one (1) alternative to replace the existing bridge with an estimated total cost of \$11.10 million (\$5.49 million construction cost, \$2.02 million right of way, utility relocation cost and \$3.59 million support cost) in program year 2017/2018.

In addition to having only one (1) alternative with the interest to only replace the scour ridden bridge structure and not considering to accommodate City of Malibu and the RCD-SMM featured future plans, the PSSR did not account for the Los Angeles County Department of Public Works (LACDPW) 50 year burned and bulked storm event requirement and thus the need to raise the bridge profile grade.

This project report, starting with draft project report, has taken City of Malibu and the RCD-SMM featured future plans into consideration by adding Alternative 3, to build a longer bridge, and accounted for the LADWP 50 year burned and bulked storm event requirement by raising the short bridge, proposed in the PSSR, by a minimum of 2.5-ft and by revising the bridge deck thickness from 5.58-ft, proposed in the PSR, to 2.17-ft.

In case of Alternative 2, raising the bridge profile grade by 2.5-ft required raise of the roadway profile grade beyond the beginning and end of the bridge structure itself and

triggered the need for retaining walls to support the roadbed on both north and south bound direction of the highway. Having to construct a retaining wall in the southbound direction will deprive access to a house whose only driveway is 50-ft north of the end of bridge, therefore, this alternative would also require condemnation of the property.

In case of Alternative 3, constructing a longer bridge by 120-ft long and maintaining the existing roadway profile grade required excavation and regarding the surrounding area in order not to impede storm flow complying with LACDPW. The area to be excavated and regraded is outside Caltrans right of way and has to be acquired. Furthermore, the residence on the Oceanside whose drive way is 50-ft north of the end of bridge will not have access to the property during construction and needs to be relocated temporarily.

Therefore, it is because of the above five (5) paragraphs stated that there is a large cost discrepancies between the approved PSSR of January 18, 2013 and this DPR/PR document.

3B. Community Interaction

On January 8, 2016 scoping letters were sent to federal, state and local elected officials, agencies and local stakeholder interest groups informing them about the proposed project and the planned public scoping meeting.

Scoping meeting was conduct in the vicinity of the project site, on January 27, 2016, where approximately 30 people attended, including local elected officials and local media sources. Project information handouts and comment cards were made available to the attendees. The meeting included a viewing session of the project maps and exhibits, a power point presentation, and the opportunity to provide verbal and written comments and questions from the public and stakeholders. The public and stakeholders were supportive and positive of the project.

Public hearing for the environmental document IS/EA was conducted on May 25, 2017. Local elected representatives and stakeholders have presented and consulted with respect to the alternatives being presented. Their views and inputs have been considered and implemented in the preferred alternative to the maximum possible within the project scopes capacity.

3C. Existing Facility

Pacific Coast Highway (PCH) is a 4-lane divided, by a raised median, conventional highway that traverses the City of Malibu and is a major route along the California Coast. Though PCH in general is a north-south bound conventional highway along the California Coast, within the project limit, it is an east-west roadway that provides two (2) westbound standard width lanes with an eight (8) foot outside shoulder and two (2) eastbound standard width lanes with an eight (8) foot outside shoulder. In addition to the two (2) eastbound lanes and an eight (8) foot outside shoulder there is a class III bikeway situated between the edge of traveled way and the outside shoulder, where vehicles are allowed to park. The posted speed limit in this section of PCH is 50 mph.

Trancas Creek Bridge, the bridge to be replaced is located approximately half way between Guernsey Avenue and Trancas Canyon. The bridge, which was built in 1927 and widened in 1938 and 1954, consists of 97-ft long, 85-ft wide with three (3) span, six (6) "T" beam girders and reinforced concrete (RC) solid slab on RC closed end "T" beam seated and slab rigid frame abutments and six (6) RC column and solid pier walls. All supported on spread footings.

4. PURPOSE AND NEED

4A. Purpose

The purpose of this project is to replace Trancas Creek Bridge with a new bridge structure that maintains reliable access for the public in compliance with current standard of mobility.

4B. Need

The existing 90 year old bridge, designed for 50-year span, has a history of scour erosion from 1967 to 1998 that were repaired at various times with riprap, regrading and stabilization of dikes. Therefore, there is not much left that an interim scour mitigation can prevent the bridge from settling in a 10 year storm event due to scour at the piers that could cause significant damage to the structure and thus closure of the bridge to traffic.

4C. Problem, Deficiencies, Justification

State Route (SR) 1 within the project limit is a four lane conventional highway, two (2) lane in each direction with a raised Median Island that varies in width between 4-ft to 16.5-ft, no inside shoulders, 8-ft outside shoulders and is designated as having a Class III bikeway. The existing outside shoulder on the Oceanside in many cases with cars parked there is currently used by both cyclists and pedestrians. This project will widen the southerly (eastbound) side of the highway for a 6-ft wide bicycle/pedestrian use throughout the project limit.

4D. Regional and System Planning

State Route (SR) 1 is part of the National Highway System (NHS) and part of the Federal Surface Transportation Assistance Act of 1982 (STAA). It is a north/south state conventional scenic highway that provides interregional, recreational, commuter and local travel through urban as well as rural corridors. Within the project limit it is an east/west conventional highway consisting four (4) lanes, two (2) lanes in each direction.

Based on the 2014 Transportation Concept Report (TCR) for segment 18, where this project is located, there is no plan to widen the highway for additional travel lanes. However, City of Malibu has a safety grant for bike and pedestrian facilities and thus it is anticipated that bicycle/pedestrian facilities would be developed along this segment of SR-1. In anticipation of the regional development, this project lengthens and widens the bridge

to be replaced and widens roadway pavement within the project limit to accommodate the future anticipated bicycle/pedestrian facility.

4E. Traffic

Based on the Traffic Engineering Performance Assessment (TEPA), there is no operational deficiencies within the project limits of SR-1. The city of Malibu Safety Study that was completed in 2015, recommended to provide a pedestrian sidewalk along the northbound side of the highway to connect with pedestrian undercrossing (PUC) under the bridge. The possibility of providing PUC was discussed with Caltrans HQ Traffic Safety Liaison and was decided that PUC was not viable solution due to maintenance and security issues related to undercrossings. There is a signalized intersection at Trancas Canyon Road with marked crosswalk located approximately 740-ft to the north of the bridge, where pedestrians can safely walk across the highway. Furthermore, the bridge is being widened to provide proper sidewalk for pedestrians. Therefore, the walkway under the Trancas Creek Bridge is not recommended at this time. It is however recommended to provide a sidewalk from the crosswalk to the bridge.

i. Existing and Future Traffic Conditions

Current average AADT is approximately 23,600 vehicles with 5.43% track traffic and peak hourly demands of 2,500 vehicles per hour per lane (vphpl). However, since this project is a bridge replacement to mitigate scouring issues and not capacity issue, the PDT decided not to spend time on year 2040 projected traffic analysis.

i. Accident Rates and Analysis

The summary of the collision analysis for Pacific Coast Highway, between Guernsey Ave and Trancas Canyon Rd within a three year period from April 1, 2012 to March 31, 2015 as documented in the Traffic Accident and Surveillance and Analysis System (TASAS) are shown on the table below.

Table B-Selective Accident Rate Calculation Summary
(Accident rates express as No. of accidents/Million Vehicle Miles)

Location	Post Mile	No. of Accidents			Actual (acc/mvm)			State Average (acc/mvm)		
		Total	Fatal	Injury	Fatal	F+I	Total	Fatal	F+I	Total
SR-1	56.5/56.9	15	0	3	0.00	0.32	1.40	0.010	0.60	1.45

SR-1 for this segment of highway within this project limit, the actual fatality, fatality + injury and the total accident rates are lower than the state average rates for similar types of facilities. There are no Table C and Wet Table C for this segment of highway identified within the three (3) year period from 04/01/2012 to 03/31/2015.

The TSAR for the time period from 04/01/2012 to 03/31/2015, revealed 15

collisions, 4 injury accidents with 6 persons injured report and no fatal accidents. The type of collisions were 1-head-on (6.3%), 4-sideswipe (25%), 5 rear end (31.3%), 4-broadside (25%) and 2-other (12.5%). The primary Collision Factors were due to 1-influence of alcohol (6.3), 4-failure to yield (25), 3-improper turn (18.8%), 4-speeding (25%), 2-other violations (12.5%), 1-unknown (6.3%) and 1-not stated (6.3%).

5. ALTERNATIVES

5A. Alternatives

Three alternatives were proposed for this Project, including the No Build Alternative and two build Alternatives. Each alternative is described below:

i. Alternative 1: No Build

Under this alternative, the current configuration of Trancas Creek Bridge would have been maintained and remain in place. This alternative would not have achieved nor satisfied the need and purpose of the project.

ii. Alternative 2: 120-ft long Bridge

Alternative 2 proposed to replace the existing 97 foot long, 85 foot wide, and three (3) span bridge with a new 120-ft long, 90.5-ft wide and two (2) span bridge with a capacity to be lengthened to 240-ft in the future. The structural elements consisted 2.17-ft deep precast voided slab structure deck supported by six (6) 3.5-ft diameter column on 4-ft diameter cast-in-steel-shell (CISS) piles for the piers and 2-ft diameter CISS piles for abutment foundations.

In this alternative, roadway profile would have been raised starting 265.85-ft south of the begin bridge and 261.15-ft north of the end bridge to replace existing Trancas Creek Bridge. As a result of the raised roadway profile grade, retaining walls will be erected on both side of the highway to retain the roadbed. The raised profile grade would have a maximum 2.23% grade slope and would have satisfied LACDWP 50 year storm burned and bulked event vertical clearance requirement under the bridge.

iii. Alternative 3: 240-ft long Bridge

Alternative 3 proposed to replace the existing 97 foot long, 85 foot wide, and three (3) span bridge with a new 240-ft long, 90.5-ft wide and four (4) span bridge. As in alternative 2, the structural elements consisted of 2.17-ft deep precast voided slab structure deck supported by six (6) 3.5-ft diameter column on 4-ft diameter cast-in-steel-shell (CISS) piles for the piers and 2-ft diameter CISS piles for abutment foundations.

In this alternative, roadway profile remained as is and roadway rehabilitation to facilitate bridge replacement would take place starting 45.85-ft south of the begin bridge and 64.15-ft north of the end bridge. This 240-ft long bridge will have the capacity to satisfy LACDWP 50 year storm burned and bulked event vertical clearance requirement under the bridge. Additionally, Alternative 3 will accommodate RCD-SMM desire to have a bicycle/pedestrian trail crossing under the bridge during none heavy rain season.

Both build alternatives, in addition to replacing Trancas Creek Bridge have a commonly shared roadway improvements that consist widening of the roadway by as much as 9-ft on the westerly (southbound) side to allow for a 6-ft wide future bicycle/pedestrian use. Existing 16.5-ft raised median will be reduced to 6.5-ft raised curb Median Island in order to provide a 5-ft median shoulders.

5B. Preferred Alternative

Alternative 3 – 240-ft long bridge that accommodates featured future City of Malibu and RCD-SMM plan to restore Trancas lagoon and provide pedestrian trail that crisscrosses between Zuma beach and Trancas County Market via a Trancas Creek Bridge underpass is the preferred alternative. This preferred alternative is consistent with California Coastal Act and the Coastal Commission’s proposal Coastal Access and Safety Alternative design options. It complies with coastal Act policies access to coastal areas, and expansion of public works facilities to meet the needs of residents.

5C. Rejected Alternatives

The originally proposed Trancas Creek Bridge replacement that was approved at the project scope summary report (PSSR) stage has been rejected. The rejected alternative was similar to the Alternative 2 that this draft project report is proposing in terms of size. However, having lacked features to be lengthened to 240-ft long to accommodate future Trancas Lagoon Restoration plan that is understudy by the Resource Conservation District of the Santa Monica Mountains (RCD-SMM), the PDT decided to eliminate the alternative.

In addition to the originally proposed Trancas Creek Bridge replacement stated above, Alternative 1 and Alternative 2 are rejected because of the following reasons:

The Alternative 1 – No Build alternative is rejected because it does not mitigate settlement of the bridge due to scour at the piers failing to maintain reliable access for the motoring public.

The Alternative 2 – 120-ft long bridge is rejected because though it would have complied with featured City of Malibu plan to construct footbridge to cross over creek and connector underpass and with featured future RCD-SMM plan to restore Trancas lagoon and provide pedestrian trail from Zuma beach to Trancas Country Market, by lengthening the bridge in the future when City of Malibu and RCD-SMM bring their plan to fruition, it is not worth the savings of not having to build the longer bridge at this stage because of the impact it

will create to the travelling motorists to have to reduce travelling lanes to one (1) in each direction again in the future for stage construction to lengthen the bridge.

5D. Non-Standard Advisory Design Features

Due to California Coastal Commission desire to maximize shoulder parking space, both alternatives will require fact sheet exceptions to advisory design standards for HDM Index 309.1(2) (a) to leave relocated utility power poles, fixed objects, without shield. A separate fact sheet will be prepared for approval for the advisory design standards tabulated in the table below during the PS&E project phase.

Design Standards Risk Assessment			
Location	Design Standard from Highway Design Manual Tables 82.1A & 82.1B	Probability of Design Exception Approval (None, Low, Medium, High,)	Justification for Probability Rating
Throw-out the project limit	HDM Index 309.1(2)(a), 9' instead of 20' clear recovery zone (CRZ)	High	Issues discussed with Geometrician Coordinator, District Area Traffic Engineer and HQ Traffic Liaison, verbally approval consented.

6. CONSIDERATIONS REQUIRING DISCUSSION

6A. Hazardous Waste

There is a hazardous waste concern for asbestos construction material that might be contained in the existing structure, which may be exposed during bridge demolition. There is also concern for aerially deposited lead (ADL) contaminated soil adjacent to the bridge abutments and beyond the outside shoulders that are none paved area. (See attachment J).

6B. Value Analysis

The total project cost is under \$50 million and therefore does not warrant a value analysis study.

6C. Resource Conservation

The proposed project would not require the use of water, except for minor amounts during construction. There is no landscaped areas. Therefore, the proposed project would not have a significant impact to the public water supply.

The existing asphalt concrete pavement and concrete bridge deck to be removed shall be crushed to aggregate base material and incorporated into the new pavement structural section of the proposed project or stockpiled on State property for future use.

Operation of the proposed project would not require additional supplies of energy or fuel. Minor amounts of energy and fuel would be used during construction, Long-term energy consumption will be reduced upon relieving motorist traffic congestion through this project

by providing additional bicycle/pedestrian walkway and improving traffic operations.

6D. Right-of-Way Issues

The project will involve right of way acquisitions (Fee) from Los Angeles County, 30050 Pacific Coast Highway and from Klein Family Partnership, 30660 Pacific Coast Highway on the southerly side of Trancas Creek Bridge and from land of Matthew Keller in the Ranch Toponga Malibu Sequit, 30745 Pacific Coast Highway on the north side of Trancas Creek Bridge, all in the City of Malibu, California 90265. This right of way is needed to be excavated for creek widening for placing rock slope protection (RSP) around the abutments.

Temporary construction easements (TCE) to facilitate construction of Trancas Creek Bridge replacement would also be required for the build alternatives from Los Angeles County, 30050 Pacific Coast Highway, from Klein Family Partnership, 30660 Pacific Coast Highway and from land of Matthew Keller in the Ranch Toponga Malibu Sequit, 30745 Pacific Coast Highway, Malibu, California 90265.

The corresponding accessor parcel numbers (APN) where right of way requirements will be acquired for both Fee and TCE are 4469-045-001, and 4469-026-009, 4469-027-901. APN No 44609-045-001 is owned by Zuma Beach Properties, LLC, APN No 4469-026-009 is owned by Klein, Family Partnership and 4469-027-901 is owned by County of Los Angeles.

The right of way data sheet for both build alternatives have been prepared and the total cost includes relocation of residence, relocation of southern California Edison power pole posts and relocation of other utility facilities. The project right of way requirements are as shown in the table below:

Right-of-Way (R/W) Requirements

Accessor Parcel No.	Alternative 2		Alternative 3	
	Fee (SQ FT)	TCE (SQ FT)	Fee (SQ FT)	TCE (SQ FT)
4469-045-001	11,760.00	80,209.00	24,967.00	72,465.00
4469-026-009	6.77	19,301.23	6.77	7,418.00
4469-027-901	4,047.00	36,960.00	21,732.00	22,285.00
Total	15,813.77	136,470.23	46,705.77	102,168.00

Since the preferred alternative is Alternative 3, the right of way requirements for this project is what is shown in the table above under Alternative 3 and right of way data sheet attachment for Alt 3 that shows detailed cost estimate including relocation of utilities. (See attachment H)

6E. Environmental Compliance

Though the preliminary environmental analysis report (PEAR) at the PSR phase of the project has determined this project to be a Categorical Exemption and Categorical

Exclusion under CEQA/NEPA, the appropriate environmental document is ND/FONSI.

Project environmental commitments include archaeological and historical resources for study as well as wetland/riparian and coastal appealing bridge railings.

Construction activities within the creek are limited to the dry season, from May 1 through November 1, only. Construction activities other than within the creek are allowed to proceed including the rainy season.

6F. Air Quality Conformity

Per 40 Code of Federal Regulations (CFR) 93.126, published in the Federal Register (Volume 69, page 4004) on July 1, 2004, Table 2 allows certain projects to be exempt from all emissions analysis. Based on the proposed project scope of work, the proposed project is deemed listed in Table 2 under the subtitle "Safety" and classification "Widening narrow pavements or reconstructing bridges (no additional travel lanes)." Therefore, pursuant to 40 CFR 93.126, this project is deemed classified and is exempt from the requirement to determine conformity.

An Air quality analysis was completed as part of the Initial Study/Environmental Assessment (IS/EA) for the proposed project. Analysis demonstrated that the project-level conformity, NEPA, and CEQA requirements are satisfied.

6G. Title VI Considerations

A Community Impact Memorandum was prepared for this finding, Trancas Creek Bridge replacement would not result in significant long term adverse impacts on communities or neighborhoods within the project area. Either of the build alternatives will require staging the project to be constructed in two (2) phases where only one lane instead of the two lanes in each direction will be available for the travelling motorist during construction. However, since the single lane of the travelled way in each direction is limited to a stretch of 2,000-ft (0.38 mile) long and is temporary, no disproportionately high or adverse impacts are expected to the community or the traveling public.

Once the project is completely constructed, the 14-foot wide shoulder on the westerly (southbound) side will be available for bicycle/pedestrian use.

6H. Noise Abatement Decision Report

This is not a Type 1 project and a noise study is not required.

7. OTHER CONSIDERATIONS AS APPROPRIATE

7A. Public Hearing Process

The draft environmental document was circulated on May 02, 2017 and a public hearing

was conducted on May 25, 2017 to present the alternatives for public review and comments. It is in accordance with the public comments received during and after the public hearing that Alternative 3 emerged as the preferred alternative.

7B. Route Matters

This project is in compliance with where City of Malibu has a safety grant for bike and pedestrian facilities and thus it is anticipated that bicycle/pedestrian facilities would be developed along this segment of SR-1 in the future. In anticipation of the regional development, this project chooses Alternative 3 as the preferred alternative, widens the bridge to be replaced and roadway pavement within the project limit to accommodate the future anticipated bicycle/pedestrian facility.

7C. Permits

The permits, reviews, and approvals listed in the table below will be required for project construction.

Permitting Requirements

Agency	Permit/Approval
U.S. Army Corp of Engineers (USACOE)	Clean Water Act, Section 404 Nationwide 23 permit
U.S. Fish & Wildlife (USFWS)	Endangered Species Program, Section 7 Consultation
U.S. Fish & Wildlife Service, Fisheries (NOAA/NMFS)	NEPA, Section 7 consultation
CA Dept. of Fish & Wildlife (CDFW)	Lake & Streambed Alt Agreement, Section 1600
State Water Resources Control Board	Clean Water Act, Section 402 NPDES
Los Angeles Regional Water Quality Control Board (RWQCB)	Clean Water Act, Section 401 Water Quality Certification
FHWA, Caltrans	Clean Air Act Transportation Conformity Determination
California Coastal Commission and/or Local Coastal Program, The City of Malibu	California Public Resources Code Division 20 (California Coastal Act) Coastal Development Permit
Caltrans	Right-of-Way Encroachment Permit Cooperative Agreement National Historic Preservation Act Section 106

7D. Cooperative Agreements

Project does not involve any cooperative agreement

7E. Other Agreements

No other agreements are involved with this project.

7F. Report on Feasibility of Providing Access to Navigable Rivers

The creek under where Trancas Creek Bridge replacement takes place is not considered a navigable water.

7G. Public Boat Ramps

No public boat ramps are involved with this project.

7H. Transportation Management Plan for use During Construction

Note that due to anticipated 30 minutes traffic delay the Transportation Management Plan (TMP) needs to be approved by the District Lane Closure Review Committee (DLCRC). The TMP based upon the planned stage construction presented below to reduce potential construction related traffic conflicts and delays will be presented to the DLCRC for approval at the PS&E project phase. A TMP Data Sheet will be prepared to address lane closure required by the selected alternative.

Since there are no roads within the vicinity of the project that run parallel to Pacific Coast Highway, it will be necessary to close two lanes during the entire construction period to facilitate replacement of Trancas Creek Bridge. The PS&E package will include stage construction and traffic handling plans.

A TMP certification was issued during draft project report design development identifying the following strategies.

- Public Awareness Campaign—Development of a public awareness campaign to sufficiently inform residents and motorists prior to construction. This utilizing local media, telephone hotline mailers, direct advertising and internet updates would inform the public of construction related congestion.
- Real time communications—Real time communications with motorists advising them of construction activities, closures, and delays will be conducted using portable changeable message signs and fixed changeable message signs.
- Construction Zone Enhancement Enforcement Program (COZEEP)—Implementation of COZEEP to provide police assistance and surveillance within construction areas. The officers can monitor and enforce speed reductions within work zones and provide emergency response support. Costs associated with implementing the TMP strategies are included in the TMP Data Sheet.

Project construction is anticipated to take approximately 16 months and will be phased in two (2) stages.

7I. Stage Construction

A preliminary stage construction concept for both Alternative 2 and Alternative 3, which are almost identical, has been prepared to ensure that there were no fatal construction plans:

STAGE 1 – As first order of work Contractor will restripe existing northbound traffic lanes and convert them to one (1) lane northbound direction and one (1) lane southbound direction. The lanes will be separated by a 4-ft median with surface mounted channelizers. Then, southbound traffic will be detoured to the newly created southbound traffic lane that used to be the northbound lane No. 1. Contractor will place temporary railing (type k) and close all, what used to be existing southbound direction, traveled lanes and shoulders to public traffic.

Once public traffic is detoured and temporary railing (type k) is complete in place, Contractor will demolition and remove 35-ft and 3-inches portion of exiting southbound Trancas Creek Bridge and replace it with 43-ft and 6-inches wide brand new bridge deck. Duration of this first stage construction will take about eight (8) months.

STAGE 2 – Once stage one is complete, Contractor will stripe newly constructed Structure and adjoining roadway pavement into one (1) southbound direction and one (1) northbound direction traveled lanes and relocate temporary railing (type k) to newly created roadway facility adjacent to northbound lane direction. Then, traveling public traffic will be detoured to the newly striped and created traveled lanes.

Once public traffic is detoured and temporary railing (type k) is relocated and complete in place to the newly constructed partial roadway facility, Contractor will demolish and remove 47-ft portion of remaining old Trancas Creek Bridge and replace it with 47-ft wide brand new bridge deck. Duration of this second stage construction will take about eight (8) months.

Once stage 2 is complete, Contractor will restripe SR-1 within the project limit to its original traveled lane configurations of having two (2) lanes in the northbound and two (2) lanes in the southbound direction, will remove temporary railing (type k) and temporarily surface mounted channelizers facilitating for the travelling motor vehicles to resort back to current directional travelling configuration.

7J. Accommodation of Oversize Loads

The proposed project will widen the westerly (southbound) side shoulder to 14-ft which would provide room for future bicycle/pedestrian use. The existing 16.5-ft wide raised median will be reduced to 6.5-ft raised curb Median Island in order to provide a 5-ft standard median shoulders. Therefore, with those improvements and standard width lanes, the project in this segment of SR-1 will not reduce the ability of to transport oversized loads.

7K. Graffiti Control

Trancas Creek Bridge is identified as urban area and thus may be graffiti-prone. Standard deterrent technics will be used as part of the proposed design. To prevent vandalism and theft of electrical systems, theft deterrent security pull boxes will be installed. Proposed signs will also be coated with premium anti-graffiti film for easier cleaning.

7L. Scour Mitigation

In the event bridge replacement cannot be expedited within two years, the District will initiate an interim scour mitigation measures that would involve modification to the channel and or the structure to reduce potential scouring that could undermine the integrity of the bridge.

8. FUNDING, PROGRAMMING AND ESTIMATE

Funding

Project will be funded by the Highway Bridge Rehabilitation and Replacement (HBBR-S) program and it has been determined that his project is eligible for Federal-aid funding.

Programming

This project is programed in the 2014 SHOPP for fiscal year 2017/2018 under program code 201.110. Funding sources are as shown in the table below.

Alternative 2

Fund Source	Fiscal Year Estimate								
	Prior	14/15	15/16	16/17	17/18	18/19	19/20	Future	Total
20.XX.201.110									
Component	In thousands of dollars (\$1,000)								
PA&ED Support				2,776					2,776
PS&E Support					1,800	700			2,500
Right-of-Way Support					670	180			850
Construction Support							2,500		2,500
Right-of-Way						46,660			46,660
Construction						9,081			9,081
Total				2,776	2,470	56,621	2,500		64,367

Alternative 3

Fund Source								Fiscal Year Estimate			
	Prior	14/15	15/16	16/17	17/18	18/19	19/20	Future	Total	Support vs Cap	Historic Support
Component								In thousands of dollars (\$1,000)			
PA&ED Support				2,776					2,776	4.7%	4.3%
PS&E Support					1,800	700			2,500	29%	28.7%
Right-of-Way Support					670	180			850	1.44%	1.32%
Construction Support									2,500	4.2%	3.84%
Right-of-Way						48,500			48,500		
Construction						10,337			10,337		
Total				2,776	2,470	59,717	2,500		67,463		

The support cost ratio is approximately 13.40%.in case of Alternative 2 and 12.79% in case of Alternative 3.

Estimate

The most significant aspect of the bridge replacement is the right of way cost, which varies between \$46,660 for Alternative 2 and \$48,500,000 for Alternative 3.

Another significant aspect of the project cost estimate is cost of the structure itself, which varies between 5,707,000 for Alternative 2 and \$7,063,000 for Alternative 3.

9. DELIVERY SCHEDULE

Project Milestones		Milestone Date (Month/Day/Year)	Milestone Designation (Target/Actual)
PROGRAM PROJECT	M015	03/21/14	A
BEGIN ENVIRONMENTAL	M020	09/15/14	A
NOTICE OF PREPARATION (NOP)	M030	10/05/14	A
NOTICE OF INTENT (NOI)	M035	10/15/14	A
CIRCULATE DED EXTERNALLY	M120	05/21/17	T
PA & ED	M200	06/30/17	T
PS&E TO DOE	M377	01/15/19	T
DRAFT STRUCTURES PS&E	M378	10/27/18	T
RIGHT OF WAY CERTIFICATION	M410	06/29/19	T
READY TO LIST	M460	06/30/19	T
FUND ALLOCATION	M470	09/16/19	T
HEADQUARTERS ADVERTISE	M480	12/16/19	T
AWARD	M495	03/15/20	T
APPROVE CONTRACT	M500	04/15/20	T
CONTRACT ACCEPTANCE	M600	12/15/21	T
END PROJECT	M800	10/16/23	T

10. RISKS

The project team is in the process of identifying potential risks, which will be included in the final project report based on the selected alternative. While probability and impact varies with each one, the risks will require close attention throughout the project. The risks will be monitored and updated during the PS&E and the construction phase.

11. FHWA COORDINATION

This project is determined to be a Delegated Project and is administered per the Project Responsibility List in the Joint Stewardship and Oversight Agreement between FHWA and Caltrans.

12. PROJECT REVIEWS

Formal review has occurred continuously throughout the development of the proposed draft project report by the project development team (PDT) including District Program Advisor, Headquarters SHOPP Program Advisor, District Maintenance, Headquarters Project Delivery Coordinator and Project Manager. All proposed nonstandard features were reviewed and approved by Caltrans. Design Exceptions will be processed during final PA/ED phase of the project.

13. PROJECT PERSONNEL

Barnabas F. Vorreiter Project Engineer, Design C	(213) 897-0717
Orlance C. Lee Senior Transportation Engineer, Design C	(213) 897-6444
Lupe Tamayo Office of Traffic Engineer	(213) 897-0434
Joseph Kibe Senior Transportation Engineer, Office of Traffic Engineering	(213) 897-0393
Christine Lan Associate Environmental Planner	(213) 897-2936
Wayne D. Lee, Senior Right of Way Agent	(213) 897-0117
Douglas C. Menzmer Senior Bridge Engineer, Office of Bridge Design—South 2	(916) 227-9535
Matt Holm A. Holm Chief Bridge Design Branch 12	(916) 227-8832
Shahriar Yadegari Project Manager	(213) 897-3867

14. ATTACHMENTS (Number of Pages)

- A. Location map (1)
- B. Alternative 2 – Preliminary Design Plans (12)

- C. Alternative 3 – Preliminary Design Plans (16)
- D. Advanced Planning Study (APS) (9)
- E. Storm Water Data Report (SWDR) (1)
- F. Cost Estimate – Alternative 2 (6)
- G. Cost Estimate – Alternative 3 (6)
- H. Right of Way Data Sheet (12)
- I. Traffic Management Plan (TMP) (6)
- J. Hazardous Waste Assessment (14)
- K. Risk Register (1)
- L. Project Study Summary Report (1)
- M. Environmental Document (3)

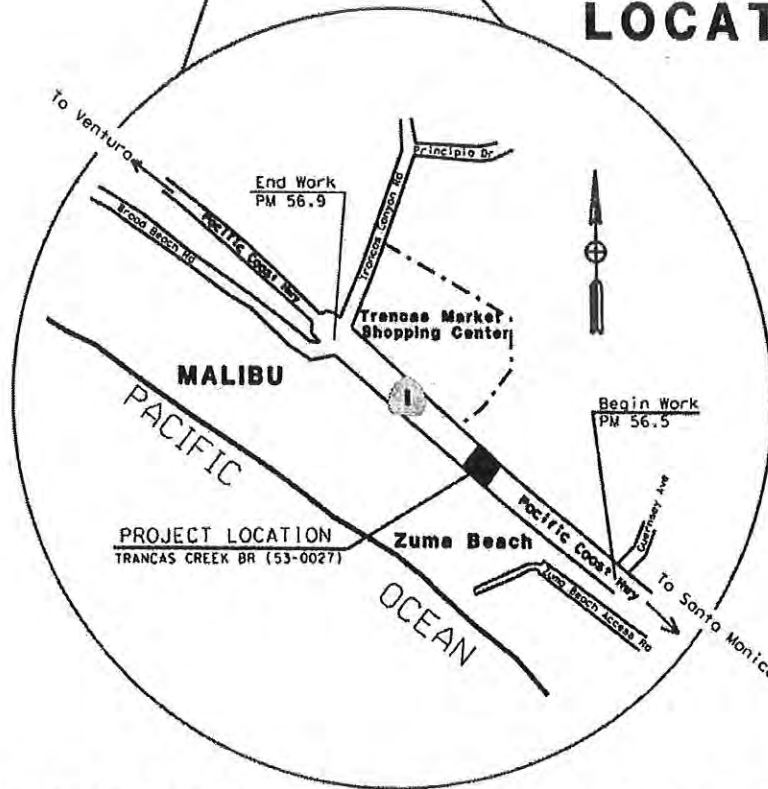
Attachment A

LOCATION MAP

VICINITY MAP



LOCATION MAP



PROJECT VICINITY AND LOCATION MAP

07-LA-001 PM56.7

Attachment A

NO SCALE

Attachment B

**ALTERNATIVE 2
PRELIMINARY DESIGN PLANS**

INDEX OF PLANS

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
 PROJECT PLANS FOR CONSTRUCTION ON
 STATE HIGHWAY
 IN LOS ANGELES COUNTY IN MALIBU
 FROM GUERNSEY AVENUE
 TO TRANCAS CANYON ROAD

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2010

DIST	COUNTY	ROUTE	POST MILEAGE TO NEXT PROJECT	SHEET TOTAL
07	LA	1	56.5/56.9	NO. OF SHEETS

LOCATION MAP

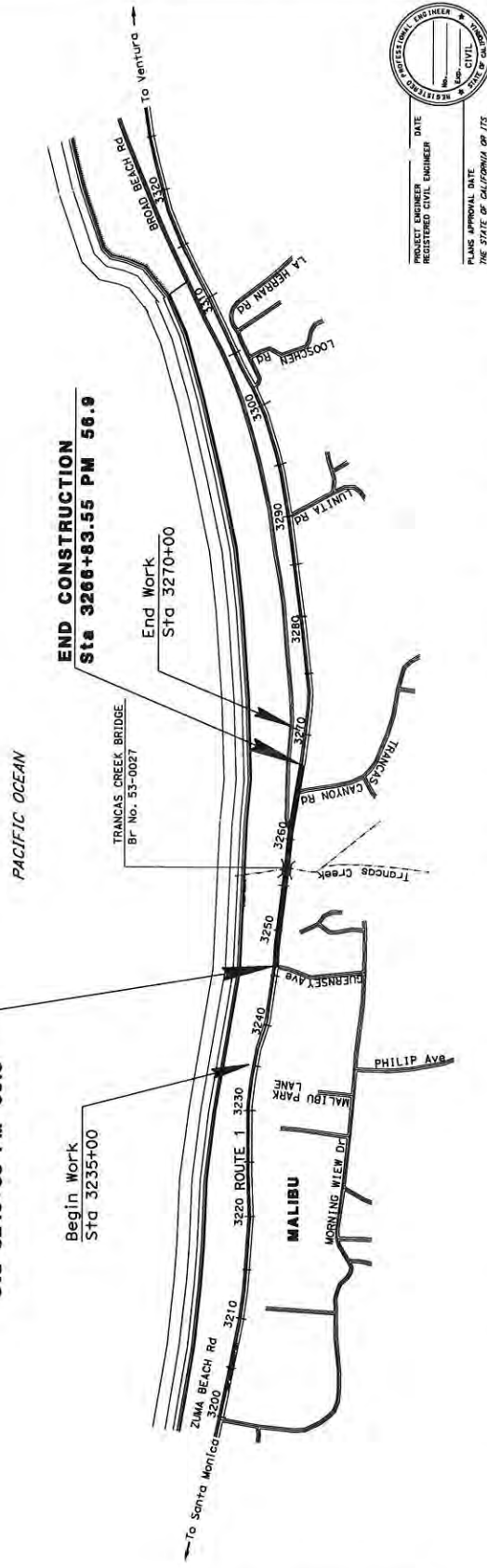


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Begin Work
 Sta 3235+00

END CONSTRUCTION
 Sta 3266+83.55 PM 56.9

End Work
 Sta 3270+00



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 IS IN INCHES

THE CONTRACTOR SHALL POSSESS THE CLASS (OR CLASSES) OF LICENSE AS SPECIFIED IN THE "NOTICE TO BIDDERS."

BORDER LAST REVISED 7/2/2010 CALTRANS WEB SITE IS: [HTTP://WWW.DOT.CA.GOV/](http://www.dot.ca.gov/)

SHORT BR. ALTERNATIVE 2

PROJECT ENGINEER REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA, BY ITS REGISTERED PROFESSIONAL ENGINEER, IS RESPONSIBLE FOR THE ACCURACY OF THE DIMENSIONS AND SPECIFICATIONS OF SHOWN THEREIN OF THIS PLAN SHEET.

PROJECT ENGINEER: SHAHRIAR VADEGARI
 PROJECT MANAGER: BAHMAYAS F. VORHEITER

CONTRACT NO. 07-291404
 PROJECT ID 0712000094

UNIT 1B1.4 PROJECT NUMBER & PHASE 0712000094.1

DATE PLOTTED => 29-JUN-2017
 TIME PLOTTED => 11:08

DESIGN ENGINEER	PROJECT MANAGER
BAHMAYAS F. VORHEITER	SHAHRIAR VADEGARI

DIR#	COUNTY	ROUTE	TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	01	56.5/56.9		

REGISTERED CIVIL ENGINEER	DATE
MO. T. NGUYEN	06/30/15
NO. C090381	CIVIL

PLANS APPROVAL DATE	DATE
06/30/15	06/30/15

EXIST STRUCTURAL SECTIONS

- 1. 0.75' AC
- 2. 0.5' AB

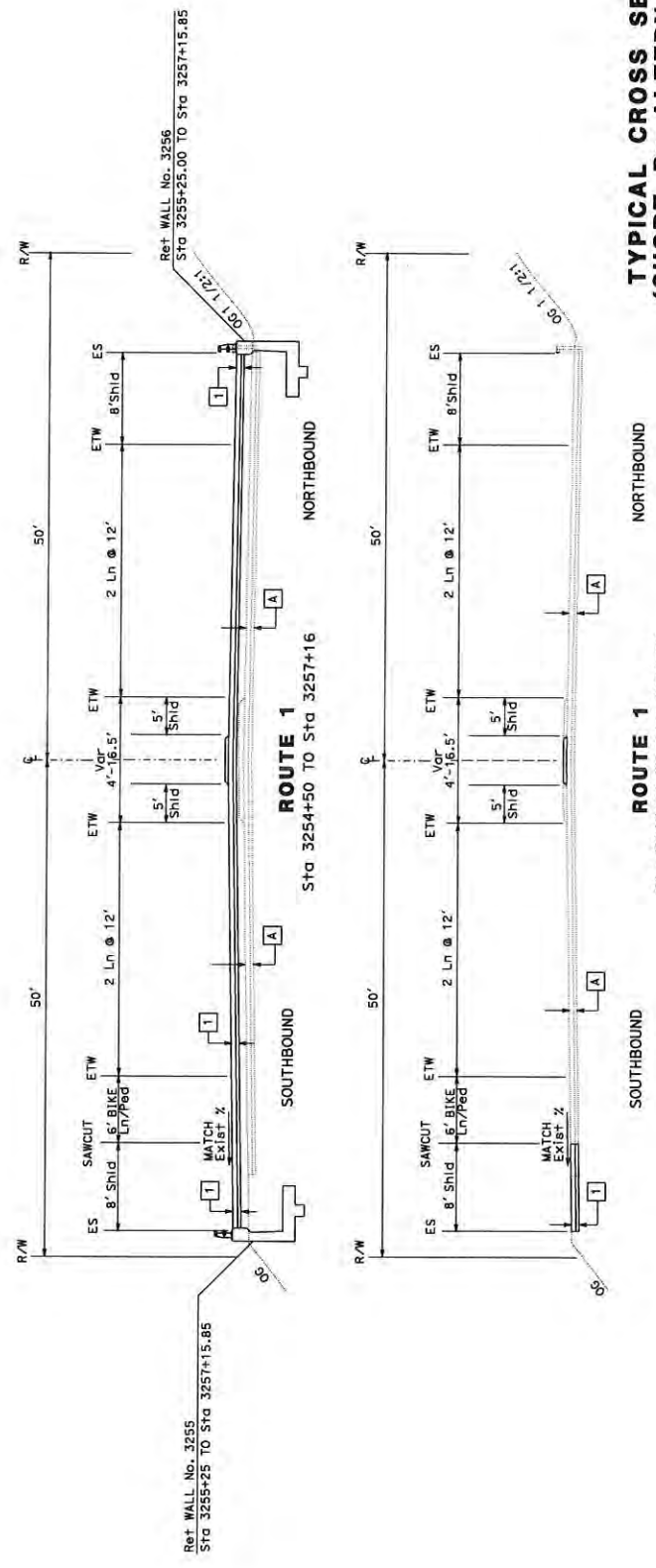
STRUCTURAL SECTIONS

- 1. 0.75' HOT MIX ASPHALT CONCRETE (TYPE A)
- 2. 0.50' CLASS 3 AGGREGATE BASE

ABBREVIATIONS:

RHMA-SF-G: RUBBERIZED HOT MIX ASPHALT, SUPERPAVE (GAP GRADED)

- NOTES:**
1. DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURE SECTIONS) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
 2. SUPERELEVATIONS ARE SHOWN ON THE SUPERELEVATION DIAGRAMS.



TYPICAL CROSS SECTIONS (SHORT BR. ALTERNATIVE 2)

NO SCALE

X-1

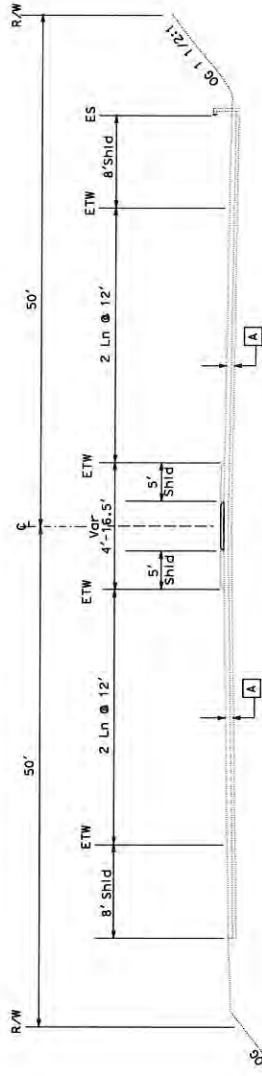
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FUNCTIONAL SUPERVISOR	CHECKED BY	BARNABAS F. VORREITER	REVISION
DESIGNED BY	DATE REVISION		
CALCULATED BY			

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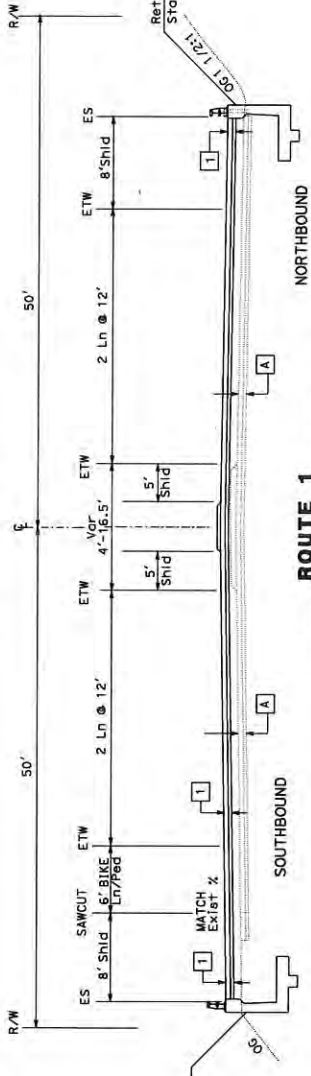
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PROFESSIONAL ENGINEER	

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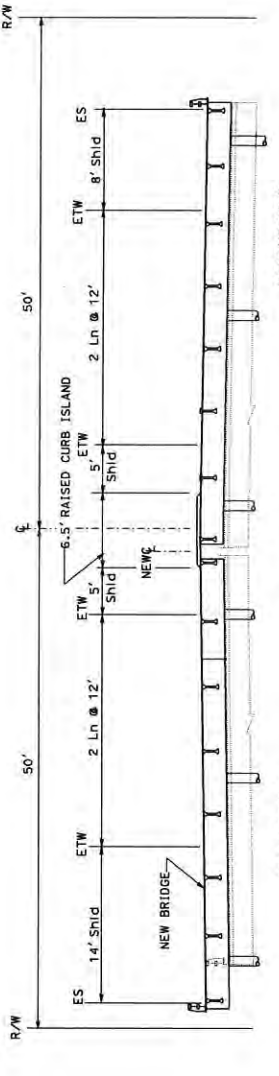
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 THE RECORD OF THIS PLAN SHEET
 COPIES OF THIS PLAN SHEET.



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ROUTE 1
Sta 3258+35.85 TO Sta 3261+00



ROUTE 1
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BR No. 53-0027

**TYPICAL CROSS SECTIONS
(SHORT BR. ALTERNATIVE 2)**

X-2

NO SCALE

PROJECT NUMBER & PHASE

UNIT 1814

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RELATIVE BORDER SCALE
15 IN INCHES

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DGN FILE => 7281600002.dgn

BORDER LAST REVISED 7/2/2010

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FUNCTIONAL SUPERVISOR	DESIGNED BY	OC LEE	CHECKED BY	BARNABAS F. WORETTER	REVISOR	DATE REVISED

DIST	COUNTY	ROUTE	TOTAL PROJECT LENGTH	SHEET TOTAL
07	LA	01	56.5/56.9	NO. SHEETS

REGISTERED CIVIL ENGINEER	DATE
PROFESSIONAL ENGINEER	

PLANS APPROVAL DATE: _____

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 HEREIN IS NOT GUARANTEED OR WARRANTED BY THE
 ENGINEER OR ANY OTHER PARTY.

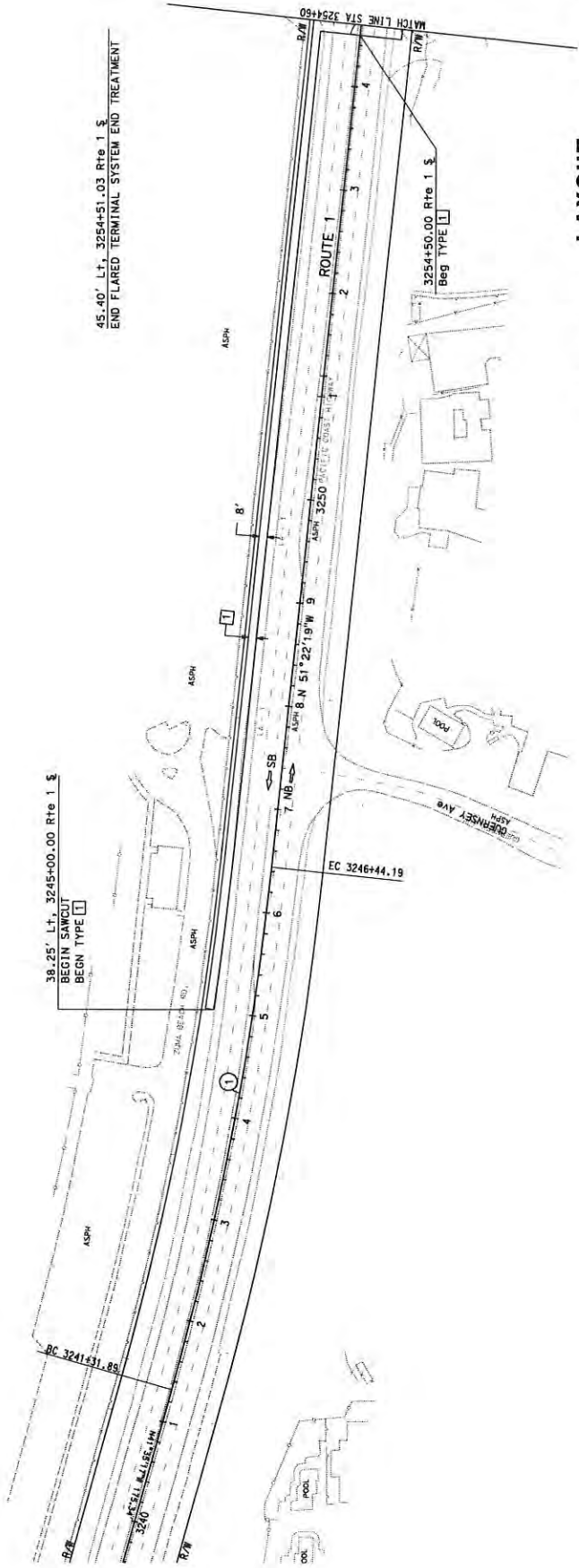
REGISTERED CIVIL ENGINEER
 AND T. WOLFE
 No. C050961
 Exp. 8-30-15

- NOTES:
- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
 - FOR NEW BRIDGE SEE STRUCTURE PLAN.



CURVE DATA

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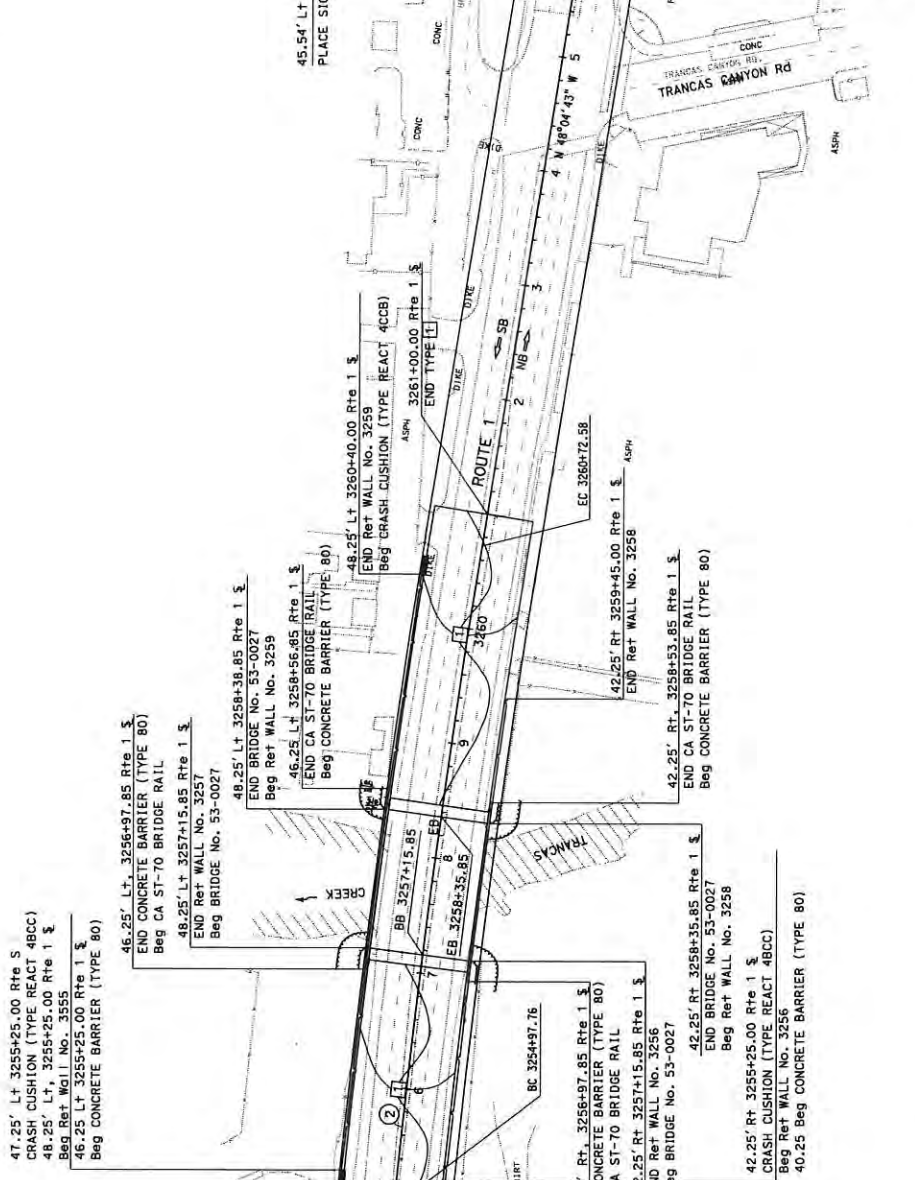
LAYOUT (SHORT BR. ALTERNATIVE 2)

SCALE: 1" = 50'
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LAST REVISION	17		
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ROUTE	01	POST MILE	56.5/56.9
SHEET NO.		TOTAL SHEETS	



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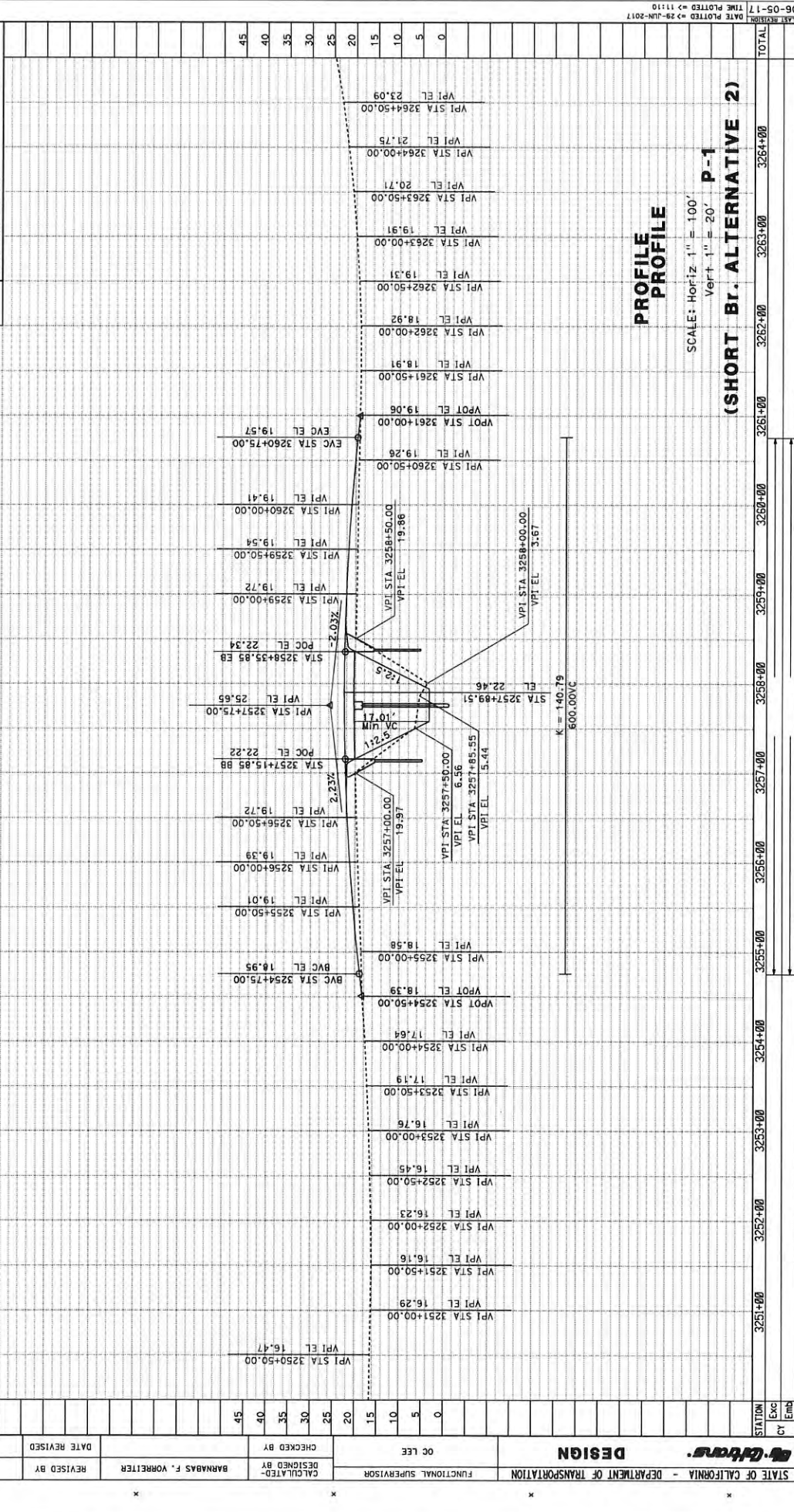


**LAYOUT
(SHORT Br. ALTERNATIVE 2)**
SCALE: 1" = 50'
L-2

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FUNCTIONAL SUPERVISOR
DESIGNED BY: BARNABAS F. VORREITER
CHECKED BY: OC LEE
DATE REVISED: 7/2/2010
BORDER LAST REVISED: 7/2/2010
UNIT: 1814
PROJECT NUMBER & PHASE: 07120000094
RELATIVE BORDER SCALE: 15 IN INCHES
USER NAME: s112731
DWG FILE: s72910e0000.dgn

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DESIGNED BY: OC LEE	CHECKED BY: OC LEE	DATE REVISED: 7/2/2010

SHEET NO. 56.5/56.9
 PROJECT TOTAL SHEETS
 COUNTY LA 01
 ROUTE 56.5/56.9
 REGISTERED CIVIL ENGINEER DATE
 HO T NGUYEN
 No. C050361
 Exp. 6-30-15
 CIVIL
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS
 THE RECORDING OF THIS DRAWING IS FOR THE
 PURPOSES OF THIS PLAN SHEET.



PROFILE PROFILE
 SCALE: Horiz. 1" = 100'
 Vert. 1" = 20'
(SHORT BR. ALTERNATIVE 2)

STATION	Exc	Emb
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3252+00		
3253+00		
3254+00		
3255+00		
3256+00		
3257+00		
3258+00		
3259+00		
3260+00		
3261+00		
3262+00		
3263+00		
3264+00		
TOTAL		

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 UNIT: 1814
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 BORDER LAST REVISED: 7/2/2010

DATE PLOTTED => 29-JUN-2017
 TIME PLOTTED => 11:10

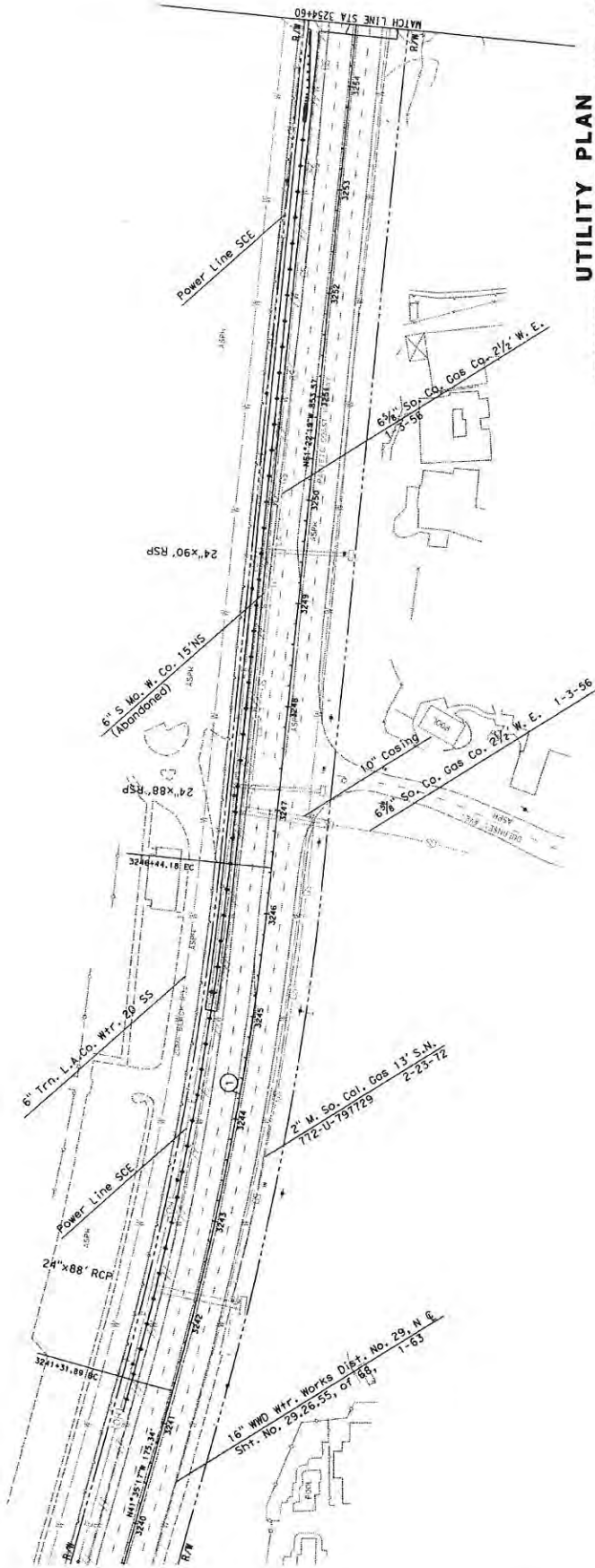
DATE COUNTY ROUTE POST MILES SHEET TOTAL
 07 LA 01 56.5/56.9

REGISTERED CIVIL ENGINEER DATE
 MS. T. MODER
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 Exp. 03-31-15
 STATE OF CALIFORNIA
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS
 OR AGENTS SHALL NOT BE RESPONSIBLE FOR
 THE ACCURACY OF THE INFORMATION OR THE
 CORRECTNESS OF THIS PLAN SHEET.

CURVE DATA

No. @	R	Δ	T	L
1	3000'	99°47'03"	256.77'	512.29'

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



UTILITY PLAN
 (SHORT BR. ALTERNATIVE 2)
 U-1
 SCALE: 1" = 50'

APPROVED FOR UTILITY INFORMATION ONLY
 RELATIVE BORDER SCALE
 15 IN INCHES

USPS FILE # 7281404001.097

BORDER LAST REVISED 7/2/2010

UNIT 1814 PROJECT NUMBER & PHASE

07120000094

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CELINA AVILES	CHECKED BY	BARNABAS F. VORREITER	DATE REVISED	
DESIGNED BY			REVISOR			

DATE PLOTTED: 19-APR-2017
 TIME PLOTTED: 10:43

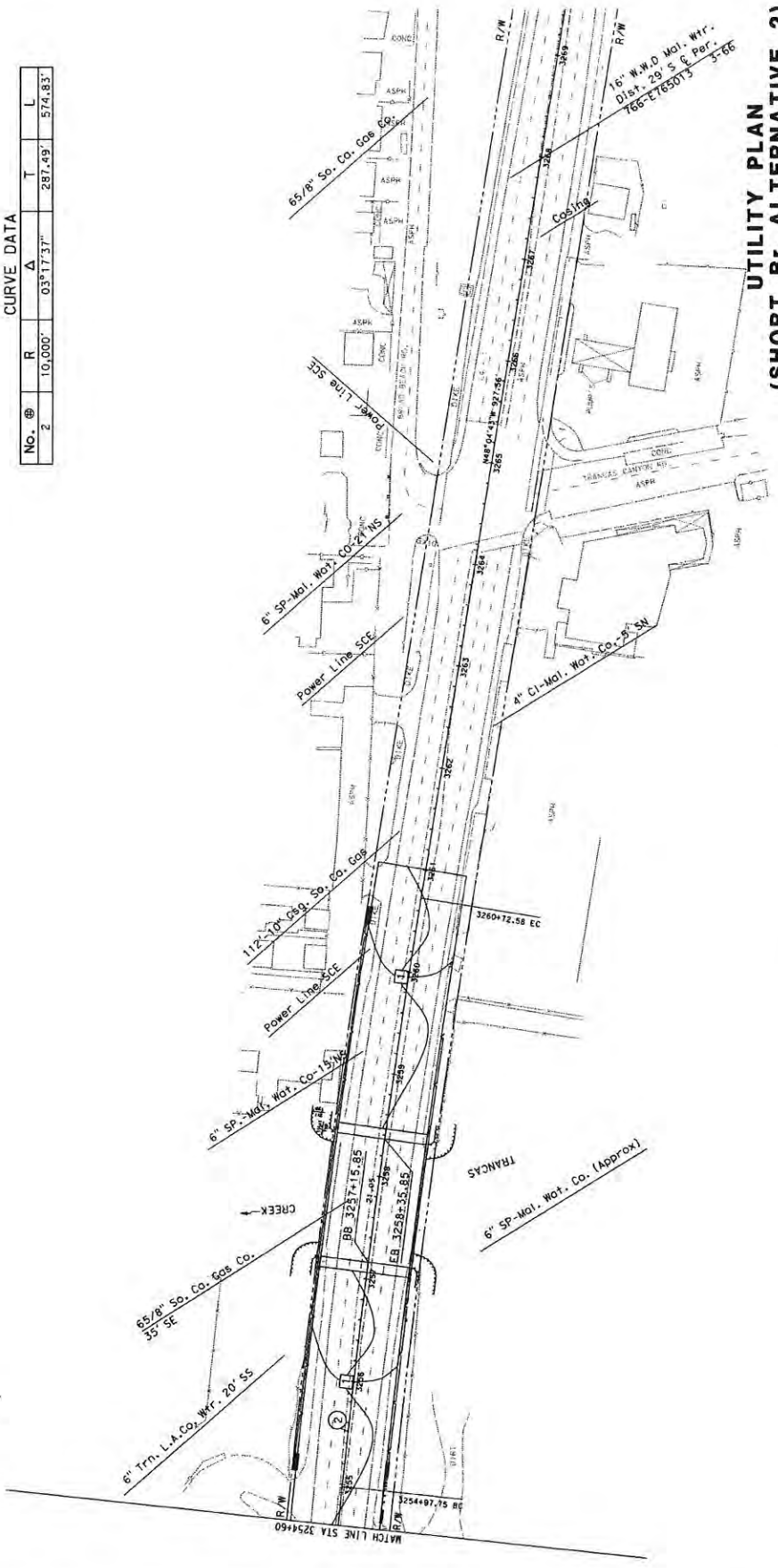
DATE	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	01	56+5/56+9		

REGISTERED CIVIL ENGINEER	DATE
IND. I. HIGGINS	06-30-15

PLANS APPROVAL DATE: 06-30-15
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ANY INFORMATION CONTAINED HEREIN OR FOR THE RESULTS OR CONSEQUENCES OF THE USE OF THE INFORMATION CONTAINED HEREIN.

No. @	R	Δ	T	L
2	10,000'	03°17'37"	287.49'	574.83'

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



**UTILITY PLAN
 (SHORT BR. ALTERNATIVE 2)**
 SCALE: 1" = 50'

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CELINA AVILES	CHECKED BY	BARNABAS F. VORREITER	DATE REVISED	
DESIGNED BY			DESIGNED BY			
CALCULATED-			CALCULATED-			

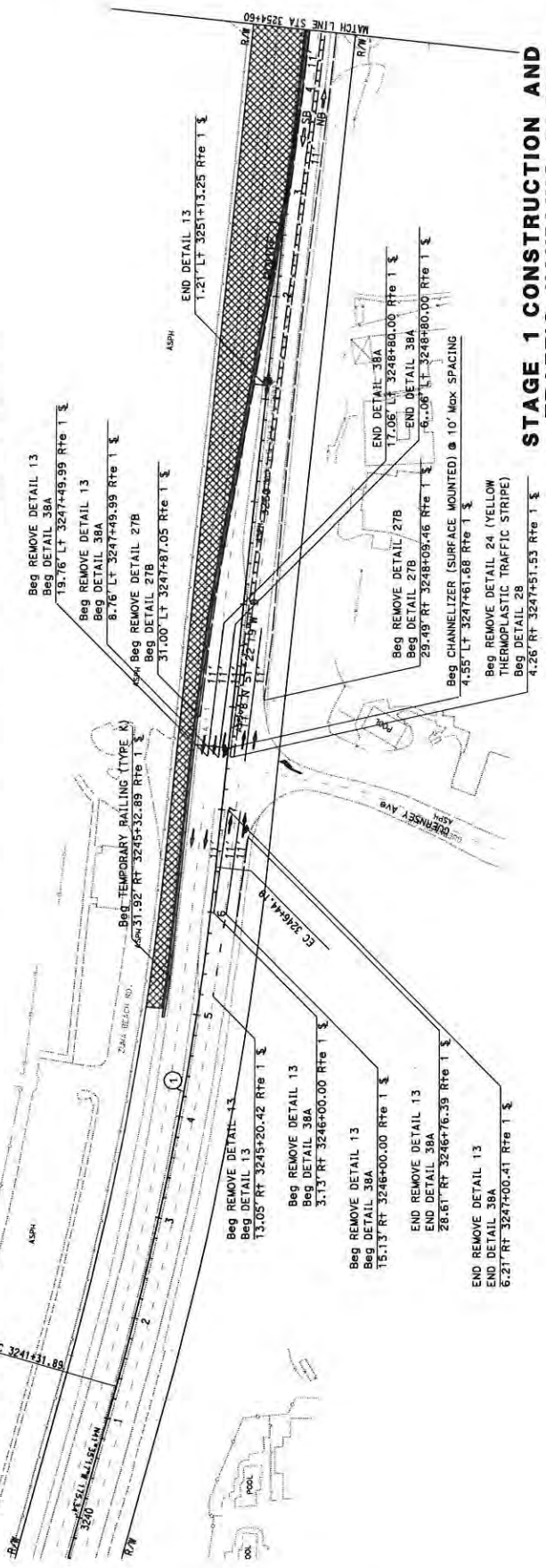
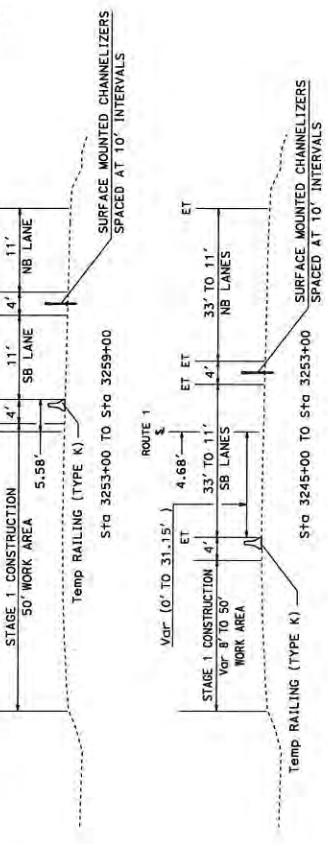
DIST	COUNTY	ROUTE	TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	01	56.5/56.9	1	1

REGISTERED CIVIL ENGINEER
 DATE: 06-30-15
 PROJECT: 07010000094
 SHEET: 01 OF 56.9
 DRAWN BY: J. VORREITER
 CHECKED BY: J. VORREITER
 DATE: 06-30-15

PLANS APPROVAL DATE: 06-30-15
 REGISTERED CIVIL ENGINEER: J. VORREITER
 LICENSE NO.: 00503851
 PROJECT NO.: 07010000094
 SHEET NO.: 01 OF 56.9

DATE PLOTTED: 29-JUN-2017
 TIME PLOTTED: 11:10

- GENERAL NOTES:**
1. REMOVE STRIPING AND PAVEMENT MARKERS IN CONFLICT WITH TEMPORARY PAVEMENT DELINEATION.
 2. ALL TEMPORARY TRAFFIC STRIPES ARE PAINT (2 COAT).
 3. RECONSTRUCTING EXISTING SHOULDERS AND PAVEMENT DELINEATION IS TO BE DONE DURING NIGHTLY HOURS OF CLOSURES.



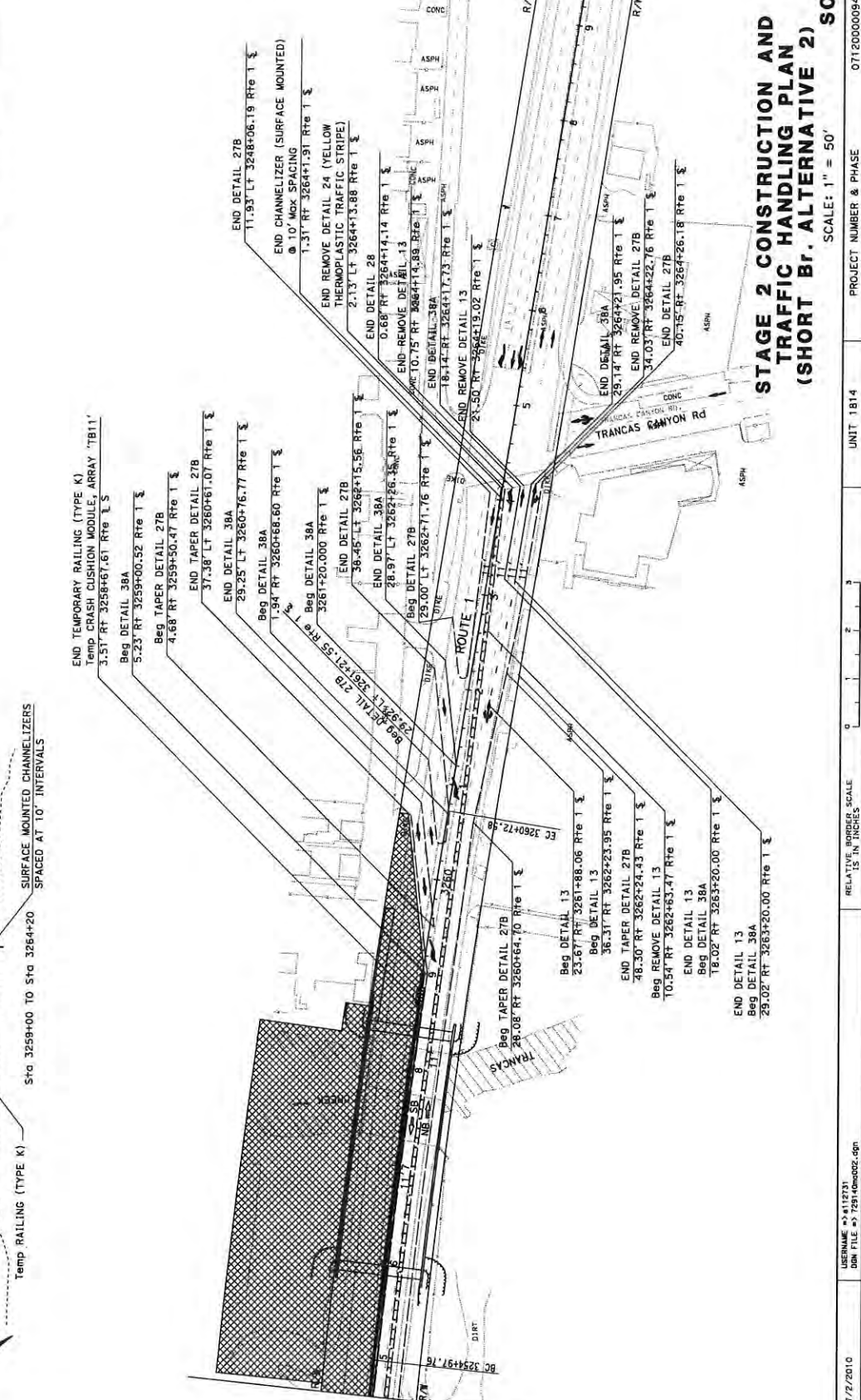
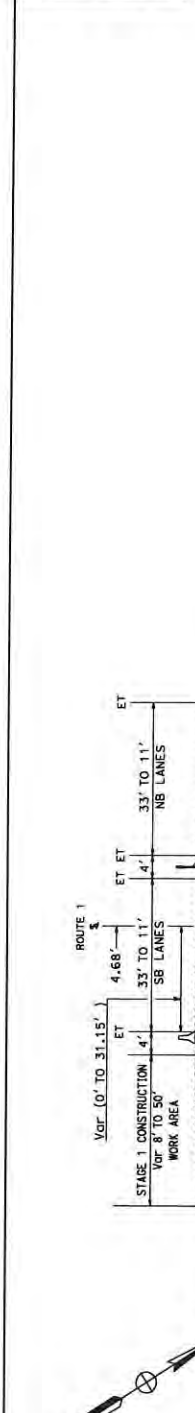
STAGE 1 CONSTRUCTION AND TRAFFIC HANDLING PLAN (SHORT BR. ALTERNATIVE 2) SC-1
 SCALE: 1" = 50'

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CHECKED BY OC LETT	DESIGNED BY BARBARAS F. VORREITER	REVISIONS	DATE REVISIONS
BARRIER LAST REVISED 7/2/2010 USERNAME: 31115731 DGN FILE: 7291406002.dgn					

COUNTY ROUTE TOTAL PROJECT SHEET TOTAL SHEETS
 07 LA 01 56.5/56.9

REGISTERED CIVIL ENGINEER DATE
 PLANS APPROVAL DATE
 NO. I. J. JORDAN
 No. C0540381
 Exp. 6-30-15
 CIVIL ENGINEER

I AM A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF CALIFORNIA AND I HEREBY CERTIFY THAT THE ACCOMPANYING PLANS AND SPECIFICATIONS ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

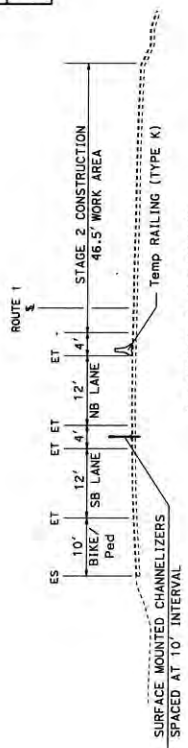


STAGE 2 CONSTRUCTION AND TRAFFIC HANDLING PLAN (SHORT Br. ALTERNATIVE 2)
 SCALE: 1" = 50'
 PROJECT NUMBER & PHASE
 UNIT 1B14
 0 1 2 3
 RELATIVE BORDER SCALE
 15 IN INCHES
 DATE REVISIONS
 06-27-17
 TIME PLOTTED => 29-JUN-2017
 LST REVISION
 07120000094
 SC-2

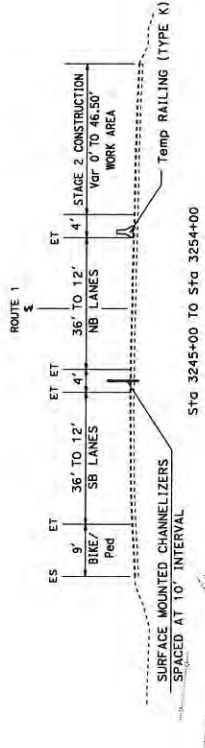
DIR#	COUNTY	ROUTE	TOTAL PROJECT SHEETS	SHEET NO.
07	LA	01	56.5/56.9	56



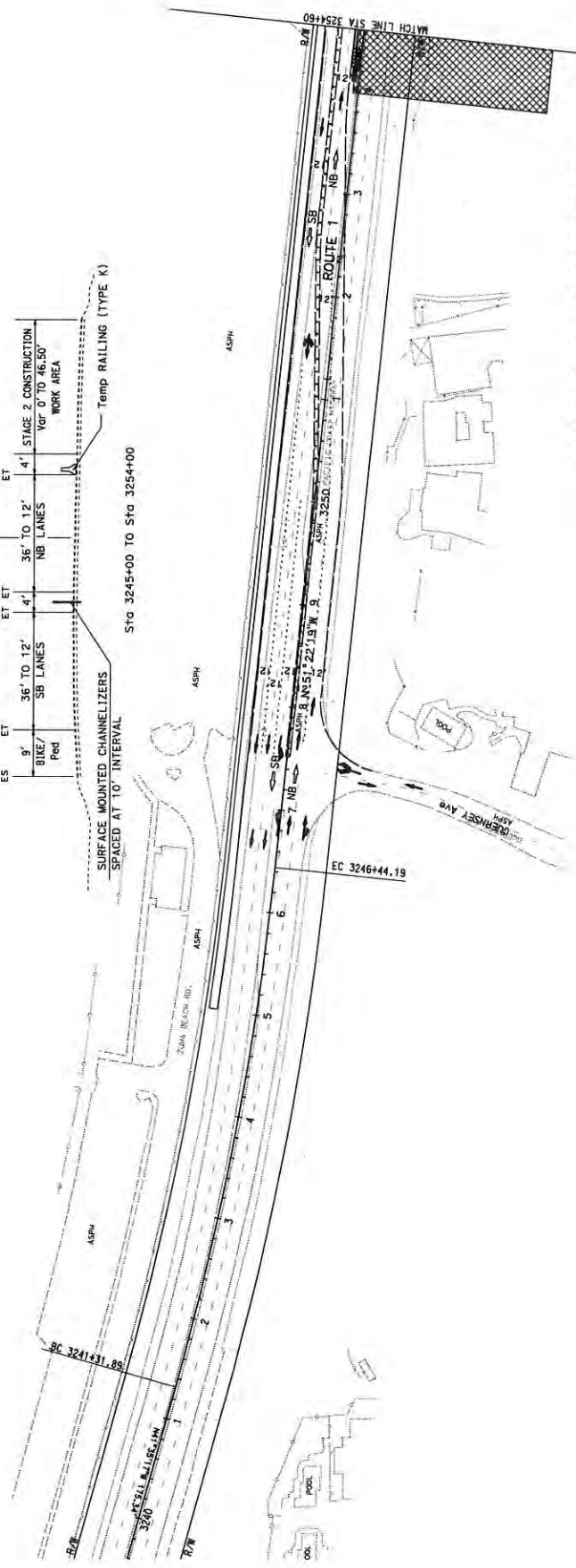
REGISTERED CIVIL ENGINEER DATE: _____
 PLANS APPROVAL DATE: _____
 THE STATE OF CALIFORNIA OR ITS OFFICERS
 DO NOT GUARANTEE THE ACCURACY OR COMPLETENESS OF SCANNED
 COPIES OF THIS PLAN SHEET.



Sta 3254+00 TO Sta 3261+00



Sta 3245+00 TO Sta 3254+00



**STAGE 2 CONSTRUCTION AND
 TRAFFIC HANDLING PLAN
 (SHORT BR. ALTERNATIVE 2) SC-3**
 SCALE: 1" = 50'

PROJECT NUMBER & PHASE: 07120000094 UNIT 1814
 RELATIVE BORDER SCALE IS IN INCHES: 0 1 2 3
 BORDER LAST REVISED 7/2/2010 USERNAME: s112731 DWF FILE: s778970mwd03.dgn

DESIGNED BY	BARNBAS F. VORREITER	REVISOR	
CHECKED BY		DATE REVISED	
FUNCTIONAL SUPERVISOR	OC LEE		
DESIGN			
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION			

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	DESIGN	OC LEE	CHECKED BY	DATE REVISED
FUNCTIONAL SUPERVISOR	DESIGNED BY	BARNABAS F. VORREITER	REVISOR	
CALCULATED BY				

BORDER LAST REVISED 7/2/2010
 USERNAME => s112731
 DWF FILE => 729140nhd04.dgn

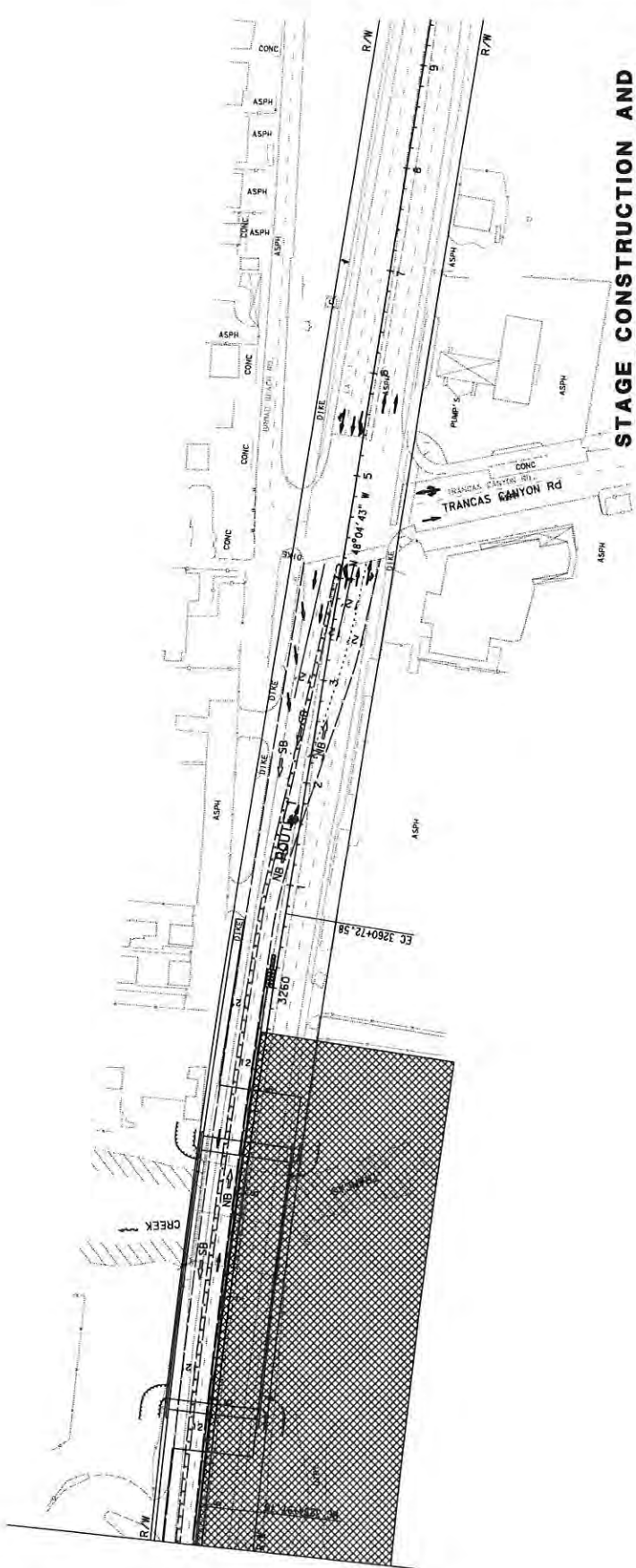
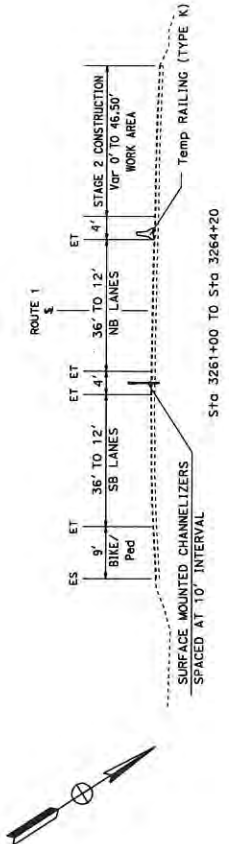
DIST	COUNTY	ROUTE	POST MILE	SHEET NO.	TOTAL SHEETS
07	LA	01	56.5/56.9		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS
 ACCEPTS RESPONSIBILITY FOR THE ACCURACY AND COMPLETENESS OF EXAMINED
 COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER
 HAS T. UNICOR
 No. C0000861
 Exp. 6-30-15



**STAGE CONSTRUCTION AND
 TRAFFIC HANDLING PLAN
 (SHORT BR. ALTERNATIVE 2) SC-4**

SCALE: 1" = 50'

UNIT 1814 PROJECT NUMBER & PHASE 07120000094

RELATIVE BORDER SCALE IS IN INCHES

DIST	COUNTY	ROUTE	POST MILES PROJECT	SHEET TOTAL
07	LA	01	56.5/56.9	NO. SHEETS



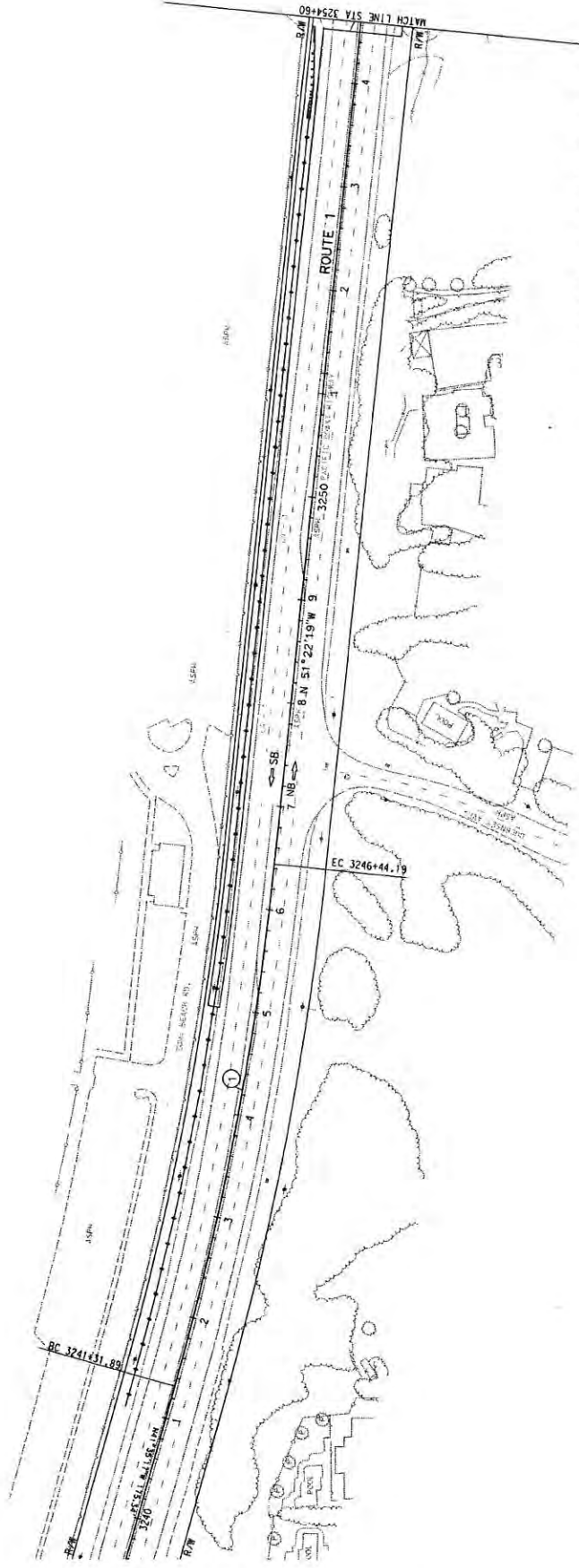
REGISTERED CIVIL ENGINEER DATE: _____
 PLANS APPROVAL DATE: _____
 THE STATE OF CALIFORNIA OR ITS OFFICERS
 OR AGENTS SHALL NOT BE RESPONSIBLE FOR
 COPIES OF THIS PLAN SHEET.

- NOTES:
- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE
 - FOR NEW BRIDGE SEE STRUCTURE PLAN.



CURVE DATA

No.	R	Δ	T	L
1	3000'	88°45'58"	256.77'	512.28'
2	10009'	03°17'26"	281.49'	374.82'



**RIGHT OF WAY FEE
(SHORT BR. ALTERNATIVE 2)**

SCALE: 1" = 50' RW-1

PROJECT NUMBER & PHASE: 07120000094

UNIT 1814

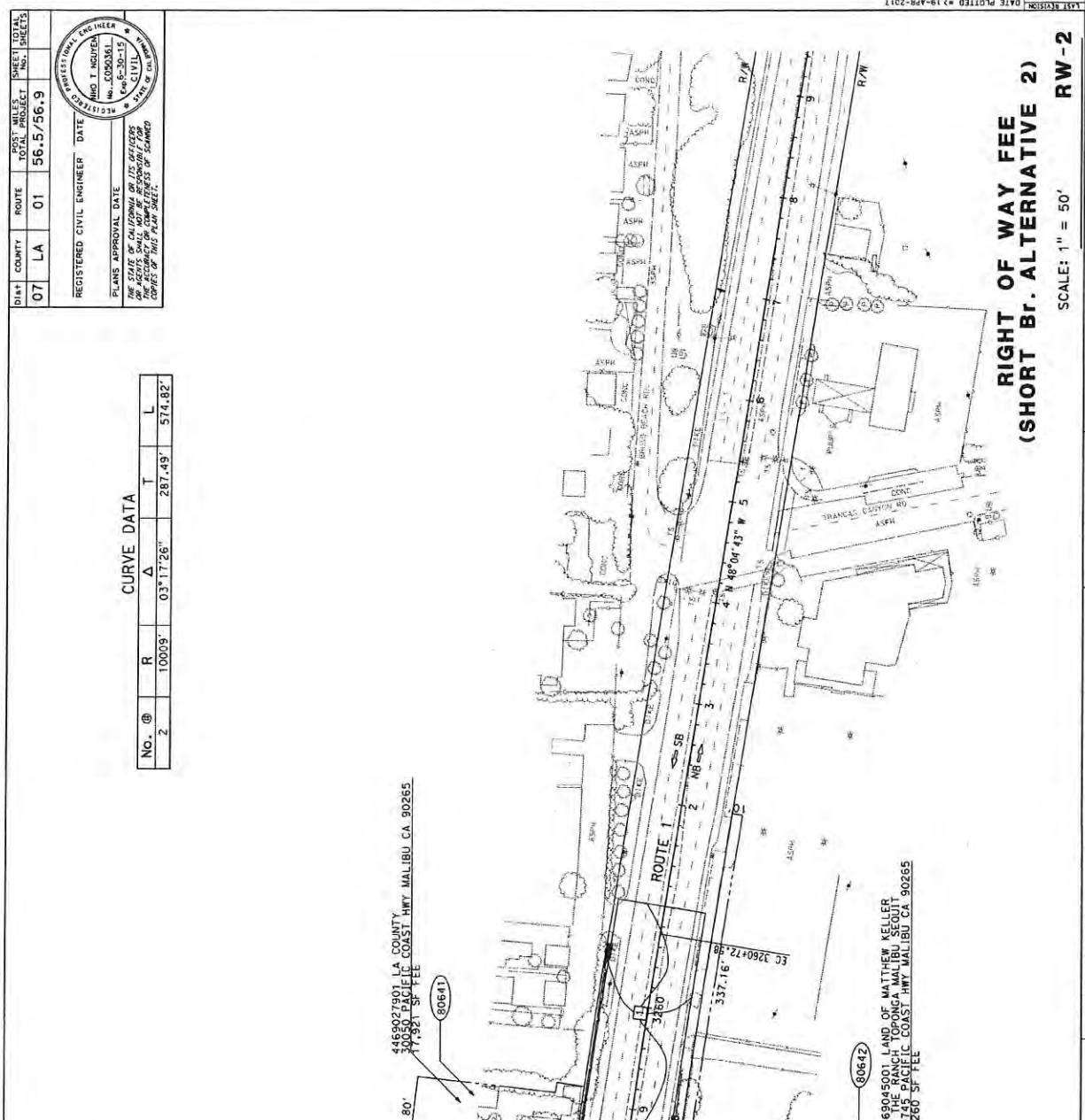
RELATIVE BORDER SCALE IS IN INCHES

0 1 2 3

USERNAME: s3112731
 DOW FILE: s3 729140-rev001-ar/rev.dgn

BORDER LAST REVISED 7/2/2010

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	DESIGN	OC LEE	CHECKED BY	DATE REVISED
FUNCTIONAL SUPERVISOR	DESIGNED BY	BARNABS F. VORREITER	REVISED BY	



NOTES:
 1. FOR ACCURATE RIGHT OF WAY DATA CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE
 2. FOR NEW BRIDGE SEE STRUCTURE PLAN.

CURVE DATA

No. @	R	Δ	T	L
2	10009	03°17'26"	287.49'	574.82'

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL
07	LA	01	56.5/56.9	NO. SHEETS

REGISTERED CIVIL ENGINEER DATE
 MIND I NGUYEN
 No. 0080361
 Exp. 6-30-15
 CIVIL
 REGISTERED PROFESSIONAL ENGINEER
 STATE OF CALIFORNIA
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA BY THE REGISTERED CIVIL ENGINEER
 OR AGENTS SHALL NOT BE RESPONSIBLE FOR
 CORRECTNESS OF THIS PLAN SHEET.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
07	LA	01	56.5/56.9	

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

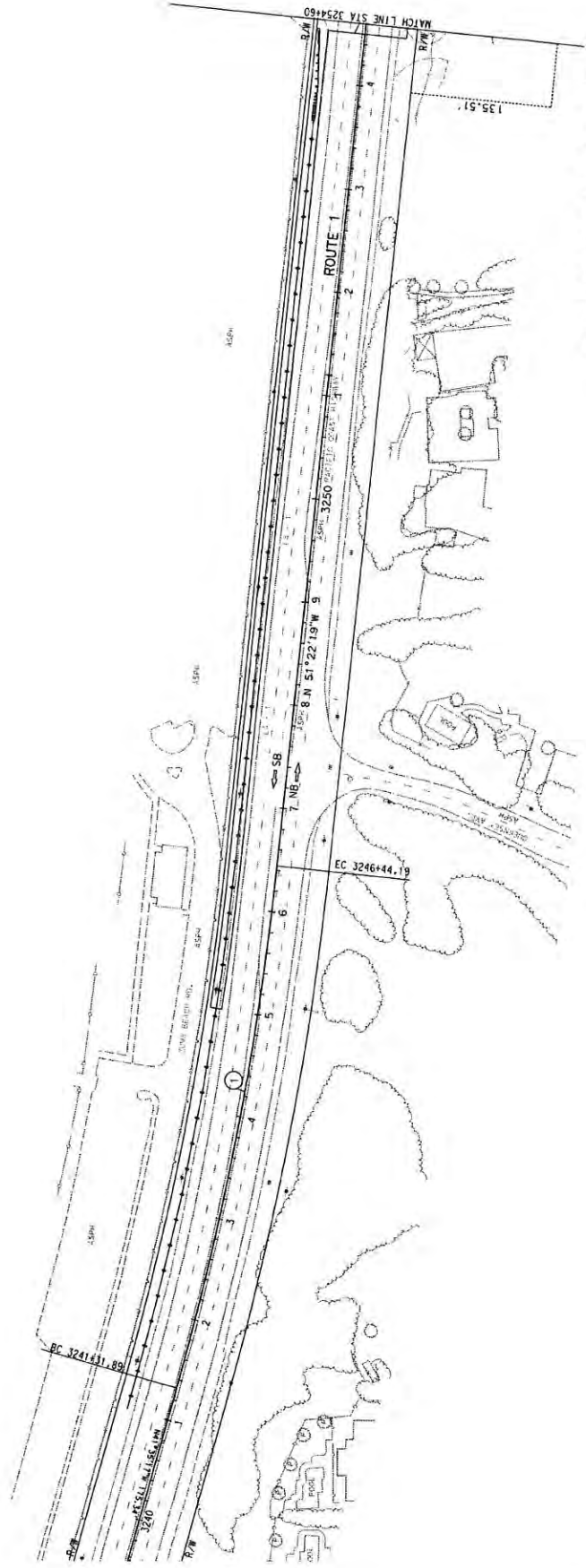
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR CONSEQUENCES OF THIS PLAN SHEET.

- NOTES:
- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE
 - FOR NEW BRIDGE SEE STRUCTURE PLAN.



CURVE DATA

No. @	R	Δ	T	L
1	3000'	09°46'59"	256.77'	512.29'
2	10009'	03°17'26"	287.49'	574.82'



**RIGHT OF WAY TCE
(SHORT BR. ALTERNATIVE 2)**

SCALE: 1" = 50'

PROJECT NUMBER & PHASE

UNIT 1814

RELATIVE BORDER SCALE
15 IN INCHES

USERNAME → 8112731
DWG FILE → 729140rwd03abrvc.dgn

BORDER LAST REVISED 7/27/2010

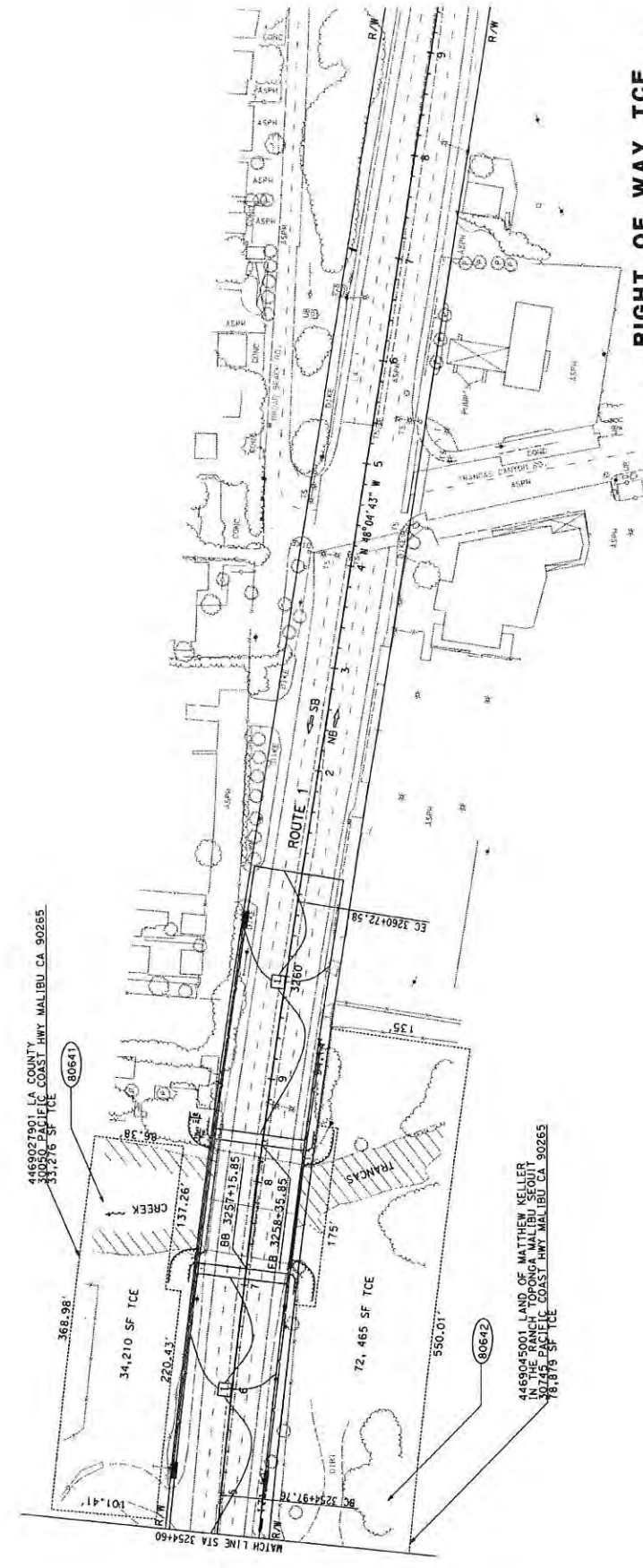
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	OC LEE	CHECKED BY	DATE REVISED
DESIGNED BY	BARNABAS F. VORREITER	REVISOR	DATE REVISED	

DIST	COUNTY	ROUTE	TOTL	MILE	PROJECT	SHEET
07	LA	01	56.5	/	56.9	9

REGISTERED CIVIL ENGINEER
 DATE: 56.5/56.9
 No. I. 10009
 No. C05082
 No. S. 03-15
 No. S. 06-30-15
 No. S. 06-30-15
 No. S. 06-30-15
 No. S. 06-30-15
 No. S. 06-30-15

PLANS APPROVAL DATE:
 THE STATE OF CALIFORNIA OR ITS OFFICES
 SHALL NOT BE HELD RESPONSIBLE FOR THE
 CONSTRUCTION OF THIS PLAN SHEET.

No.	@	R	Δ	T	L
2		10009'	03°-17' 26"	287.45'	574.82'



**RIGHT OF WAY TCE
 (SHORT BR. ALTERNATIVE 2)
 RW-4**

SCALE: 1" = 50'

PROJECT NUMBER & PHASE
 0712000094

UNIT 1814

RELATIVE BORDER SCALE
 15' IN INCHES

USERNAME #0112731
 DGN FILE #1 729140'cnc04p1st04.dgn

BORDER LAST REVISED 7/2/2010

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DESIGN

CHECKED BY	OC LEE
DESIGNED BY	BARNABAS F. VORREITER
REVISION	DATE

Attachment C

**ALTERNATIVE 3
(PREFERRED ALTERNATIVE)
PRELIMINARY DESIGN PLANS**

INDEX OF PLANS

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
 PROJECT PLANS FOR CONSTRUCTION ON
 STATE HIGHWAY
 IN LOS ANGELES COUNTY IN MALIBU
 FROM GUERNSEY AVENUE
 TO TRANCAS CANYON ROAD

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2010



BEGIN CONSTRUCTION
 Sta 3246+00 PM 56.5

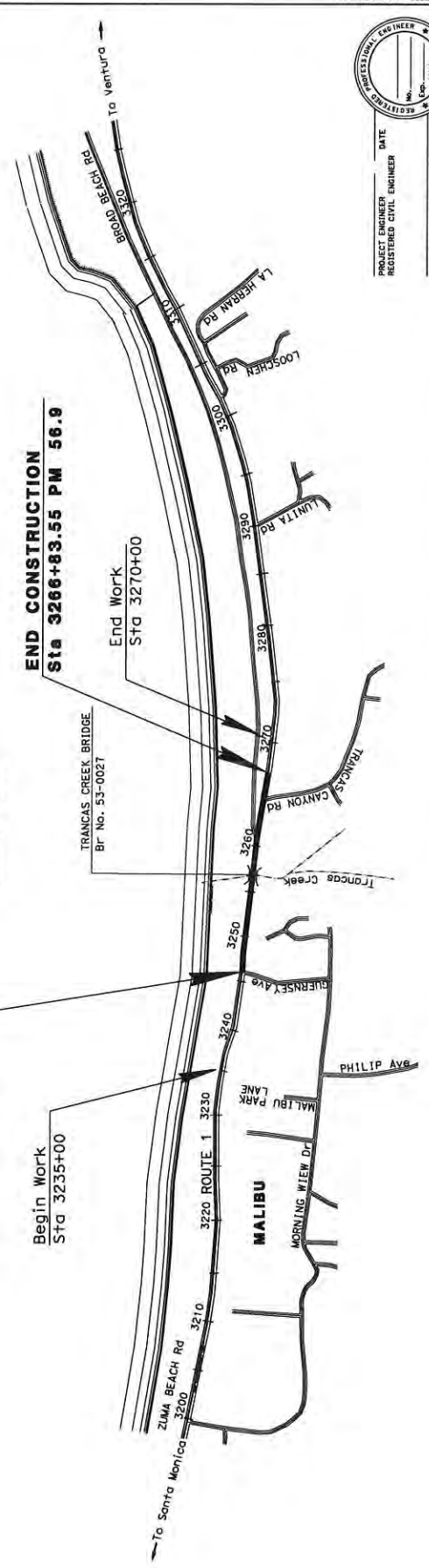
Begin Work
 Sta 3235+00

END CONSTRUCTION
 Sta 3266+83.55 PM 56.9

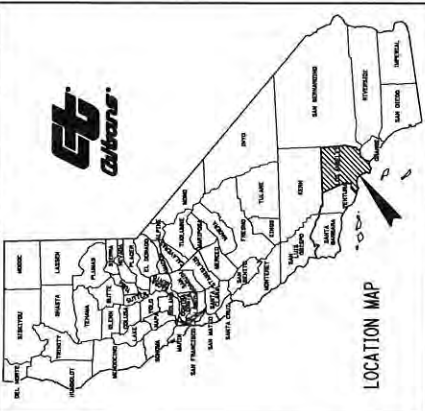
End Work
 Sta 3270+00

PACIFIC OCEAN

TRANCAS CREEK BRIDGE
 BR No. 53-0027



Dist	COUNTY	ROUTE	TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	1	56.5/56.9		



DESIGN ENGINEER	BARNAHBS F. VORREITER
PROJECT MANAGER	SHAHRILAR YADGARJI

THE CONTRACTOR SHALL POSSESS THE CLASS (OR CLASSES) OF
 OF LICENSE AS SPECIFIED IN THE "NOTICE TO BIDDERS."
 BORDER LAST REVISED 7/2/2010 CALTRANS WEB SITE IS: HTTP://WWW.DOT.CA.GOV/

NO SCALE

LONG BR. ALTERNATIVE 3

CONTRACT No.	07-291404
PROJECT ID	0712000094

PROJECT ENGINEER REGISTERED CIVIL ENGINEER DATE _____

PLANE APPROVAL DATE _____

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

UNIT 1814 PROJECT NUMBER & PHASE 0712000094

RELATIVE BORDER SCALE 0 1 2 3 15 IN INCHES USERNAME => 8112731 DWF FILE => 7931400001.dgn

DATE PLOTTED => 29-JUN-2017
 TIME PLOTTED => 11:20
 06-05-17

DIST	COUNTY	ROUTE	TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	01	56.5/56.9		

REGISTERED CIVIL ENGINEER	DATE
APPROVED FOR THE ENGINEER	

PLANS APPROVAL DATE	NO. T. MODIFIED
	05030861
	EXP. 6-30-15

REGISTERED CIVIL ENGINEER	DATE
APPROVED FOR THE ENGINEER	

THE STATE OF CALIFORNIA	BY THE OFFICER
THE COUNTY OF LOS ANGELES	COMPLETENESS OF PLANS
COPIES OF THIS PLAN SHEET	

NOTES:

- DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURE SECTIONS) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
- SUPERELEVATIONS ARE SHOWN ON THE SUPERELEVATION DIAGRAMS.

EXIST STRUCTURAL SECTIONS

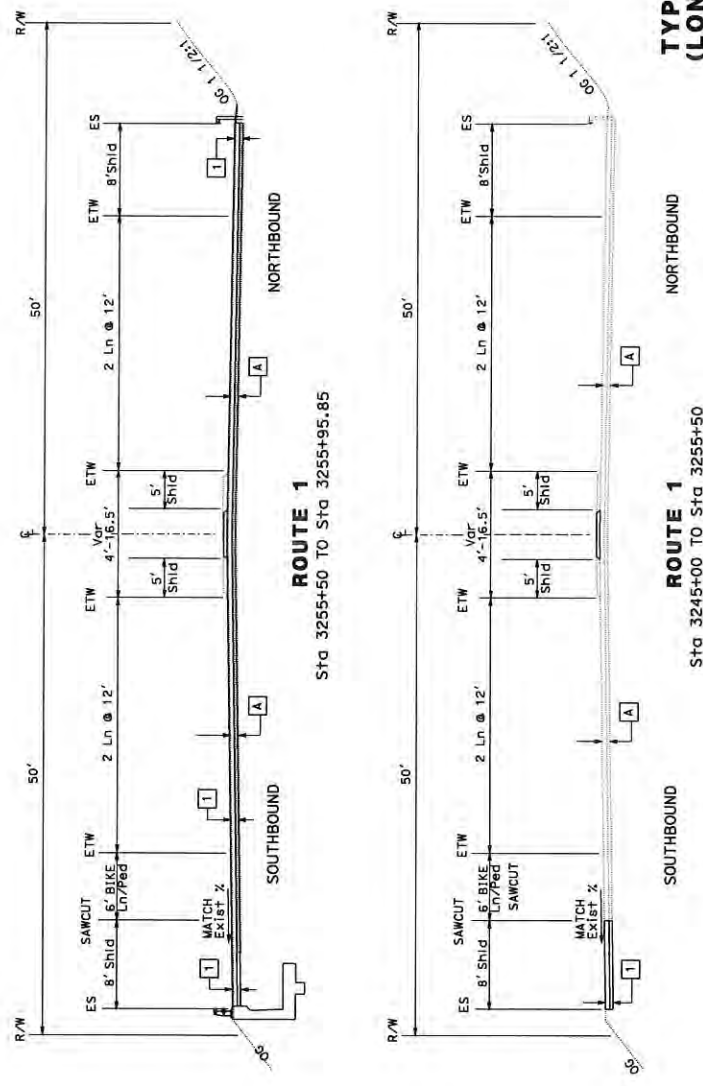
A 0.75' AC
0.5' AB

STRUCTURAL SECTIONS

1 0.75' HOT MIX ASPHALT CONCRETE (TYPE A)
0.50' CLASS 3 AGGREGATE BASE

ABBREVIATIONS:

RHMA-SP-G: RUBBERIZED HOT MIX ASPHALT, SUPERPAVE (GAP GRADED)



**TYPICAL CROSS SECTIONS
(LONG BR. ALTERNATIVE 3)**

NO SCALE

X-1

ROUTE 1
Sta 3245+00 TO Sta 3255+50

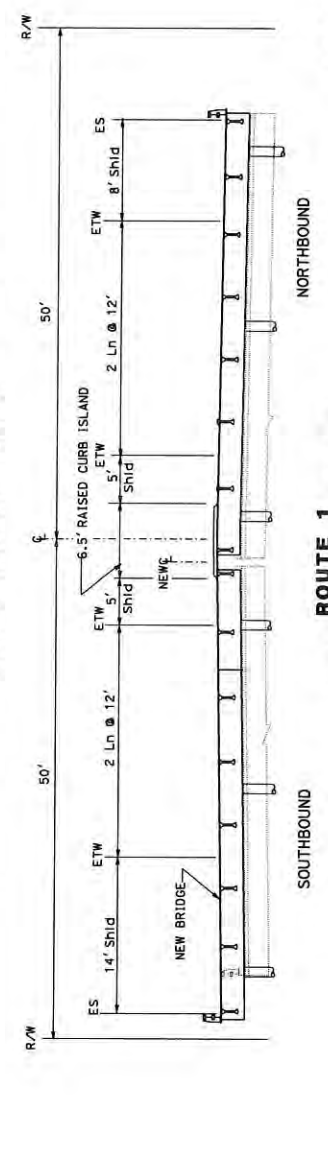
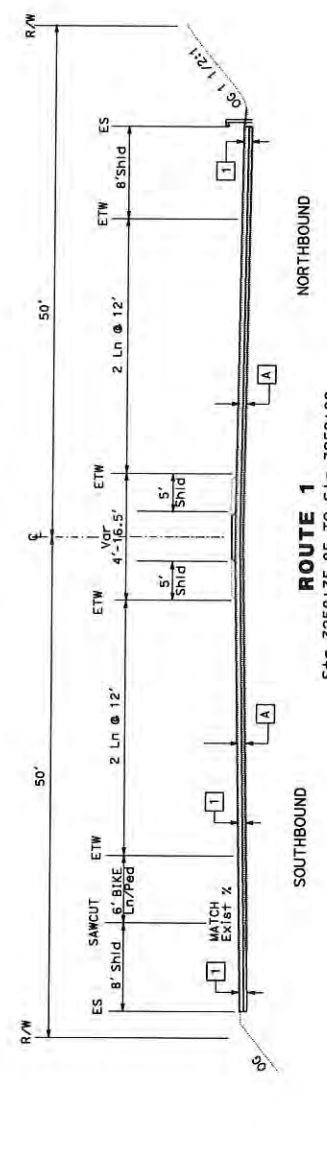
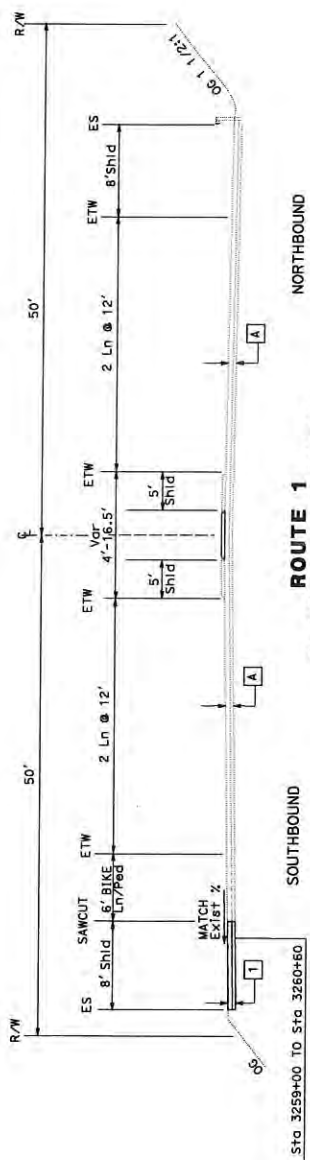
ROUTE 1
Sta 3255+50 TO Sta 3255+95.85

ROUTE 1
Sta 3255+95.85 TO Sta 3255+100

DIST	COUNTY	ROUTE	PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	01	56-5/56.9		

REGISTERED CIVIL ENGINEER	DATE
NO. 100000000	

PLANS APPROVAL DATE	REGISTERED CIVIL ENGINEER
NO. 100000000	NO. 100000000



**TYPICAL CROSS SECTIONS
(LONG BR. ALTERNATIVE 3)**

NO SCALE

X-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	OC LEE	CHECKED BY	BARNABS F. VORREITER	REVISOR	DATE REVISOR
DESIGNED BY						
CALCULATED BY						

DATE	07/11/17	TIME PLOTTED	09:29:40
DATE REVISION	06-05-17	TIME PLOTTED	09:29:40
DI+1 COUNTY	LA 01	ROUTE	56.5/56.9
TOTAL PROJECT SHEETS	NO. 01	TOTAL PROJECT SHEETS	56.5/56.9

REGISTERED CIVIL ENGINEER
 DATE
 REGISTERED CIVIL ENGINEER
 DATE
 REGISTERED CIVIL ENGINEER
 DATE

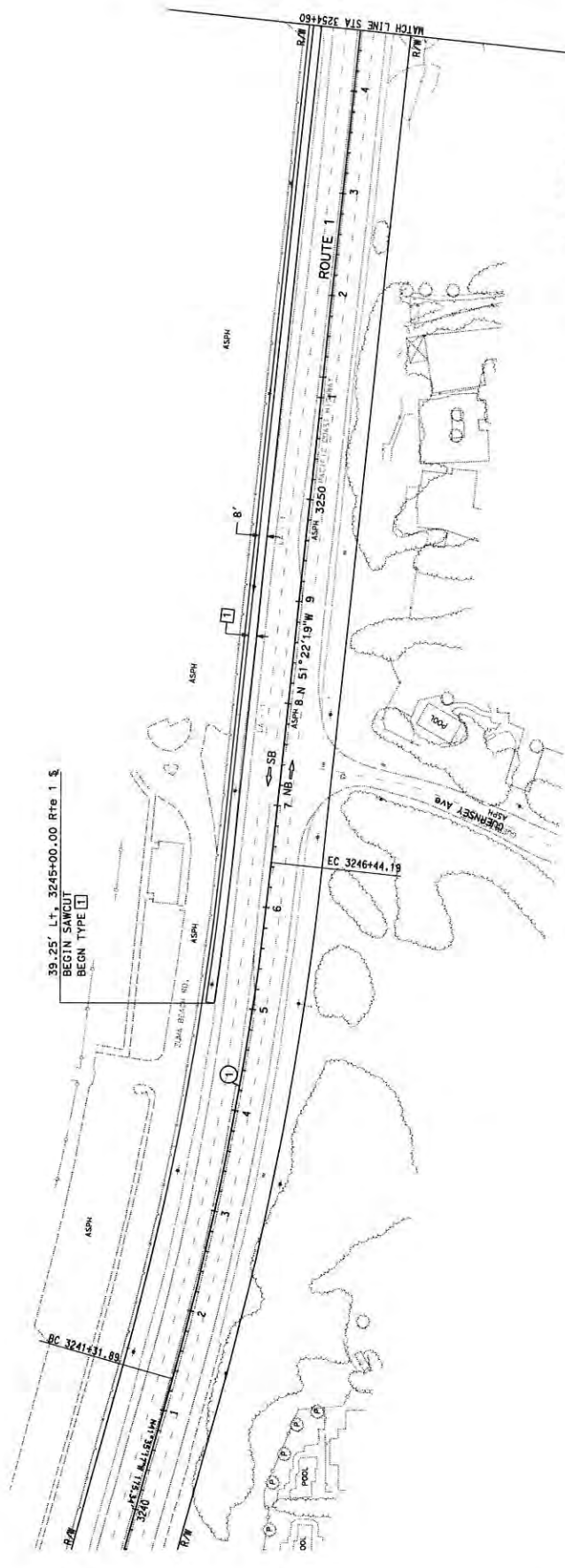
PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 THE ACCURACY OF THIS PLAN
 IS GUARANTEED BY THE
 REGISTERED CIVIL ENGINEER

NOTES:
 1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT
 RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE
 2. FOR NEW BRIDGE SEE STRUCTURE PLAN.



CURVE DATA

No.	R	Δ	T	L
1	3000'	09°46'58"	256.77'	512.29'
2	10009'	03°17'26"	287.49'	574.82'



LAYOUT
 (LONG BR. ALTERNATIVE 3)
 SCALE: 1" = 50'

PROJECT NUMBER & PHASE
 UNIT 1814

RELATIVE BORDER SCALE
 IS IN INCHES

0 1 2 3

0712000094

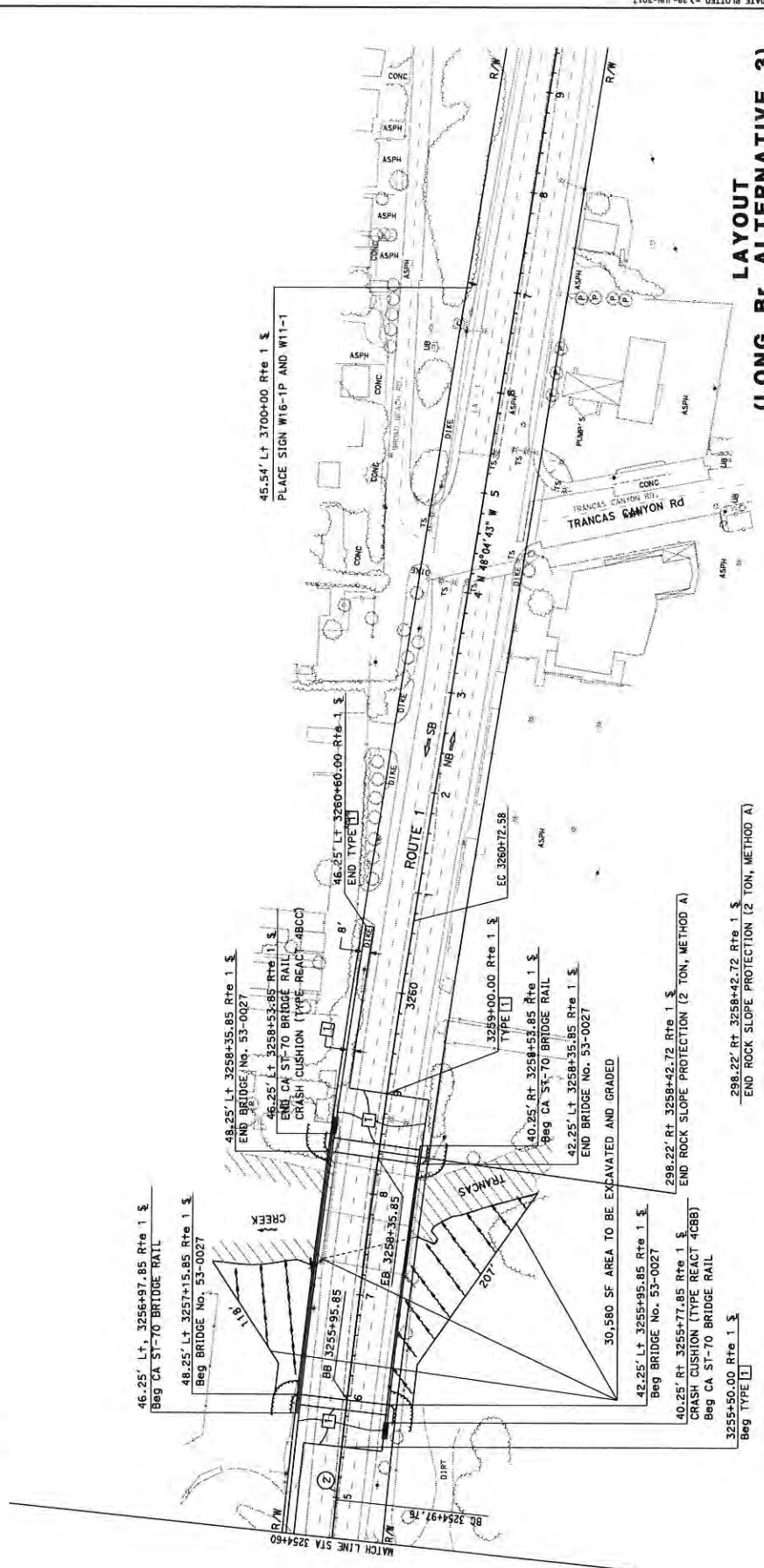
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 DGN FILE => 7291066001.dgn

BORDER LAST REVISED 1/2/2010

DESIGNED BY	BARNABS F. VORREITER	REVISION	
CHECKED BY	OC LEE	DATE REVISION	
FUNCTIONAL SUPERVISOR			
DESIGN			
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION			

DATE	COUNTY	ROUTE	POST MILE	SHEET NO.	TOTAL SHEETS
07	LA	01	56.5/56.9		
REGISTERED CIVIL ENGINEER DATE					
PLANS APPROVAL DATE					
THE STATE OF CALIFORNIA OR ITS OFFICERS AND AGENTS SHALL BE RESPONSIBLE FOR THE ACCURACY AND COMPLETENESS OF THE COPIES OF THIS PLAN SHEET.					
PROFESSIONAL ENGINEER REG. NO. 50908 CIVIL EX. 8-30-15					

CURVE DATA					
NO.	@	R	Δ	T	L
2		10009'	03°17'26"	287.49'	574.82'



**LAYOUT
(LONG BR. ALTERNATIVE 3)**

SCALE: 1" = 50'

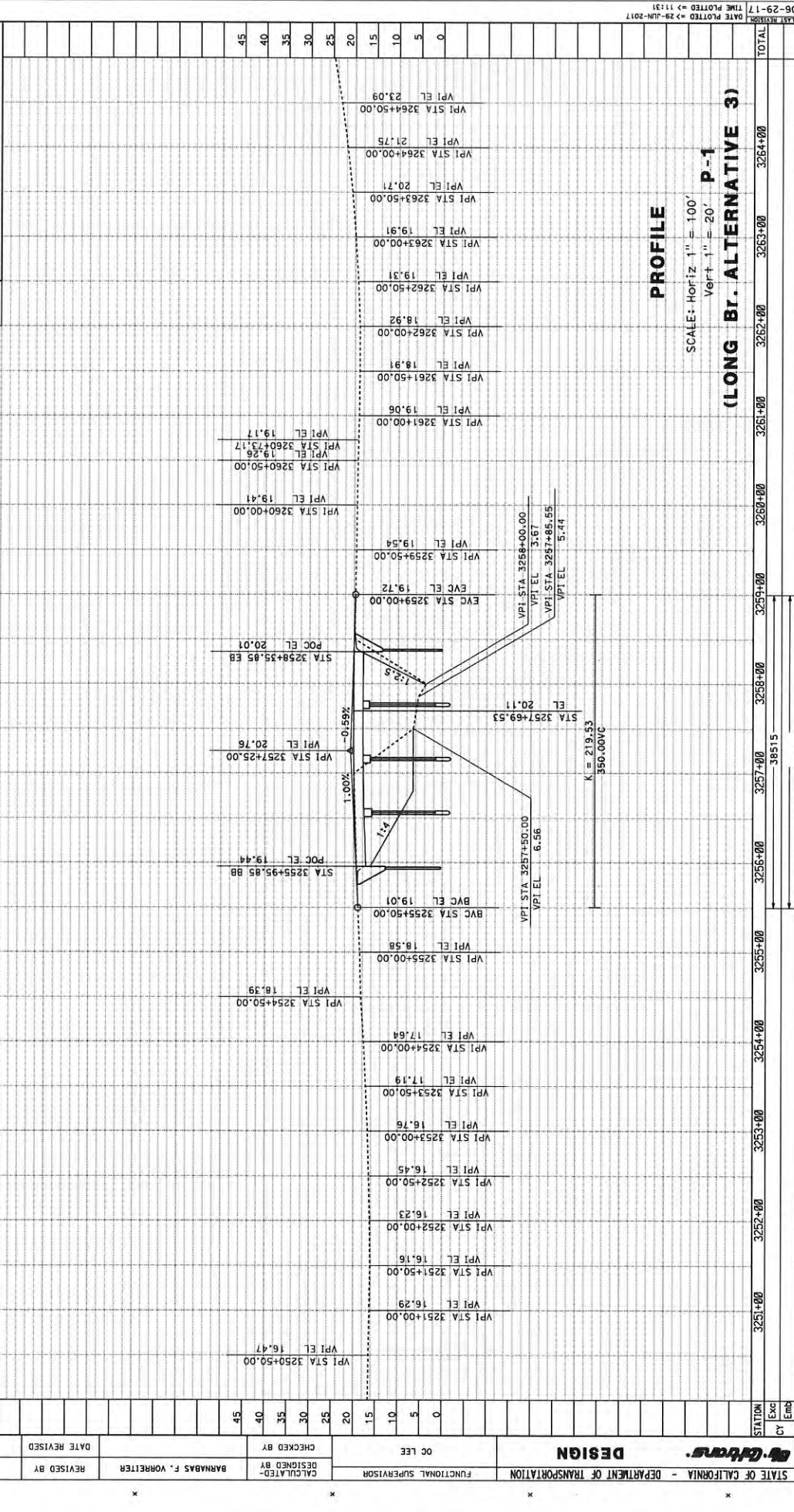
L-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	DESIGN	FUNCTIONAL SUPERVISOR	OC LEE	CHECKED BY	BARNABS F. VORREITER	REVISIONS	DATE REVISED
BORDER LAST REVISED 7/2/2010							

DIRECTOR COUNTY ROUTE TOTAL PROJECT SHEET NO. TOTAL SHEETS
 07 LA 01 56.5/56.9

REGISTERED CIVIL ENGINEER DATE
 PLANS APPROVAL DATE
 I AM A REGISTERED CIVIL ENGINEER IN THE STATE OF CALIFORNIA. I HAVE REVIEWED THESE PLANS AND APPROVE THEM FOR CONSTRUCTION. THE ACCURACY OF THE INFORMATION SHOWN ON THESE PLANS IS THE RESPONSIBILITY OF THE DESIGNER.

AND T. MOYER
 No. 0000361
 Exp. 6-30-15
 CIVIL ENGINEER



STATION	Exc	Emb
3251+00		
3252+00		
3253+00		
3254+00		
3255+00		
3256+00		
3257+00		
3258+00		
3259+00		
3260+00		
3261+00		
3262+00		
3263+00		
3264+00		
TOTAL		

PROJECT NUMBER & PHASE: UNIT 1814
 0712000094
 USERNAME: s112731
 DGN FILE: 7291496001.dgn
 BORDER LAST REVISED 7/2/2010

DATE PLOTTED => 29-JUN-2017
 TIME PLOTTED => 11:31

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 DESIGN
 FUNCTIONAL SUPERVISOR
 CHECKED BY
 CALCULATED BY
 BARNBAS F. VOHRLEITER
 REVISIONS:

NO.	DATE	REVISION

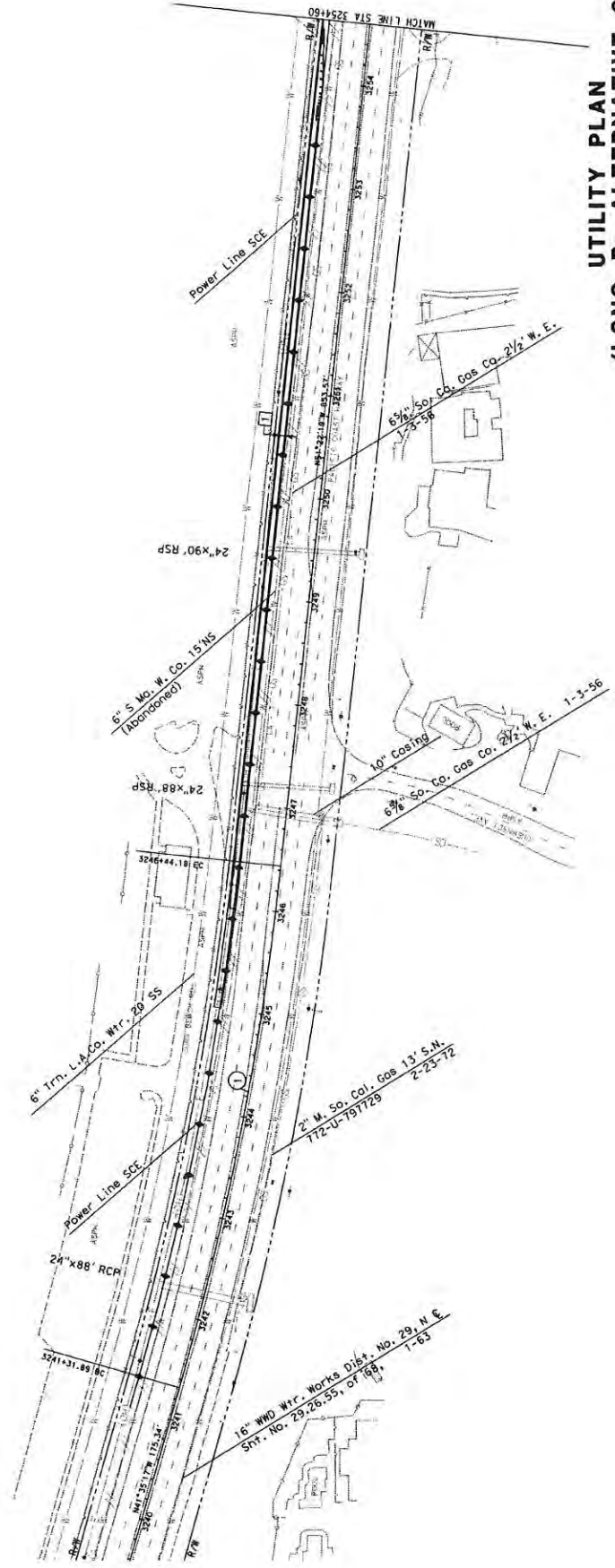
DIST	COUNTY	ROUTE	POST MILES	SHEET TOTAL
07	LA	01	56.5/56.9	NO. SHEETS
REGISTERED CIVIL ENGINEER		DATE	PROFESSIONAL ENGINEER	
AND T. NGUYEN			NO. 303001	
PLANS APPROVAL DATE			THE STATE OF CALIFORNIA ON ITS OFFICERS	
OF AGENTS SHALL NOT BE RESPONSIBLE FOR			CORRECT OF THIS PLAN SHEET.	

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



CURVE DATA

No. @	R	Δ	T	L
1	3000'	09°47'03"	256.77'	512.23'



**UTILITY PLAN
(LONG BR. ALTERNATIVE 3)
U-1**

SCALE: 1" = 50'

APPROVED FOR UTILITY INFORMATION ONLY

DATE PLOTTED => 12-JUN-2017
 PROJECT NUMBER & PHASE: UNIT 1814
 RELATIVE BORDER SCALE IS IN INCHES
 USER NAME => s112731
 DWF FILE => 729140x0001.dgn

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CELINA AVILES	CHECKED BY	BARBARAS F. VORREITER	DATE REVISD
	DESIGNED BY		REVISD BY		

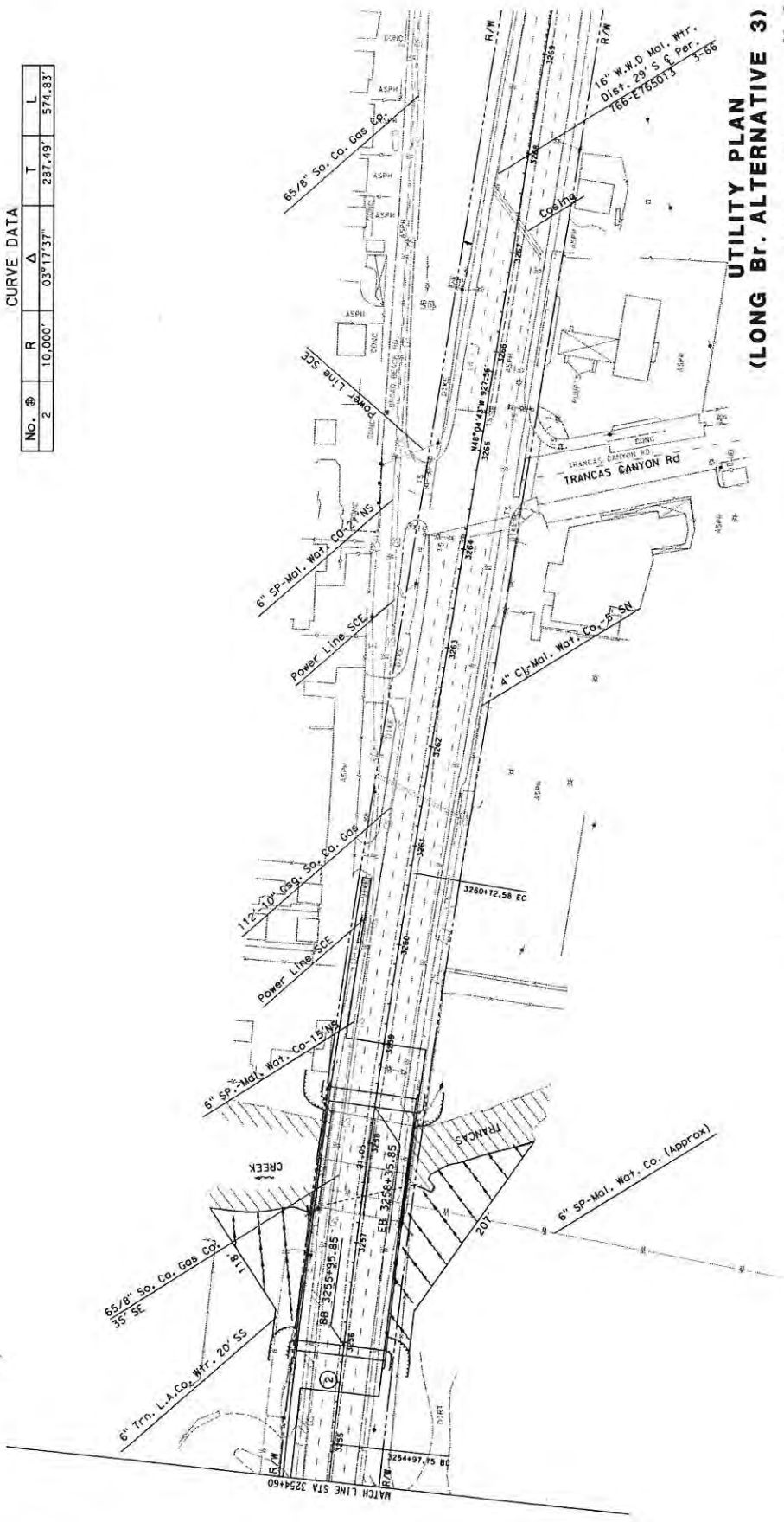
DIST	COUNTY	ROUTE	POST MILES	SHEET NO.	TOTAL SHEETS
07	LA	01	56.5/56.9		

REGISTERED CIVIL ENGINEER DATE
 PROFESSIONAL ENGINEER
 AND J. HENDERSON
 No. 46301-5
 CIVIL
 THE STATE OF CALIFORNIA BY ITS OFFICERS
 AND THE BOARD OF PROFESSIONAL ENGINEERS
 AND ARCHITECTS IN CONNECTION WITH THE
 CONSTRUCTION OF THIS PLAN SHEET.

CURVE DATA

No.	R	Δ	T	L
2	10,000'	03°17'37"	287.49'	574.83'

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



**UTILITY PLAN
 (LONG BR. ALTERNATIVE 3)**
 SCALE: 1" = 50'

PROJECT NUMBER & PHASE
 UNIT 1814

APPROVED FOR UTILITY INFORMATION ONLY
 RELATIVE BORDER SCALE
 15" IN INCHES

USERNAME: s112131
 DOW FILE: 7291606002.dgn

BORDER LAST REVISED 7/2/2010

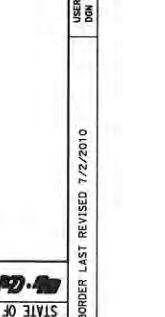
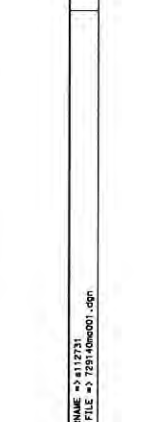
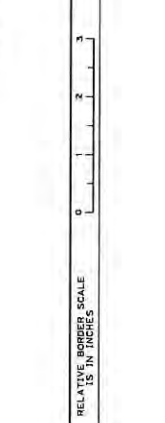
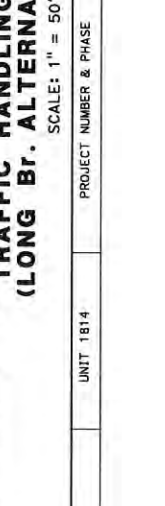
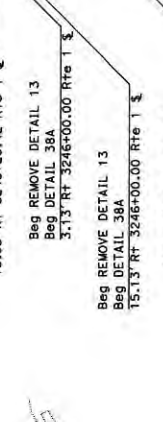
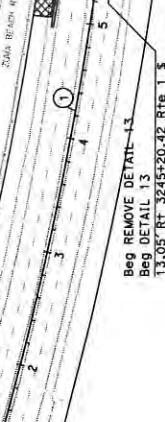
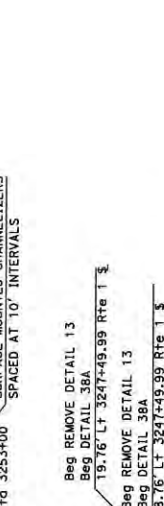
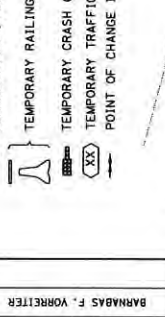
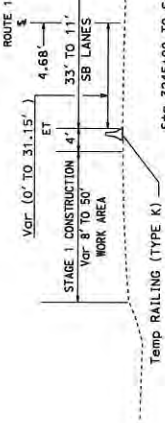
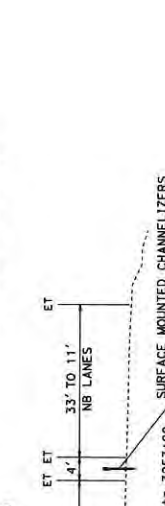
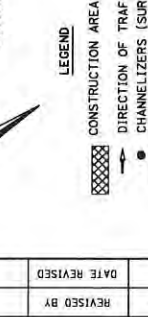
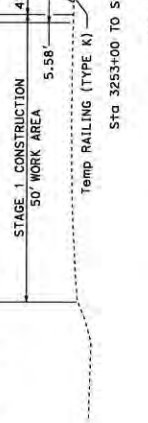
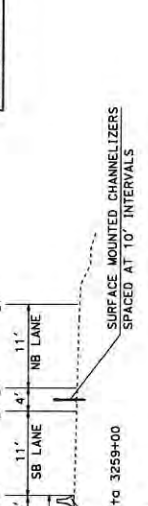
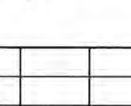
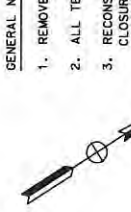
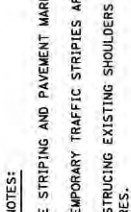
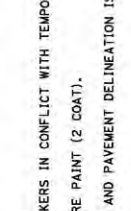
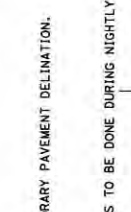
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CELINA AYLES	CHECKED BY	BARBARAS F. VORREITER	DATE REVISED
REVISIONS	DESIGNED BY		REVISOR		

DIST	COUNTY	ROUTE	TOTAL PROJECT SHEETS	SHEET NO.
07	LA	01	56.5/56.9	56

REGISTERED CIVIL ENGINEER DATE: _____
 PROFESSIONAL ENGINEER NO. 0050381
 M.D. T. MOYER
 CIVIL ENGINEER
 THE STATE OF CALIFORNIA OR ITS OFFICERS
 SHALL NOT BE HELD RESPONSIBLE FOR THE
 ACCURACY OR COMPLETENESS OF THE
 DATA OR INFORMATION ON THIS PLAN SHEET.

PLANS APPROVAL DATE: _____
 REGISTERED CIVIL ENGINEER DATE: _____
 PROFESSIONAL ENGINEER NO. 0050381
 M.D. T. MOYER
 CIVIL ENGINEER
 THE STATE OF CALIFORNIA OR ITS OFFICERS
 SHALL NOT BE HELD RESPONSIBLE FOR THE
 ACCURACY OR COMPLETENESS OF THE
 DATA OR INFORMATION ON THIS PLAN SHEET.

GENERAL NOTES:
 1. REMOVE STRIPING AND PAVEMENT MARKERS IN CONFLICT WITH TEMPORARY PAVEMENT DELINEATION.
 2. ALL TEMPORARY TRAFFIC STRIPES ARE PAINT (2 COAT).
 3. RECONSTRUCTING EXISTING SHOULDERS AND PAVEMENT DELINEATION IS TO BE DONE DURING NIGHTLY HOURS OF CLOSURES.



STAGE 1 CONSTRUCTION AND TRAFFIC HANDLING PLAN (LONG BR. ALTERNATIVE 3) SC-1
 SCALE: 1" = 50'

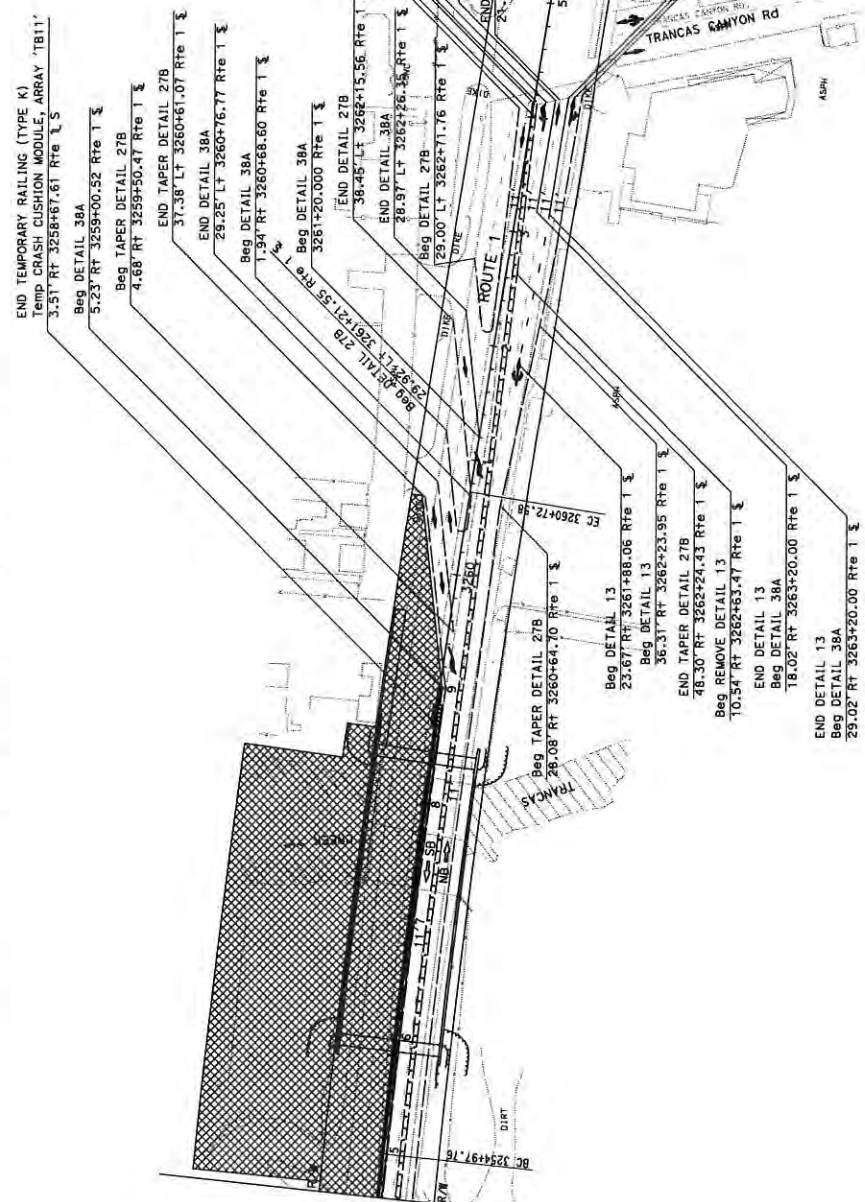
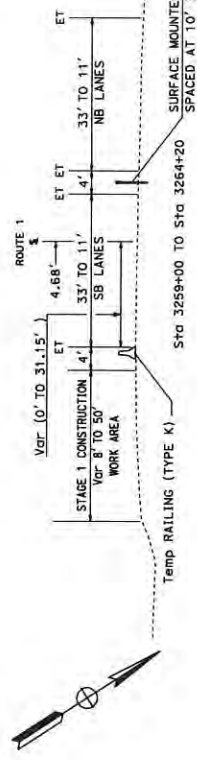
PROJECT NUMBER & PHASE: 0712000094
 UNIT: 1814
 RELATIVE BORDER SCALE IS IN INCHES: 0 1 2 3
 DATE PLOTTED: 29-JUN-2010 11:32
 LAYOUT: 06-27-11

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	DESIGN	FUNCTIONAL SUPERVISOR	OC LEE	REVISIONS	DATE REVISION
BARNBAS F. YORREITER	DESIGNED BY	CHECKED BY	OC LEE	REVISIONS	DATE REVISION
07	LA	01	56.5/56.9	56	

DIST	COUNTY	ROUTE	TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	01	56.5/56.9		

REGISTERED CIVIL ENGINEER	DATE
PLANS APPROVAL DATE	

NO. I. JIGGED	NO. I. JIGGED
NO. CDSO.381	NO. CDSO.381
EXP. E-30-15	EXP. E-30-15
CIVIL	CIVIL



STAGE 2 CONSTRUCTION AND TRAFFIC HANDLING PLAN (LONG BR. ALTERNATIVE 3)
 SCALE: 1" = 50'

PROJECT NUMBER & PHASE: 0712000094 UNIT 1814
 DATE PLOTTED: 28-JUN-2017 TIME PLOTTED: 11:32
 USERNAME: s112731 BOM FILE: 72916m002.dgn
 BORDER LAST REVISED: 7/2/2010
 RELATIVE BORDER SCALE: 15 IN INCHES

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	DESIGN	OC LEE	CHECKED BY	DATE REVISED
FUNCTIONAL SUPERVISOR	DESIGNED BY	BARNABAS F. YORREITER	REVISOR	

DATE	COUNTY	ROUTE	PROJ. MILES	SHEET TOTAL
07	LA	01	56.5/56.9	NO. SHEETS

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

NO. T. MOUNTED

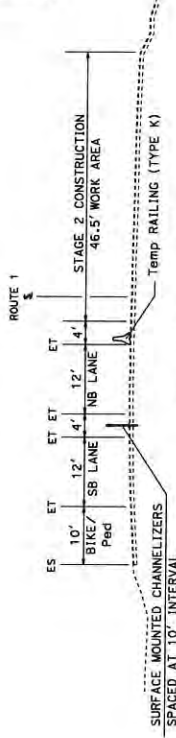
NO. 0050361

EXPIRES 08-30-15

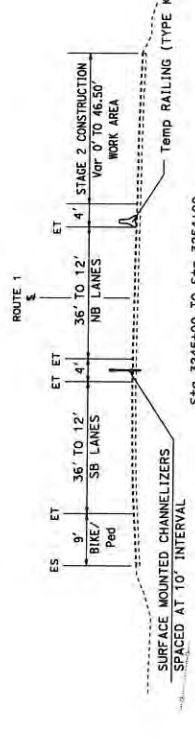
CIVIL ENGINEER

REGISTERED PROFESSIONAL ENGINEER

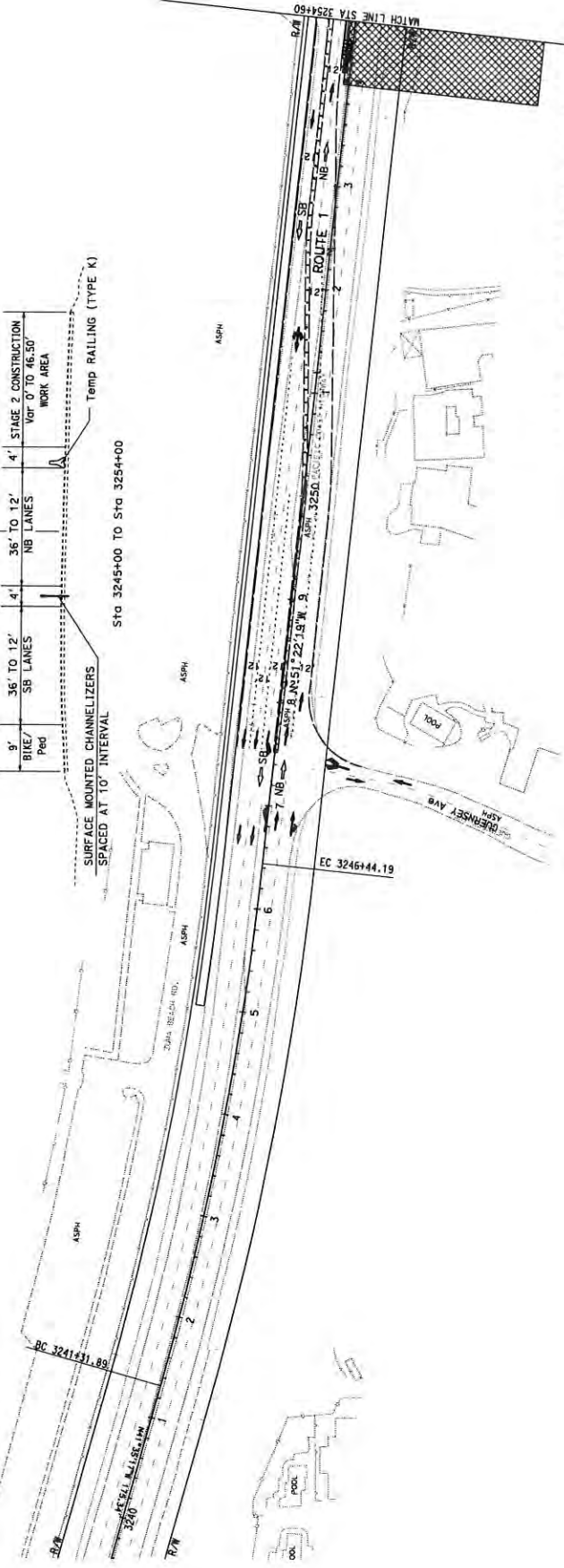
DATE OF EXPIRES OF THIS PLAN SHEET



Sta 3254+00 To Sta 3261+00



Sta 3245+00 To Sta 3254+00



STAGE 2 CONSTRUCTION AND TRAFFIC HANDLING PLAN (LONG BR. ALTERNATIVE 3) SC-3

SCALE: 1" = 50'

PROJECT NUMBER & PHASE

UNIT 1B14

RELATIVE GRAPHIC SCALE 15' IN INCHES

0 1 2 3

USERNAME -> 6112731
DWG FILE -> 7291-000003.dgn

BORDER LAST REVISED 7/2/2010

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	OC LEE	DESIGNED BY	BARNABAS F. VORREITER	REVISOR	DATE	REVISION
CALCULATED BY			CHECKED BY				

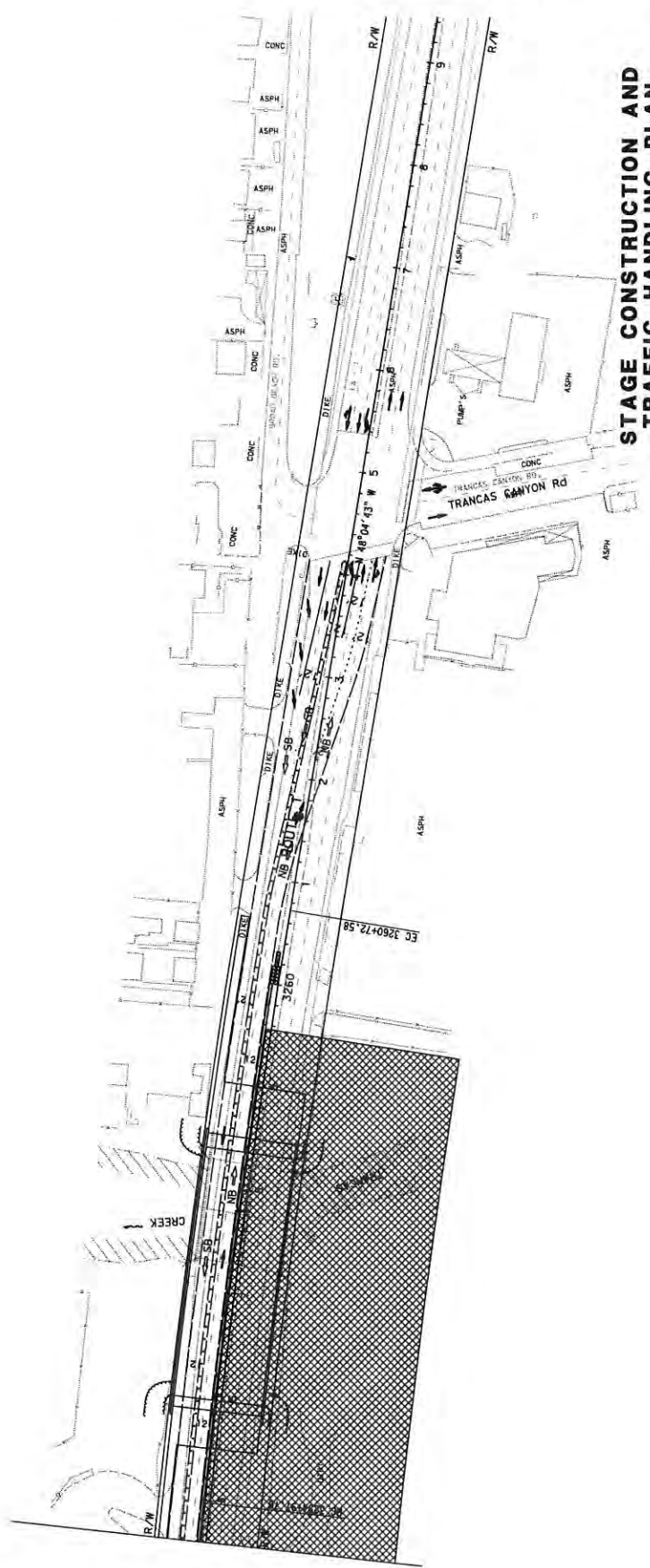
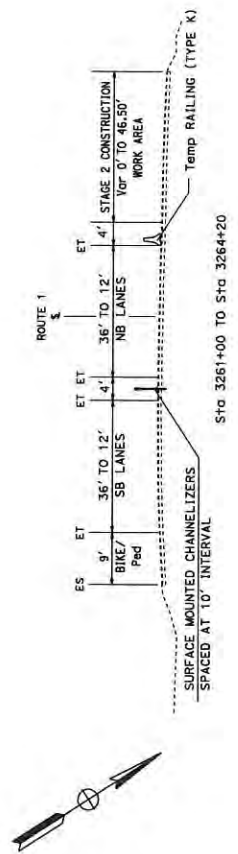
DATE PLOTTED -> 29-JUN-2017
TIME PLOTTED -> 11:33
LATE NUMBER

DIST	COUNTY	ROUTE	TOTAL PROJECT SHEETS	SHEET NO.
07	LA	01	56.5/56.9	56

REGISTERED CIVIL ENGINEER	DATE	REGISTERED PROFESSIONAL ENGINEER
		NO. 1
		NO. 4000861
		EXPIRES 6-30-15
		CIVIL
		STATE OF CALIF.

PLANS APPROVAL	DATE

ONE STATE OF CALIFORNIA OR ITS OFFICERS ARE NOT BE HELD RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



STAGE CONSTRUCTION AND TRAFFIC HANDLING PLAN (LONG BI. ALTERNATIVE 3) SC-4
 SCALE: 1" = 50'

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	DESIGN	OC LEE	CHECKED BY	DATE REVISED
FUNCTIONAL SUPERVISOR	DESIGNED BY	BARNABAS F. VORREITER	DESIGNED BY	

07	LA	01	56.5/56.9	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
----	----	----	-----------	-----------------------------	---------------------------

REGISTERED CIVIL ENGINEER DATE

RESIGNED PROFESSIONAL ENGINEER

NO. 5000081

NO. 5000081

THE STATE OF CALIFORNIA ON 05.07.2009

ON BEHALF OF THE STATE ENGINEER

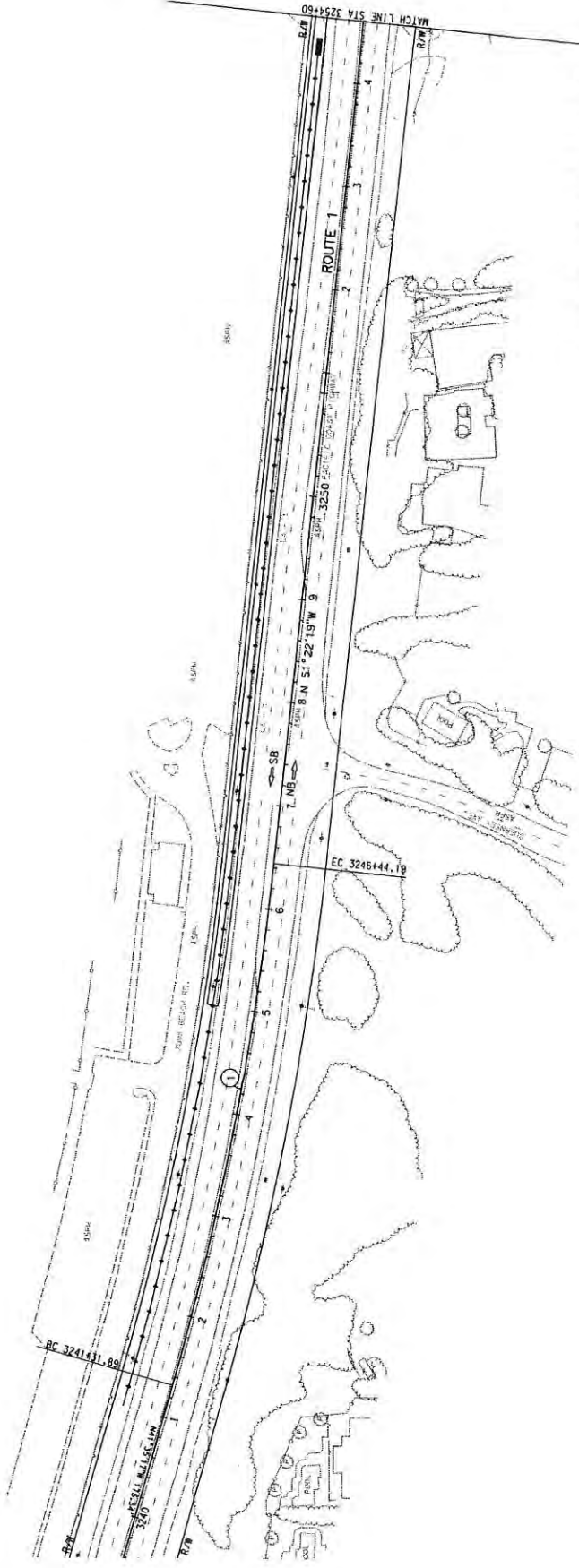
COPIES OF THIS PLAN SHEET

- NOTES:
- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE
 - FOR NEW BRIDGE SEE STRUCTURE PLAN.



CURVE DATA

No. @	R	Δ	T	L
1	3000'	09° 46' 58"	256.77'	512.29'
2	10000'	03° 17' 26"	287.49'	574.82'



**RIGHT OF WAY FEE
(LONG BR. ALTERNATIVE 3)**

SCALE: 1" = 50'

RW-1

PROJECT NUMBER & PHASE UNIT 1814 RELATIVE BORDER SCALE 15 IN INCHES 0 1 2 3

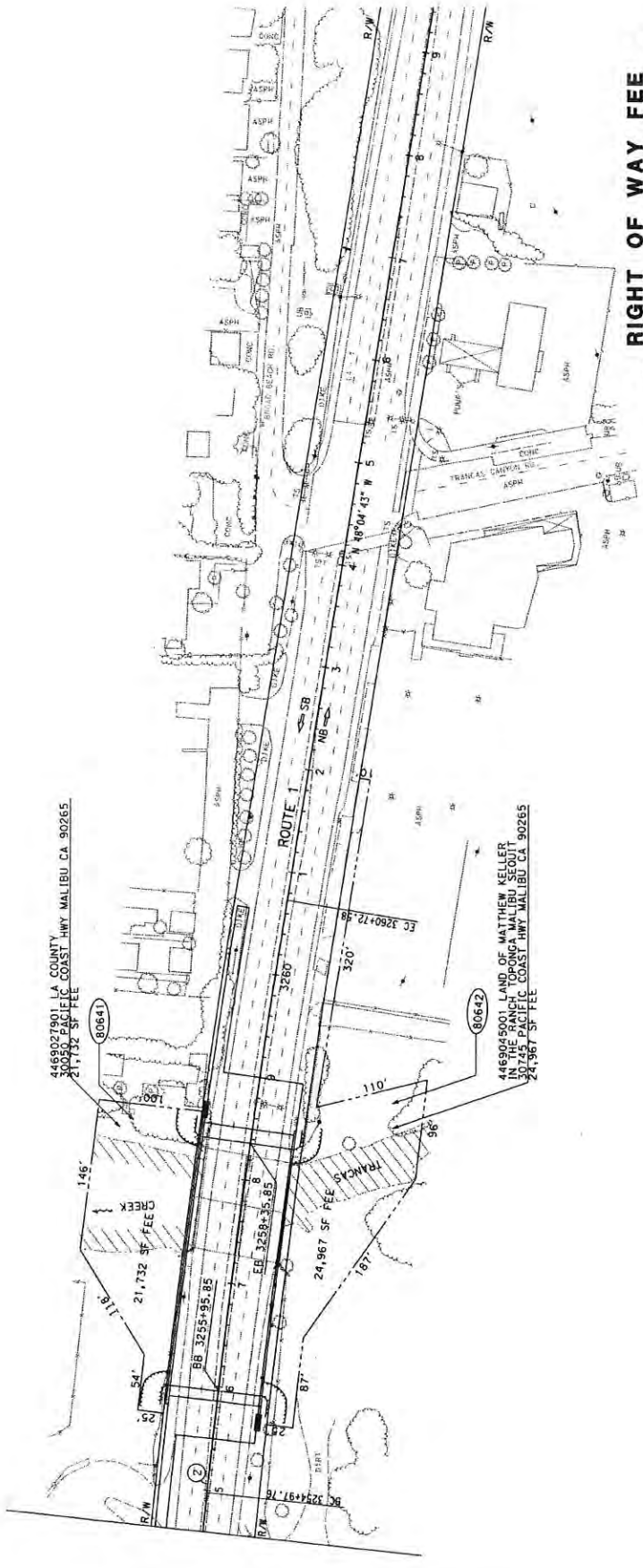
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	OC LEE	CHECKED BY	DATE REVISED
DESIGNED BY	BARBARAS F. VORREITER	REVISOR		

DIST	COUNTY	ROUTE	POST MILES TO PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	01	56.5/56.9		

REGISTERED CIVIL ENGINEER
 DATE
 PROFESSIONAL ENGINEER
 NO. 117231
 CIVIL
 STATE OF CALIFORNIA

CURVE DATA

No. @	R	Δ	T	L
2	10009	03°17'26"	287.49'	574.82'



**RIGHT OF WAY FEE
 (LONG BR. ALTERNATIVE 3)
 RW-2**

SCALE: 1" = 50'

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED-DRAWN BY	BAHABAS F. VORREITER	REVISOR	DATE
DESIGNED BY	OC LEE	CHECKED BY			

DIST	COUNTY	ROUTE	SHEET NO.	TOTAL SHEETS
07	LA	01	56.5/56.9	

REGISTERED CIVIL ENGINEER	DATE
PLANS APPROVAL DATE	

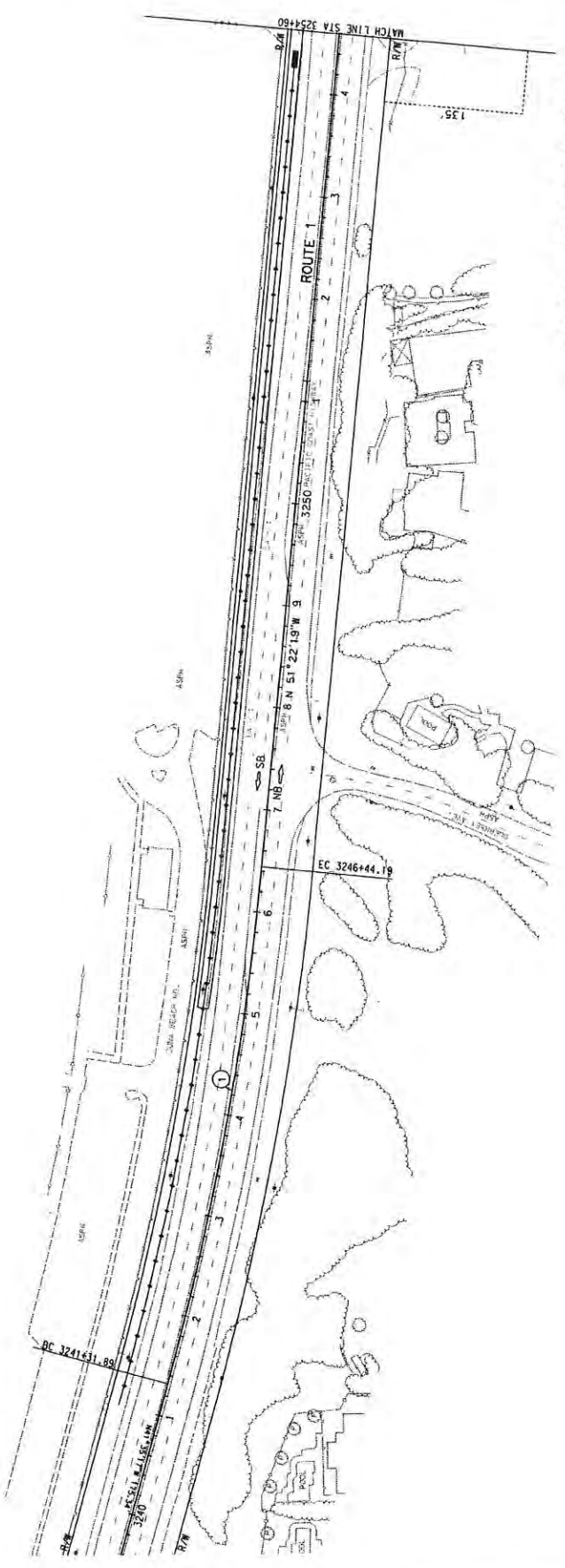
PROFESSIONAL ENGINEER
 NO. 110789
 CIVIL
 STATE OF CALIFORNIA
 LICENSE NO. 5090363
 EXPIRES 06-30-15

NOTES:
 1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE
 2. FOR NEW BRIDGE SEE STRUCTURE PLAN.



CURVE DATA

No.	R	Δ	T	L
1	3000'	09°46'58"	256.77'	512.29'
2	10009'	03°17'26"	287.49'	574.82'



**RIGHT OF WAY TCE
 (LONG BR. ALTERNATIVE 3)**

SCALE: 1" = 50'

RW-3

PROJECT NUMBER & PHASE

UNIT 1814

RELATIVE HORIZONTAL SCALE
 1" = 50' INCHES

RELATIVE VERTICAL SCALE
 1" = 5' INCHES

USERNAME: s112731
 DGN FILE # 72140P-000311.dwg

BORDER LAST REVISED: 7/2/2010

0712000094

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	DESIGN	OC LEE	CHECKED BY	DATE REVISION
FUNCTIONAL SUPERVISOR			BARNABAS F. VOHRREITER	
CALCULATED/DESIGNED BY				

Dist	County	Route	Project	SHEET TOTAL
07	LA	01	56.5/56.9	NO. SHEETS

REGISTERED CIVIL ENGINEER	DATE
PLANS APPROVAL	DATE

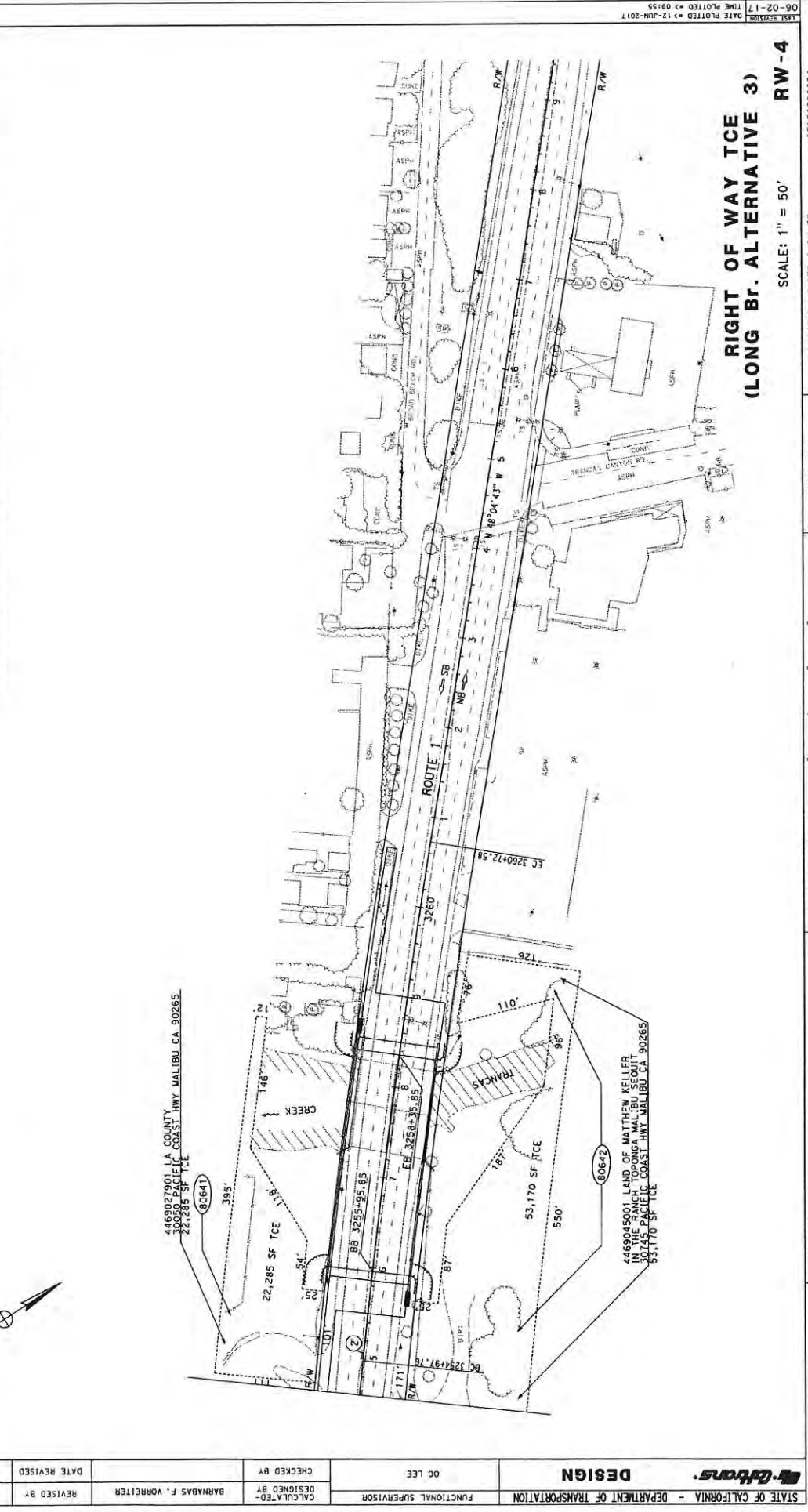
NO. @	R	Δ	T	L
2	10000'	03°17'26"	287.49'	574.92'

REGISTERED CIVIL ENGINEER: **ANDREW J. MOUZER**
 No. 0050261
 Exp. 8-30-19
 CIVIL
 STATE OF CALIFORNIA

CURVE DATA

REGISTERED CIVIL ENGINEER	DATE
PLANS APPROVAL	DATE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	DESIGN
FUNCTIONAL SUPERVISOR	OC LEE
CALCULATED/DESIGNED BY	BARNABAS F. VORREITER
CHECKED BY	OC LEE
REVISOR	DATE REVISED



**RIGHT OF WAY TCE
 (LONG BR. ALTERNATIVE 3)**
 RW - 4

SCALE: 1" = 50'

BORDER LAST REVISED 7/2/2010	UNIT 1814	PROJECT NUMBER & PHASE	0712000094
USER NAME 87417231 DON FILE 3 728146-cw00041 btorc.dgn	RELATIVE BORDER SCALE IS IN INCHES		

Attachment D

**Advanced Planning Study
(APS)**

PROBABILISTIC STRUCTURE COST ESTIMATE

GENERAL PLAN ESTIMATE ADVANCE PLANNING ESTIMATE

EST. NO. COST INDEX: DATE: 5/12/2017

BRIDGE NAME: TRANCAS CREEK BRIDGE (REPLACEMENT) - AL12

BRIDGE NUMBER: 51-0027

DISTRICT: 07

TYPE: PC/PS VOIDED SLAB

EA: PC/PS VOIDED SLAB

RTS: LA

PM: 6.7

DEPTH: 2'-2"

ACCELERATED BRIDGE PROJECT: NO

LENGTH: 120

WIDTH: 90.3

DESIGN SECTION: 12

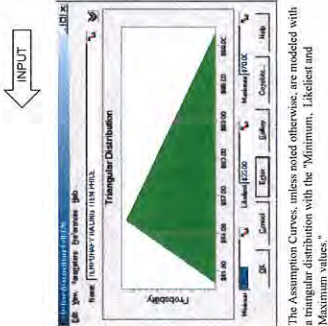
OF STRUCTURES IN PROJECT: 1

AREA: 10860

EST. NO. COST INDEX: DATE: 5/12/2017

PRICES BY: VTD

QUANTITIES BY: DOUG MENZEMBER



CONTRACT ITEMS	TYPE	UNIT	QUANTITY	MINIMUM	LIKELIEST	MAXIMUM	AMOUNT
1	STRUCTURE EXCAVATION (BRIDGE)	CY	320	\$90.00	\$109.00	\$115.00	\$32,700.00
2	STRUCTURE BACKFILL (BRIDGE)	CY	182	\$120.00	\$179.00	\$170.00	\$27,300.00
3	FURNISH 24" CAST-IN-STEEL-SHELL CONCRETE PILING	LF	640	\$128.00	\$169.00	\$190.00	\$102,400.00
4	DRIVE 24" CAST-IN-STEEL-SHELL CONCRETE PILING	EA	16	\$8,500.00	\$10,000.00	\$12,000.00	\$160,000.00
5	FURNISH 48" CAST-IN-STEEL-SHELL CONCRETE PILING	LF	600	\$460.00	\$745.00	\$510.00	\$291,000.00
6	DRIVE 48" CAST-IN-STEEL-SHELL CONCRETE PILING	EA	12	\$20,000.00	\$24,000.00	\$26,000.00	\$288,000.00
7	FURNISH PC/PS VOIDED SLAB (SVI 48 60)	SQFT	10860	\$55.00	\$40.00	\$65.00	\$651,600.00
8	ERECT PC/PS VOIDED SLAB (SVI 48 60)	EA	44	\$1,500.00	\$1,000.00	\$2,500.00	\$88,000.00
9	STRUCTURAL CONCRETE BRIDGE (POLYMER FIBER)	CY	503	\$935.00	\$1,080.00	\$1,150.00	\$528,150.00
10	STRUCTURAL CONCRETE BRIDGE (POLYMER FIBER)	CY	168	\$900.00	\$1,020.00	\$1,100.00	\$176,400.00
11	STRUCTURAL CONCRETE BRIDGE (POLYMER FIBER)	CY	64	\$1,000.00	\$1,100.00	\$1,150.00	\$70,400.00
12	BAR REINFORCING STEEL (BRIDGE)	LB	200327	\$0.80	\$1.00	\$1.25	\$210,343.60
13	JOINT SEAL (MR 1")	LF	183	\$32.00	\$45.00	\$62.00	\$8,335.00
14	ROCK SLOPE PROTECTION (1 TON METHOD A)	LF	110	\$120.00	\$150.00	\$300.00	\$22,000.00
15	CALIFORNIA ST-70 BRIDGE RAIL	LF	315	\$350.00	\$500.00	\$500.00	\$141,750.00
16	STRUCTURE EXCAVATION (RETAINING WALL)	CY	1143	\$35.00	\$55.00	\$70.00	\$62,865.00
17	STRUCTURE BACKFILL (RETAINING WALL)	CY	760	\$45.00	\$60.00	\$85.00	\$45,600.00
18	STRUCTURAL CONCRETE RETAINING WALL	CY	388	\$10.00	\$20.00	\$50.00	\$30,290.00
19	BAR REINFORCING STEEL (RETAINING WALL)	LB	37249	\$1.00	\$1.20	\$1.40	\$44,699.00
20	CONCRETE BARRIER TYPE 80	LF	620	\$260.00	\$350.00	\$450.00	\$217,000.00
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
Comments				10%			\$3,370.732
Suggested work schedule = 13 to 15 months							\$337,073.00
MOBILIZATION				10%			\$411,978.00
SUBTOTAL - BRIDGE ITEMS							\$4,119,784.00
CONTINGENCIES				25%			\$1,029,946.00
SUBTOTAL							\$5,149,730.00
BRIDGE REMOVAL							
RC T beam RC slab							
SQFT							
QUANTITY							
7352							

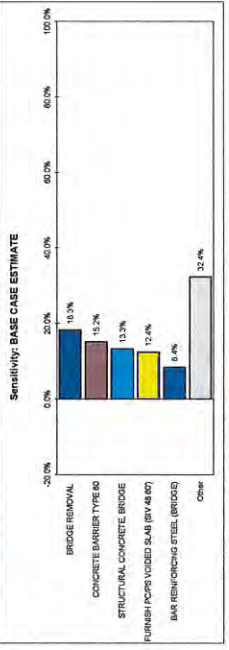
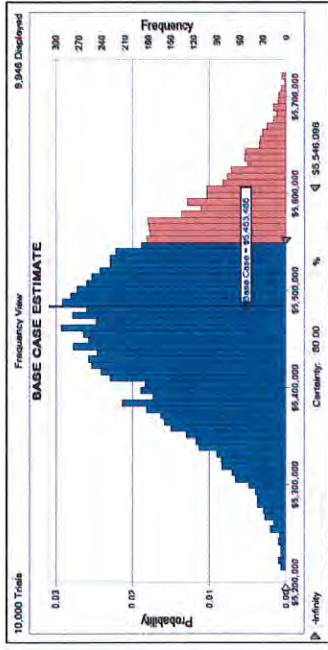
Notes: Highlighted cells represent the quantities and prices that are included in the model. Base Case Estimate is the sum of the Quantity multiplied by "Likeliest" Item Price

ITEM PRICE RANGE	MINIMUM	LIKELIEST	MAXIMUM	AMOUNT
	\$90.00	\$109.00	\$115.00	\$32,700.00
	\$120.00	\$179.00	\$170.00	\$27,300.00
	\$8,500.00	\$10,000.00	\$12,000.00	\$160,000.00
	\$460.00	\$745.00	\$510.00	\$291,000.00
	\$20,000.00	\$24,000.00	\$26,000.00	\$288,000.00
	\$55.00	\$40.00	\$65.00	\$651,600.00
	\$1,500.00	\$1,000.00	\$2,500.00	\$88,000.00
	\$935.00	\$1,080.00	\$1,150.00	\$528,150.00
	\$900.00	\$1,020.00	\$1,100.00	\$176,400.00
	\$1,000.00	\$1,100.00	\$1,150.00	\$70,400.00
	\$0.80	\$1.00	\$1.25	\$210,343.60
	\$32.00	\$45.00	\$62.00	\$8,335.00
	\$120.00	\$150.00	\$300.00	\$22,000.00
	\$350.00	\$500.00	\$500.00	\$141,750.00
	\$35.00	\$55.00	\$70.00	\$62,865.00
	\$45.00	\$60.00	\$85.00	\$45,600.00
	\$10.00	\$20.00	\$50.00	\$30,290.00
	\$1.00	\$1.20	\$1.40	\$44,699.00
	\$260.00	\$350.00	\$450.00	\$217,000.00
SUBTOTAL				\$3,370,732.00
10%				\$337,073.00
SUBTOTAL				\$4,119,784.00
25%				\$1,029,946.00
SUBTOTAL				\$5,149,730.00

MINIMUM	LIKELIEST	MAXIMUM	AMOUNT
\$22.00	\$30.00	\$40.00	\$137.38
BASE CASE ESTIMATE TO ASSUMED MIDDPOINT OF CONSTRUCTION			
BASE CASE ESTIMATE TO ASSUMED MIDDPOINT OF CONSTRUCTION			
MOBILIZATION AND CONTINGENCY			
BASE CASE ESTIMATE			\$3,370,732

INPUT

The estimate ranges generated below were prepared using Crystal Ball software. Crystal Ball software automatically calculates and records the results of thousands of different "what if" cases. Analysis of these scenarios reveals to you the range of possible outcomes, their probability of occurring, the inputs that most impact your model, and where you should focus your efforts.



Forecast values:
 0% \$5,094,362
 10% \$5,350,012
 20% \$5,388,153
 30% \$5,419,872
 40% \$5,445,020
 50% \$5,469,328
 60% \$5,492,715
 70% \$5,517,345
 80% \$5,546,096
 90% \$5,584,942
 100% \$5,819,292

Based on the assumptions used to create the model, the Des-Structure Office Engineer recommends that the programming level budget for this project be designated at the 80% forecast value.
80% Forecast Value = \$5,546,000.00

Escalation Rate
 Budget Est Escalated
 1 2.90% \$5,707,000
 2 3.00% \$5,878,000
 3 3.10% \$6,072,000
 4 3.00% \$6,354,000
 5 2.80% \$6,429,000

*80% Forecast Value Escalated Budget Estimate to Assumed Midpoint of Construction
 Years Beyond Midpoint
 1 2.90%
 2 3.00%
 3 3.10%
 4 3.00%
 5 2.80%

Escalated structure cost is provided for information only. Actual construction costs may vary. Escalated structure costs provided do not replace Departmental policy to update cost estimates annually. Escalation rates used are based on Global Insight data posted at <http://www.dot.ca.gov/hq/opp/ocosts/data.htm>. Web page updated May 2014.

80% Forecast
 BRIDGE COST PER SQUARE FOOT \$479
 BRIDGE REMOVAL \$378,100
 Bridge Cost per Square Foot and/or Bridge Removal costs modeled independently. Their 80% Forecast Values Provided for informational purposes only.

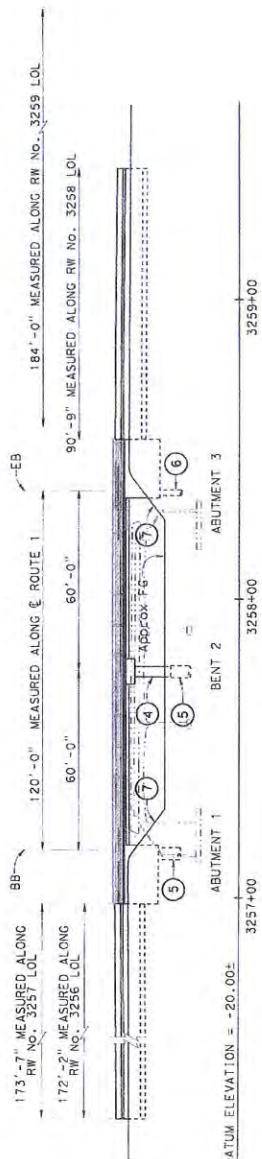
OUTPUT

BASE CASE ESTIMATE

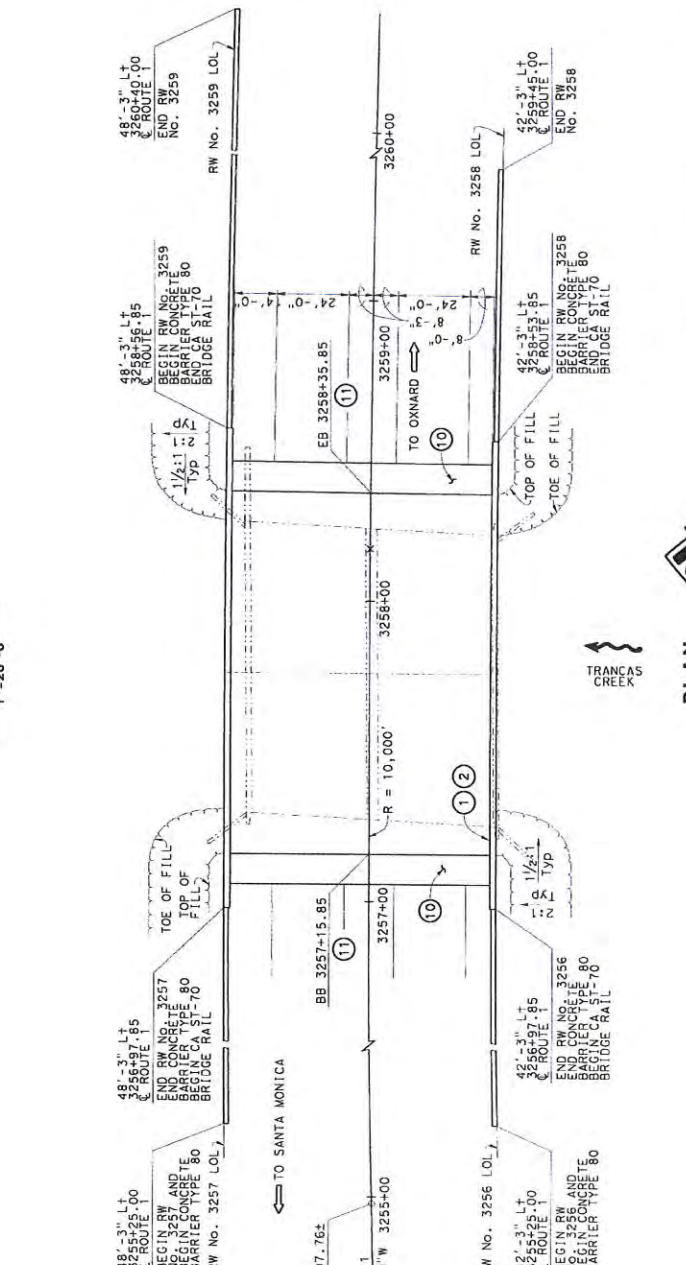
\$3,370,732

\$5,149,730

DIST	COUNTY	ROUTE	POST MILE
07	LA	1	56.71



ELEVATION
1"=20'-0"



TRANCAS CREEK

NOTES:

- 1 Point 'Trancas Creek Bridge'
- 2 Point 'Bridge No. 53-0027'
- 3 PC Slab SIV-48
- 4 3'-6"Ø Column, typical
- 5 4'-0"Ø CISS pile
- 6 2'-0"Ø CISS pile
- 7 Place rock slope protection (1 Ton)
- 8 CA ST-70 Bridge Rail
- 9 Temporary concrete barrier-type K See "Road Plans"
- 10 Structure approach type E0 (10)
- 11 New profile
- 12 2'-6" Closure Pour

LEGEND:

- Indicates new structure
- - - - - Indicates existing structure to be removed

ASSUMPTIONS

1. Construction is allowed in the dry season only (May 1 through November 1)
2. Temporary construction easement is given to allow construction equipment access to the creek bed
3. Abutment 1 is supported by 4'-0" Ø CISS piles so it can be converted into a bent in the future
4. Bents are supported by 4'-0" Ø CISS piles
5. 1 Ton, Method A Rock Slope Protection
6. Precast Voids Slabs are assumed for super structure

DATE OF ESTIMATE	06/16/17
BRIDGE REMOVAL	\$378,100.00
STRUCTURE DEPTH	3.52'
LENGTH	133'
WIDTH	96.5'
AREA	10,860
ADJUST INCLUDING	
TRD MOBILIZATION &	
25% CONTINGENCY	\$478.63
TOTAL COST	\$378,578.63

ALTERNATIVE 2	
STRUCTURE DESIGN	PLANNING STUDY-SHEET NO. 1
DESIGN BRANCH	TRANCAS CREEK BRIDGE (REPLACEMENT)
UNIT: 36.06	BRIDGE No. 53-0027
SCALE: AS NOTED	PROJECT No. & PHASE: 0712000094

12

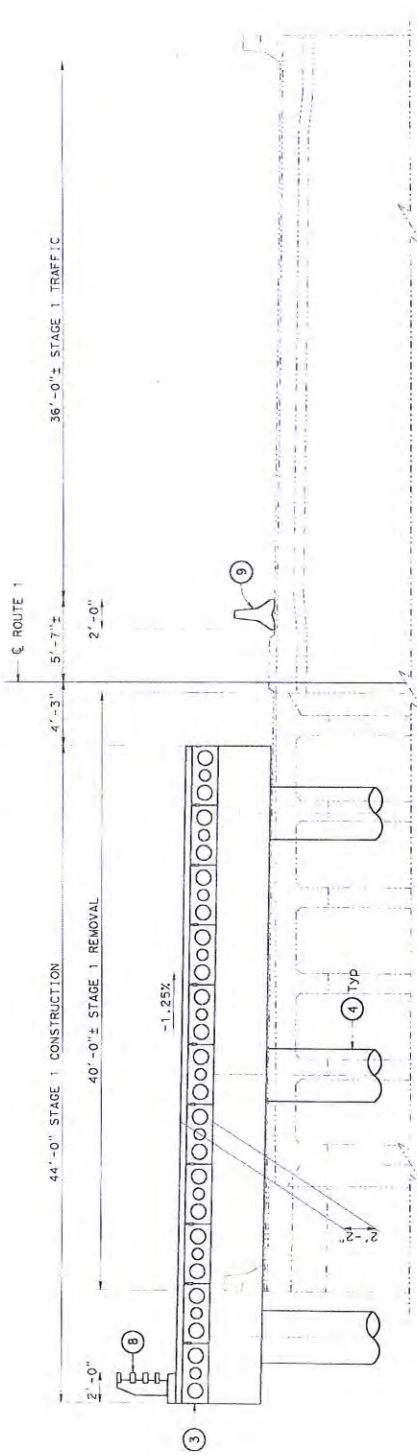
DESIGNED BY	WILLIAM ADDLESPIRGER	DATE	05-12-17
DRAWN BY	TON DOAN	DATE	05-12-17
CHECKED BY	DOUG MENZMER	DATE	05-12-17
APPROVED	MATT HOLM	DATE	05-12-17

ORIGINAL SCALE IN INCHES 6 1 2 3

CONTRACT No.: 07-291400

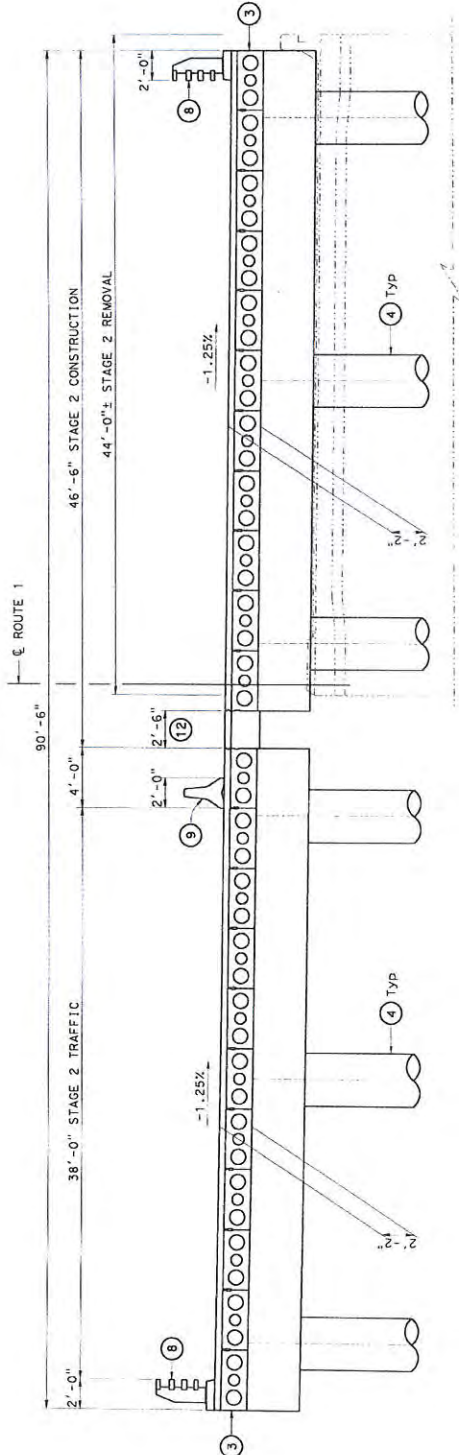
STRUCTURES DESIGN DIVISION - PLANNING STUDY SHEET (ENGLISH) (REV. 04-13-17)

Dist.	County	Route	Post Mile
07	LA	1	56.71



TYPICAL SECTION-STAGE 1 CONSTRUCTION

1/4" = 1'-0"



TYPICAL SECTION-STAGE 2 CONSTRUCTION

1/4" = 1'-0"

DESIGNED BY LILIAN ADDLESPURGER	DATE 05-12-17	STRUCTURE DESIGN	ALTERNATIVE 2
DRAWN BY TON DOAN	DATE 05-12-17	DESIGN BRANCH	PLANNING STUDY-SHEET NO. 2
CHECKED BY DOUG MENZMER	DATE 05-12-17	12	TRANCAS CREEK BRIDGE (REPLACEMENT)
APPROVED MATT HOLM	DATE 05-12-17		UNIT 3606
			BRIDGE No. 53-0027
		PROJECT No. 8 PHASE: 0712000094	
		SCALE: AS NOTED	
		CONTRACT No.: 07-291400	

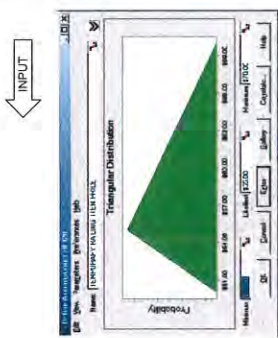
STRUCTURES SECTION GRAPHIC PLANNING STUDY SHEET (ENGLISH REV. 05-13-17) 1/13 1/14 1/15 1/16 1/17 1/18 1/19 1/20 1/21 1/22 1/23 1/24 1/25 1/26 1/27 1/28 1/29 1/30 1/31 1/32 1/33 1/34 1/35 1/36 1/37 1/38 1/39 1/40 1/41 1/42 1/43 1/44 1/45 1/46 1/47 1/48 1/49 1/50 1/51 1/52 1/53 1/54 1/55 1/56 1/57 1/58 1/59 1/60 1/61 1/62 1/63 1/64 1/65 1/66 1/67 1/68 1/69 1/70 1/71 1/72 1/73 1/74 1/75 1/76 1/77 1/78 1/79 1/80 1/81 1/82 1/83 1/84 1/85 1/86 1/87 1/88 1/89 1/90 1/91 1/92 1/93 1/94 1/95 1/96 1/97 1/98 1/99 1/100

PROBABILISTIC STRUCTURE COST ESTIMATE

GENERAL PLAN ESTIMATE X ADVANCE PLANNING ESTIMATE

BRIDGE NAME: TRANCAS CREEK BRIDGE (REPLACE)-ALT 3
 BRIDGE NUMBER: 53-0027
 TYPE: PC/PS VOIDED SLAB
 E.A.: 07-291400
 PROJECT ID: 0712000094
 ACCELERATED BRIDGE PROJECT NO
 DESIGN SECTION: 12
 # OF STRUCTURES IN PROJECT: 1
 PRICES BY: VTD
 PRICES CHECKED BY: DOUG MENZMER
 QUANTITIES BY: DOUG MENZMER

IN EST: 5/12/2017
 OUI EST: 6/16/2017
 DISTRICT: 07
 CO: LA
 RFE: 01
 P.M.: 56.7
 DEPTH: 2'-2"
 LENGTH: 340
 WIDTH: 90.5
 AREA: 21720
 EST. NO.: 427
 COST INDEX: 427
 DATE: 5/12/2017



The Assumption Curves, unless noted otherwise, are modeled with a triangular distribution with the "Minimum, Likeliest and Maximum values."

CONTRACT ITEMS	TYPE	UNIT	QUANTITY	MINIMUM	LIKELIEST	MAXIMUM	AMOUNT
1	STRUCTURE EXCAVATION (BRIDGE)	CY	320	\$90.00	\$100.00	\$115.00	\$32,000.00
2	STRUCTURE BACKFILL (BRIDGE)	CY	182	\$120.00	\$150.00	\$170.00	\$27,300.00
3	FURNISH 24" CAST-IN-STEEL-SHELL CONCRETE PILING	LF	1280	\$120.00	\$140.00	\$160.00	\$179,200.00
4	DRIVE 24" CAST-IN-STEEL-SHELL CONCRETE PILING	EA	32	\$7,000.00	\$9,000.00	\$11,000.00	\$288,000.00
5	FURNISH 48" CAST-IN-STEEL-SHELL CONCRETE PILING	LF	900	\$400.00	\$440.00	\$490.00	\$396,000.00
6	DRIVE 48" CAST-IN-STEEL-SHELL CONCRETE PILING	EA	18	\$22,000.00	\$24,000.00	\$26,000.00	\$432,000.00
7	FURNISH PC/PS VOIDED SLAB (SIV 48 60)	SQFT	21720	\$45.00	\$50.00	\$55.00	\$1,086,000.00
8	ERECT PC/PS VOIDED SLAB (SIV 48 60)	EA	88	\$1,500.00	\$2,000.00	\$2,500.00	\$176,000.00
9	STRUCTURAL CONCRETE BRIDGE (POLYMER FIBER)	CY	532	\$955.00	\$1,090.00	\$1,250.00	\$558,600.00
10	STRUCTURAL CONCRETE APPROACH SLAB EQ (10)	CY	335	\$900.00	\$1,050.00	\$1,200.00	\$351,750.00
11	STRUCTURAL CONCRETE APPROACH SLAB EQ (10)	CY	64	\$1,000.00	\$1,100.00	\$1,200.00	\$77,000.00
12	BAR REINFORCING STEEL (BRIDGE)	LB	321634	\$0.80	\$1.05	\$1.25	\$337,716.00
13	JOINT SEAL (MR 1')	LF	183	\$32.00	\$35.00	\$40.00	\$5,856.00
14	ROCK SLOPE PROTECTION (1 TON, METHOD A)	CY	110	\$120.00	\$130.00	\$140.00	\$13,200.00
15	CALIFORNIA S1-70 BRIDGE RAIL	LF	540	\$350.00	\$400.00	\$500.00	\$243,000.00
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
TIME RELATED OVERHEAD							\$4,208,201.00
MOBILIZATION							\$420,820.00
SUBTOTAL BRIDGE ITEMS							\$5,143,336.00
CONTINGENCIES							\$1,285,839.00
SUBTOTAL							\$6,429,175.00
BRIDGE REMOVAL							\$40.00
SUBTOTAL							\$6,429,215.00

PERCENTILES	FORECAST VALUES
0%	\$6,274,102
10%	\$6,597,291
20%	\$6,650,401
30%	\$6,690,443
40%	\$6,725,000
50%	\$6,756,290
60%	\$6,788,669
70%	\$6,823,827
80%	\$6,864,052
90%	\$6,918,648
100%	\$7,175,895

Escalation Rate: 2.90%
 Budget Est. Escalated: \$7,063,000
 Budget: \$7,275,000
 Escalated: \$7,515,000
 Budget: \$7,740,000
 Escalated: \$7,977,000

80% Forecast Value Evaluated Budget Estimate to Assumed Midpoint of Construction = **\$6,864,000.00**

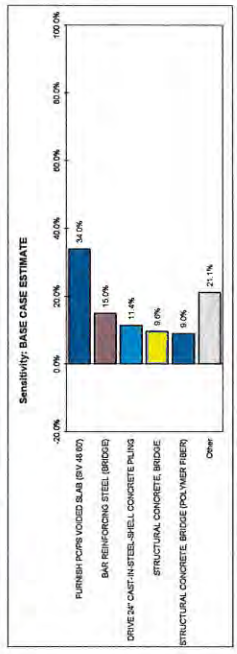
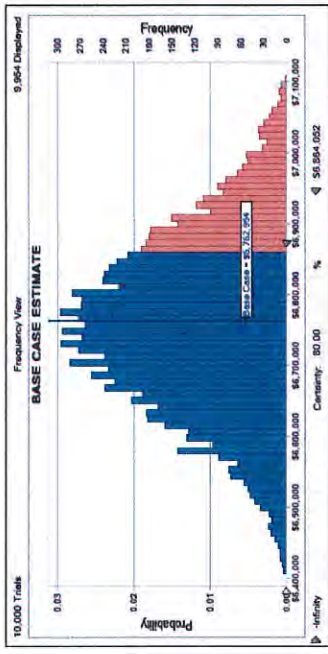
BASE CASE ESTIMATE TO ASSUMED MIDPOINT OF CONSTRUCTION
 BASE CASE ESTIMATE = \$6,769,364

BRIDGE REMOVAL LUMP SUM PRICE INCLUDES PRO, MOBILIZATION AND CONTINGENCY

Highlighted cells represent the quantities and prices that are included in the model.
 Base Case Estimate is the sum of the Quantity multiplied by "Likeliest" Item Price

OUTPUT

The estimate ranges generated below were prepared using Crystal Ball software. Crystal Ball software automatically calculates and records the results of thousands of different "what if" cases. Analysis of these scenarios reveals to you the range of possible outcomes, their probability of occurring, the inputs that most impact your model, and where you should focus your efforts.



BASED ON THE ASSUMPTIONS USED TO CREATE THE MODEL, THE DESIGNER OFFICE ENGINEER RECOMMENDS THAT THE PROGRAMMING LEVEL BUDGET FOR THIS PROJECT BE DESIGNATED AT THE 80% FORECAST VALUE.

Recommended Range: \$6,823,827 to \$6,918,648

PERCENTILES: 0% \$6,274,102; 10% \$6,597,291; 20% \$6,650,401; 30% \$6,690,443; 40% \$6,725,000; 50% \$6,756,290; 60% \$6,788,669; 70% \$6,823,827; 80% \$6,864,052; 90% \$6,918,648; 100% \$7,175,895

Escalation Rate: 2.90%
 Budget Est. Escalated: \$7,063,000
 Budget: \$7,275,000
 Escalated: \$7,515,000
 Budget: \$7,740,000
 Escalated: \$7,977,000

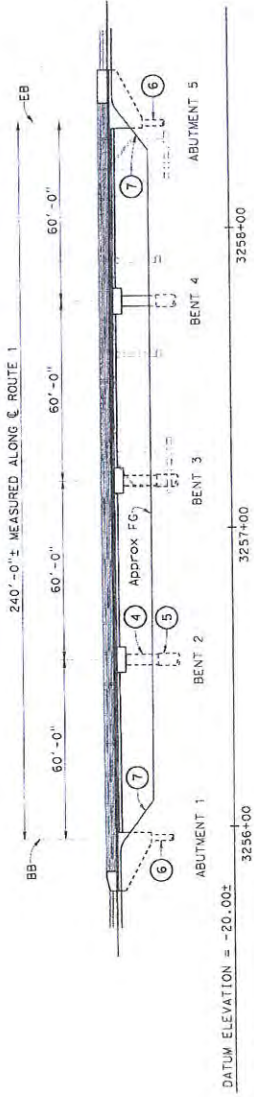
80% Forecast Value Evaluated Budget Estimate to Assumed Midpoint of Construction = **\$6,864,000.00**

* Escalated structure cost is provided for information only, actual construction costs may vary. Escalated structure costs provided do not replace Departmental policy to update cost estimates annually. Escalation rates used are based on Global Insight data posted at <http://www.doi.gov/foiapp/foiester/data.htm>. Web page updated May 2014.

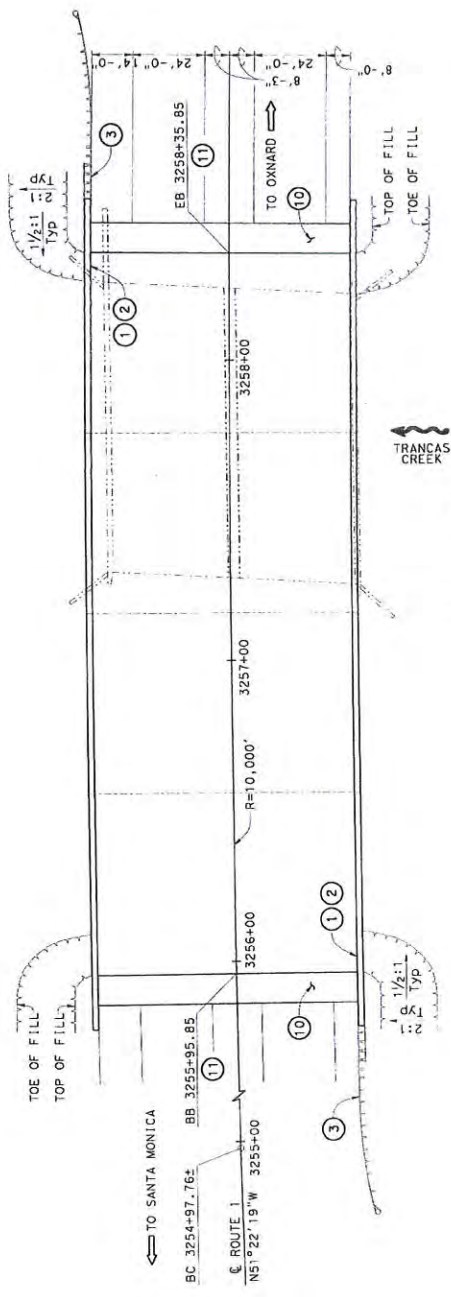
80% Forecast Value Evaluated Budget Estimate to Assumed Midpoint of Construction = \$300
 BRIDGE REMOVAL = \$378,100

Bridge Cost per Square Foot and/or Bridge Removal costs modeled independently. Their 80% Forecast Values Provided for informational purposes only.

Dist	County	Route	Post Mile
07	LA	1	56.71



ELEVATION
1"=20'-0"



NOTES:

- 1 Paint Trancas Creek Bridge
- 2 Paint Bridge No. 53-0027
- 3 MBR See "Road Plans"
- 4 3'-6" Column, Typical
- 5 4'-0" CISS pile
- 6 2'-0" CISS pile
- 7 Place rock slope protection (1 Ton)
- 8 CA ST-70 Bridge Rail
- 9 Temporary concrete barrier type K See "Road Plans"
- 10 Structure approach type E0 (10)
- 11 Match existing profile
- 12 2'-6" Closure Pour
- 13 PC Slab SIV-4B

District provides cost and plans for traffic control and temporary concrete barrier type K

LEGEND:

- Indicates new structure
- - - - - Indicates existing structure to be removed

ASSUMPTIONS

1. Construction is allowed in the dry season only (May 1 through November 1)
2. Temporary construction easement is given to allow construction equipment access to the creek bed
3. Bents are supported by 4'-0" Ø CISS piles
4. 1 Ton, Method A Rock Slope Protection
5. Precast Voided Slabs are assumed for super structure

DATE OF ESTIMATE	06/16/17
BRIDGE REMOVAL	\$378,100.00
STRUCTURE DEPTH	2'-2"
LENGTH	240
WIDTH	90.5
AREA	21,720
COST SOFT INCLUDING	\$299.86
TRK MOBILIZATION &	
25% CONTINGENCY	\$6,864,000.00
TOTAL COST	

PLAN
1"=20'-0"



ALTERNATIVE 3

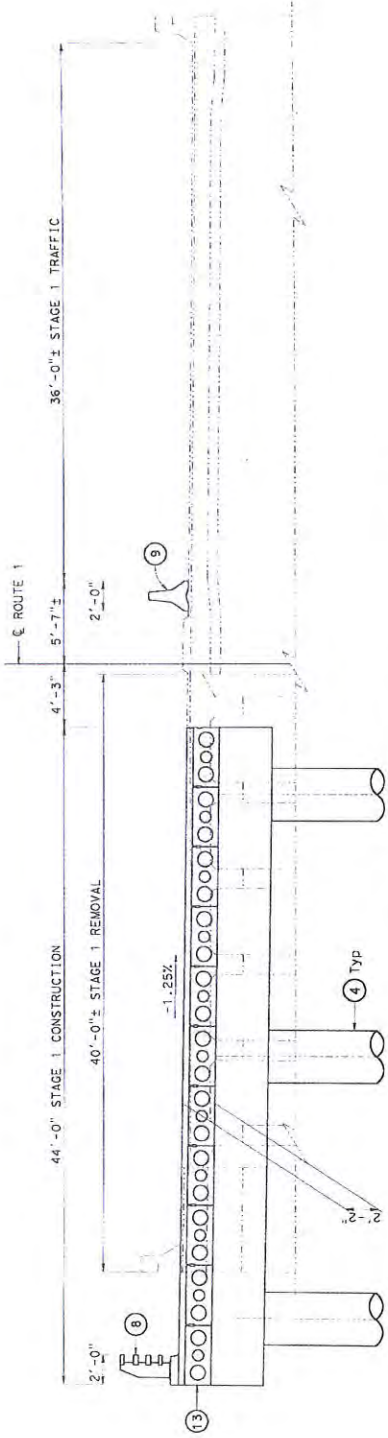
DESIGNED BY	WILLIAM ADDESPURGER	DATE	05-12-17
DRAWN BY	TON DOAN	DATE	05-12-17
CHECKED BY	DOUG MENZNER	DATE	05-12-17
APPROVED	MATT HOLM	DATE	05-12-17

STRUCTURE DESIGN	12
DESIGN BRANCH	

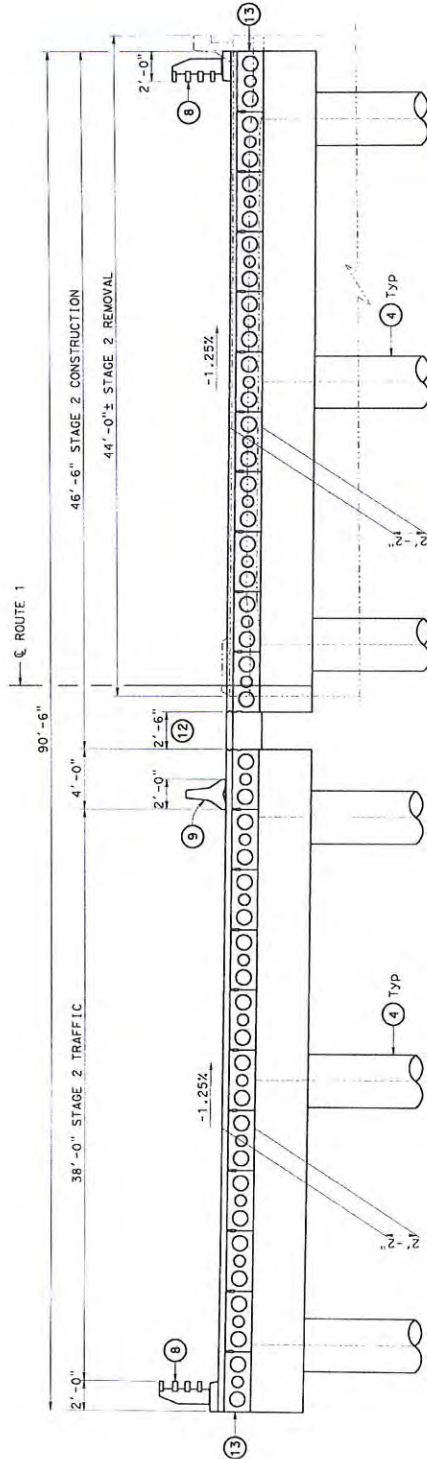
PLANNING STUDY-SHEET NO. 1
TRANCAS CREEK BRIDGE (REPLACEMENT)
UNIT: 3606
SCALE: AS NOTED
BRIDGE No. 53-0027
PROJECT No. & PHASE: 071.2000094

CONTRACT No.: 07-291400

DIST	COUNTY	ROUTE	POST MILE
07	LA	1	56.71



TYPICAL SECTION-STAGE 1 CONSTRUCTION
1/4" = 1'-0"



TYPICAL SECTION-STAGE 2 CONSTRUCTION
1/4" = 1'-0"

ALTERNATIVE 3	
STRUCTURE DESIGN	PLANNING STUDY-SHEET NO. 2
DESIGN BRANCH	TRANCAS CREEK BRIDGE (REPLACEMENT)
12	UNIT: 3606 BRIDGE No. 53-0027
DESIGNED BY: WILLIAM ADDELSBURGER DATE: 05-12-17	SCALE: AS NOTED PROJECT No. & PHASE: 0712000094
DRAWN BY: TON DOAN DATE: 05-12-17	CONTRACT No.: 07-251400
CHECKED BY: DOUG MENZMER DATE: 05-12-17	
APPROVED: MATT HOLM DATE: 05-12-17	

Attachment E

STORM WATER DATA REPORT

(SWDR)

(Cover Page)



Dist-County-Route: 07-LA-001
Post Mile Limits: 56.5/56.9
Type of Work: Bridge Replacement
Project ID (EA): 0712000019 (291400)
Program Identification: HB 21

Phase: PID PA/ED PS&E

Regional Water Quality Control Board(s): Los Angeles – Region 4

Total Disturbed Soil Area: 0.62 acres Post Construction Treatment Area: 0 acres

Alternative Compliance (acres): 0 acres

Estimated Const. Start Date: 05/29/18 Estimated Const. Completion Date: 01/15/20

Risk Level: RL 1 RL 2 RL 3 WPCP Other: _____

Is the Project within a TMDL watershed? Yes No

TMDL Compliance Units (acres): _____

Notification of ADL reuse (if yes, provide date): Yes Date: _____ No

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

Barnabas F. Vorreiter, Registered Project Engineer/Landscape Architect Date

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

Shahriar Yadegari, Project Manager Date

Roger Castillo, Designated Maintenance Representative Date

Ron Russak, Designated Landscape Architect Representative Date

[Stamp Required at PS&E only]

Shirley Park, District/Regional Design SW Coordinator or Designee Date

Attachment F

**COST ESTIMATE
ALTERNATIVE 2**

Project Report Cost Estimate Summary



District-County-Route 07-LA-01

PM 56.5/56.9

EA 291400

Program Code 40.50.201.110

Bridge Rehabilitation

PROJECT DESCRIPTION:

Limits: In Los Angeles County in Malibu from Guernsey Avenue to Trancas Canyon Road

Proposed Improvement (Scope): Replace Trancas Creek Bridge and widen roadway on the southbound side outside shoulder to provide for bicycle and pedestrian walkway.

Alternate: Alternative 2

SUMMARY OF PROJECT COST ESTIMATE

TOTAL ROADWAY ITEMS	\$ <u>3,535,330</u>
TOTAL STRUCTURE ITEMS	\$ <u>5,546,000</u>
SUBTOTAL CONSTRUCTION COSTS	\$ <u>9,081,330</u>
TOTAL RIGHT OF WAY ITEMS	\$ <u>40,117,529</u>
TOTAL PROJECT CAPITAL OUTLAY COSTS	\$ <u>49,198,859</u>

Reviewed by District Program Manager _____
(Signature)

Approved by Project Manager _____ Date _____
(Signature)

Phone No. _____

Page No. 1 of 6

District-County-Route 07-LA-01
 PM 56.5/56.9
 EA 291400

I. ROADWAY ITEMS

<u>Section 1 Earthwork</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Roadway Excavation	6,185	CY	\$ 70.00	\$ 432,950	
Structural Backfill (Sound Wall)			\$	\$	
Clearing & Grubbing	1	LS	\$10,000.00	\$ 10,000	
Develop Water Supply			\$	\$	
Remove Asphalt Concrete Dike			\$	\$	
Remove Concrete (Curb & Gutter)			\$	\$	
Remove Concrete Barrier			\$	\$	
Remove Sound Wall Masonry			\$	\$	
Remove MBGR			\$	\$	
Minor Concrete (Curb and Gutter)			\$	\$	
Subtotal Roadway Items					\$ 442,950

Section 2 Pavement Structural Section*

PCC Pavement (260 mm Depth)			\$	\$	
Asphalt Concrete	5,200	TON	\$ 85.00	\$ 442,000	
Lean Concrete Base			\$	\$	
Class 3, Aggregate Base	1,605	CY	\$ 60.00	\$ 96,300	
Cement-Treated Base			\$	\$	
Treated Permeable Base			\$	\$	
Aggregate Subbase			\$	\$	
Pavement Reinforcing Fabric			\$	\$	
Edge Drains			\$	\$	
			\$	\$	
Subtotal Pavement Structural Section					\$ 538,300

Section 3 Drainage

Drainage Adjustment and Rehab	1	LS	\$75,000.00	\$ 75,000	
Storm Drains			\$	\$	
Pumping Plants			\$	\$	
Project Drainage (X-Drains, overside, etc.)			\$	\$	
			\$	\$	
			\$	\$	
			\$	\$	
Subtotal Drainage					\$ 75,000

*Reference sketch showing typical pavement structural section elements of the roadway. Include (if available) T.I., R-Value and date when tests were performed.

NOTE: Extra lines are provided for items not listed, use additional lines as appropriate.

District-County-Route 07-LA-01
 PM 56.5/56.9
 EA 291400

<u>Section 4 Specialty Items</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
400 mm CIDH Conc Pilling (SW)	_____	_____	\$ _____	\$ _____	
Sound Wall Masonry Block	_____	_____	\$ _____	\$ _____	
Concrete Barrier Type 736	_____	_____	\$ _____	\$ _____	
Highway Planting	_____	_____	\$ _____	\$ _____	
Maintain Existing Plants	_____	_____	\$ _____	\$ _____	
Plant Establishment Work	_____	_____	\$ _____	\$ _____	
Irrigation System	_____	_____	\$ _____	\$ _____	
Maintain Exist Irrigation Facilities	_____	_____	\$ _____	\$ _____	
Retaining Walls	_____	_____	\$ _____	\$ _____	
Irrigation Modification	_____	_____	\$ _____	\$ _____	
Relocate Private Irrigation Facilities	_____	_____	\$ _____	\$ _____	
Erosion Control	_____	_____	\$ _____	\$ _____	
Slope Protection	_____	_____	\$ _____	\$ _____	
Storm Water BMPs	<u>1</u>	<u>LS</u>	<u>\$169,920</u>	<u>\$ 169,920</u>	
Hazardous Waste Mitigation Work	<u>1</u>	<u>LS</u>	<u>\$100,000</u>	<u>\$ 100,000</u>	
Environmental Mitigation	<u>1</u>	<u>LS</u>	<u>\$ 500,000</u>	<u>\$ 500,000</u>	
Resident Engineer Office Space	<u>1</u>	<u>LS</u>	<u>\$ 100,00</u>	<u>\$ 100,00</u>	
			Subtotal Specialty Items		<u>\$869,920</u>
<u>Section 5 Traffic Items</u>					
Traffic Control, COOZIP, Flaggers	<u>1</u>	<u>LS</u>	<u>\$ 300,000</u>	<u>\$ 300,000</u>	
Traffic Delineation Items	<u>1</u>	<u>LS</u>	<u>\$ 150,000</u>	<u>\$ 150,000</u>	
Traffic Signals	_____	_____	\$ _____	\$ _____	
Relocate Overhead Sign Structures	_____	_____	\$ _____	\$ _____	
Roadside Signs	_____	_____	\$ _____	\$ _____	
Temporary Railing (Type K)	<u>4,200</u>	<u>LF</u>	<u>\$ 25</u>	<u>\$ 105,000</u>	
Transportation Management Plan	_____	_____	\$ _____	\$ _____	
Construction Area Signs	<u>1</u>	<u>LS</u>	<u>\$ 15,000</u>	<u>\$ 15,000</u>	
Communication System	_____	_____	\$ _____	\$ _____	
_____	_____	_____	\$ _____	\$ _____	
			Subtotal Traffic Items		<u>\$570,000</u>
			TOTAL SECTIONS 1 thru 5		<u>\$2,496,170</u>

NOTE: Extra lines are provided for items not listed, use additional lines as appropriate.

District-County-Route 07-LA-01
PM 56.5/56.9
EA 291400

<u>Section 6 Minor Items</u>	<u>Item Cost</u>	<u>Section Cost</u>
	\$2,496,170 x (5 to 10%) =	\$124,810
	(Subtotal Sections 1 thru 5)	
	TOTAL MINOR ITEMS	\$124,810

<u>Section 7 Roadway Mobilization</u>		
	\$2,620,980 x (10%) =	\$262,100
	(Subtotal Sections 1 thru 6)	
	TOTAL ROADWAY MOBILIZATION	\$262,100

<u>Section 8 Roadway Additions</u>		
Supplemental Work		
	\$2,620,980 x (5 to 10%) =	\$131,050
	(Subtotal Sections 1 thru 6)	
Contingencies		
	\$2,620,980 x (**20%) =	\$524,200
	(Subtotal Sections 1 thru 6)	
	TOTAL ROADWAY ADDITIONS	\$655,250
	TOTAL ROADWAY ITEMS	\$3,538,330
	(Subtotal Sections 1 thru 8)	

Estimate Prepared By Barnabas F. Vorreiter Phone# (213) 897-6791 Date _____
(Print Name)

Estimate Checked By _____ Phone# _____ Date _____
(Print Name)

** Use appropriate percentage per Chapter 20.

Page No. 4 of 6

District-County-Route 07-LA-01
 PM 56.5/56.9
 EA 291400

II. STRUCTURES ITEMS

	Structure (1)	Structure (2)	Structure (3)	
Bridge Name	_____	_____	_____	
Structure Type	_____	_____	_____	
Width (out to out) - (ft)	_____	_____	_____	
Span Lengths - (ft)	_____	_____	_____	
Total Area - (ft ²)	_____	_____	_____	
Footing Type (pile/spread)	_____	_____	_____	
Cost Per ft ² (incl. 10% mobilization and 20% contingency)	_____	_____	_____	
Total Cost for Structure	_____	_____	_____	
SUBTOTAL STRUCTURES ITEMS (Sum of Total Cost for Structures)				\$ <u>5,546,000</u>
Railroad Related Costs:	_____			\$ _____
	_____			\$ _____
	_____			\$ _____
SUBTOTAL RAILROAD ITEMS				\$ _____
TOTAL STRUCTURES ITEMS (Sum of Structures Items plus Railroad Items)				\$ <u>5,546,000</u>

COMMENTS:

Estimate Prepared By _____ Phone# _____ Date _____
 (Print Name)

NOTE: If appropriate, attach additional pages and backup.

District-County-Route 07-LA-01
PM 56.5/56.9
EA 291400

III. RIGHT OF WAY ITEMS

ESCALATED VALUE

A. Acquisition, including excess lands, damages to remainder(s) and Goodwill	\$ _____
B. Utility Relocation (State share)	\$ <u>2,437,000</u>
C. Relocation Assistance	\$ _____
D. Clearance/Demolition	\$ _____
E. Title and Escrow Fees	\$ <u>37,680,529</u>

TOTAL RIGHT OF WAY ITEMS \$40,117,529
(Escalated Value)

Anticipated Date of Right of Way Certification 06/29/2019
(Date to which Values are Escalated)

F. Construction Contract Work

Brief Description of Work:

Right of Way Branch Cost Estimate for Work * \$ _____

* This dollar amount is to be included in the Roadway and/or Structures Items of Work, as appropriate. Do not include in Right of Way Items.

COMMENTS:

Estimate Prepared By _____ Phone# _____ Date _____
(Print Name)

NOTE: If appropriate, attach additional pages and backup.

Page No. 6 of 6

Attachment G

**COST ESTIMATE
ALTERNATIVE 3
(PREFERRED ALTERNATIVE)**

Project Report Cost Estimate Summary



District-County-Route 07-LA-01

PM 56.5/56.9

EA 291400

Program Code 40.50.201.110

Bridge Rehabilitation

PROJECT DESCRIPTION:

Limits: In Los Angeles County in Malibu from Guernsey Avenue to Trancas Canyon Road

Proposed Improvement (Scope): Replace Trancas Creek Bridge and widen roadway on the southbound side outside shoulder to provide for bicycle and pedestrian walkway.

Alternate: Alternative 3

SUMMARY OF PROJECT COST ESTIMATE

TOTAL ROADWAY ITEMS	\$ <u>3,513,350</u>
TOTAL STRUCTURE ITEMS	\$ <u>6,864,000</u>
SUBTOTAL CONSTRUCTION COSTS	\$ <u>10,337,350</u>
TOTAL RIGHT OF WAY ITEMS	\$ <u>41,371,324</u>
TOTAL PROJECT CAPITAL OUTLAY COSTS	\$ <u>51,748,674</u>

Reviewed by District Program Manager _____
(Signature)

Approved by Project Manager _____ Date _____
(Signature)

Phone No. _____

Page No. 1 of 6

District-County-Route 07-LA-01
 PM 56.5/56.9
 EA 291400

I. ROADWAY ITEMS

<u>Section 1 Earthwork</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Roadway Excavation	<u>10,910</u>	<u>CY</u>	<u>\$ 65.00</u>	<u>\$ 709,150</u>	
Structural Backfill (Sound Wall)	_____	_____	<u>\$ _____</u>	<u>\$ _____</u>	
Clearing & Grubbing	<u>1</u>	<u>LS</u>	<u>\$15,000.00</u>	<u>\$ 15,000</u>	
Develop Water Supply	_____	_____	<u>\$ _____</u>	<u>\$ _____</u>	
Remove Asphalt Concrete Dike	_____	_____	<u>\$ _____</u>	<u>\$ _____</u>	
Remove Concrete (Curb & Gutter)	_____	_____	<u>\$ _____</u>	<u>\$ _____</u>	
Remove Concrete Barrier	_____	_____	<u>\$ _____</u>	<u>\$ _____</u>	
Remove Sound Wall Masonry	_____	_____	<u>\$ _____</u>	<u>\$ _____</u>	
Remove MBGR	_____	_____	<u>\$ _____</u>	<u>\$ _____</u>	
Minor Concrete (Curb and Gutter)	_____	_____	<u>\$ _____</u>	<u>\$ _____</u>	
			Subtotal Roadway Items		<u>\$ 724,150</u>

Section 2 Pavement Structural Section*

PCC Pavement (260 mm Depth)	_____	_____	<u>\$ _____</u>	<u>\$ _____</u>
Asphalt Concrete	<u>1,180</u>	<u>TON</u>	<u>\$ 95.00</u>	<u>\$ 112,100</u>
Lean Concrete Base	_____	_____	<u>\$ _____</u>	<u>\$ _____</u>
Class 3, Aggregate Base	<u>365</u>	<u>CY</u>	<u>\$ 75.00</u>	<u>\$ 27,375</u>
Cement-Treated Base	_____	_____	<u>\$ _____</u>	<u>\$ _____</u>
Treated Permeable Base	_____	_____	<u>\$ _____</u>	<u>\$ _____</u>
Aggregate Subbase	_____	_____	<u>\$ _____</u>	<u>\$ _____</u>
Pavement Reinforcing Fabric	_____	_____	<u>\$ _____</u>	<u>\$ _____</u>
Edge Drains	_____	_____	<u>\$ _____</u>	<u>\$ _____</u>

Subtotal Pavement Structural Section \$ 139,475

Section 3 Drainage

Drainage Adjustment and Rehab	<u>1</u>	<u>LS</u>	<u>\$75,000.00</u>	<u>\$ 75,000</u>
Storm Drains	_____	_____	<u>\$ _____</u>	<u>\$ _____</u>
Pumping Plants	_____	_____	<u>\$ _____</u>	<u>\$ _____</u>
Project Drainage (X-Drains, overside, etc.)	_____	_____	<u>\$ _____</u>	<u>\$ _____</u>
_____	_____	_____	<u>\$ _____</u>	<u>\$ _____</u>
_____	_____	_____	<u>\$ _____</u>	<u>\$ _____</u>
			Subtotal Drainage	<u>\$ 75,000</u>

*Reference sketch showing typical pavement structural section elements of the roadway. Include (if available) T.I., R-Value and date when tests were performed.

NOTE: Extra lines are provided for items not listed, use additional lines as appropriate.

Page No. 2 of 6

District-County-Route 07-LA-01
 PM 56.5/56.9
 EA 291400

<u>Section 4 Specialty Items</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
400 mm CIDH Conc Piling (SW)	_____	_____	\$ _____	\$ _____	
Sound Wall Masonry Block	_____	_____	\$ _____	\$ _____	
Concrete Barrier Type 736	_____	_____	\$ _____	\$ _____	
Highway Planting	_____	_____	\$ _____	\$ _____	
Maintain Existing Plants	_____	_____	\$ _____	\$ _____	
Plant Establishment Work	_____	_____	\$ _____	\$ _____	
Irrigation System	_____	_____	\$ _____	\$ _____	
Maintain Exist Irrigation Facilities	_____	_____	\$ _____	\$ _____	
Retaining Walls	_____	_____	\$ _____	\$ _____	
Irrigation Modification	_____	_____	\$ _____	\$ _____	
Relocate Private Irrigation Facilities	_____	_____	\$ _____	\$ _____	
Erosion Control	_____	_____	\$ _____	\$ _____	
Slope Protection	_____	_____	\$ _____	\$ _____	
Storm Water BMPs	<u>1</u>	<u>LS</u>	<u>\$169,920</u>	<u>\$ 169,920</u>	
Hazardous Waste Mitigation Work	<u>1</u>	<u>L S</u>	<u>\$100,000</u>	<u>\$ 100,000</u>	
Environmental Mitigation	<u>1</u>	<u>LS</u>	<u>\$ 600,000</u>	<u>\$ 600,000</u>	
Resident Engineer Office Space	<u>1</u>	<u>LS</u>	<u>\$ 100,000</u>	<u>\$ 100,000</u>	
			Subtotal Specialty Items		<u>\$969,920</u>
<u>Section 5 Traffic Items</u>					
Traffic Control, COOZIP, Flaggers	<u>1</u>	<u>LS</u>	<u>\$ 300,000</u>	<u>\$ 300,000</u>	
Traffic Delineation Items	<u>1</u>	<u>LS</u>	<u>\$ 150,000</u>	<u>\$ 150,000</u>	
Traffic Signals	_____	_____	\$ _____	\$ _____	
Relocate Overhead Sign Structures	_____	_____	\$ _____	\$ _____	
Roadside Signs	_____	_____	\$ _____	\$ _____	
Temporary Railing (Type K)	<u>4,200</u>	<u>LF</u>	<u>\$ 25</u>	<u>\$ 105,000</u>	
Transportation Management Plan	_____	_____	\$ _____	\$ _____	
Construction Area Signs	<u>1</u>	<u>LS</u>	<u>\$ 15,000</u>	<u>\$ 15,000</u>	
Communication System	_____	_____	\$ _____	\$ _____	
_____	_____	_____	\$ _____	\$ _____	
			Subtotal Traffic Items		<u>\$570,000</u>
			TOTAL SECTIONS 1 thru 5		<u>\$2,478,545</u>

NOTE: Extra lines are provided for items not listed, use additional lines as appropriate.

District-County-Route 07-LA-01
PM 56.5/56.9
EA 291400

<u>Section 6 Minor Items</u>	<u>Item Cost</u>	<u>Section Cost</u>
	$\$2,478,545 \times (5 \text{ to } 10\%) =$	<u>\$123,930</u>
(Subtotal Sections 1 thru 5)		
TOTAL MINOR ITEMS		<u>\$123,930</u>

Section 7 Roadway Mobilization

$\$2,602,475 \times (10\%) =$ \$260,250
(Subtotal Sections 1 thru 6)

TOTAL ROADWAY MOBILIZATION \$260,250

Section 8 Roadway Additions

Supplemental Work

$\$2,602,475 \times (5 \text{ to } 10\%) =$ \$130,125
(Subtotal Sections 1 thru 6)

Contingencies

$\$2,602,475 \times (**20\%) =$ \$520,500
(Subtotal Sections 1 thru 6)

TOTAL ROADWAY ADDITIONS \$650,625

TOTAL ROADWAY ITEMS \$3,513,350
(Subtotal Sections 1 thru 8)

Estimate Prepared By Barnabas F. Vorreiter Phone# (213) 897-6791 Date _____
(Print Name)

Estimate Checked By _____ Phone# _____ Date _____
(Print Name)

** Use appropriate percentage per Chapter 20.

Page No. 4 of 6

District-County-Route 07-LA-01
 PM 56.5/56.9
 EA 291400

II. STRUCTURES ITEMS

	Structure (1)	Structure (2)	Structure (3)	
Bridge Name	_____	_____	_____	
Structure Type	_____	_____	_____	
Width (out to out) - (ft)	_____	_____	_____	
Span Lengths - (ft)	_____	_____	_____	
Total Area - (ft ²)	_____	_____	_____	
Footing Type (pile/spread)	_____	_____	_____	
Cost Per ft ²	_____	_____	_____	
(incl. 10% mobilization and 20% contingency)	_____	_____	_____	
Total Cost for Structure	_____	_____	_____	
SUBTOTAL STRUCTURES ITEMS				<u>\$6,864,000</u>
(Sum of Total Cost for Structures)				
Railroad Related Costs:	_____			\$ _____
	_____			\$ _____
	_____			\$ _____
SUBTOTAL RAILROAD ITEMS				\$ _____
TOTAL STRUCTURES ITEMS				<u>\$6,864,000</u>
(Sum of Structures Items plus Railroad Items)				

COMMENTS:

Estimate Prepared By _____ Phone# _____ Date _____
 (Print Name)

NOTE: If appropriate, attach additional pages and backup.

District-County-Route 07-LA-01
PM 56.5/56.9
EA 291400

III. RIGHT OF WAY ITEMS ESCALATED VALUE

A. Acquisition, including excess lands, damages to remainder(s) and Goodwill	\$ _____
B. Utility Relocation (State share)	\$ <u>3,458,800</u>
C. Relocation Assistance	\$ _____
D. Clearance/Demolition	\$ _____
E. Title and Escrow Fees	\$ <u>41,188,755</u>

TOTAL RIGHT OF WAY ITEMS \$ 44,647,555
(Escalated Value)

Anticipated Date of Right of Way Certification \$ _____
(Date to which Values are Escalated)

F. Construction Contract Work

Brief Description of Work:

Right of Way Branch Cost Estimate for Work * \$ _____

* This dollar amount is to be included in the Roadway and/or Structures Items of Work, as appropriate. Do not include in Right of Way Items.

COMMENTS:

Estimate Prepared By _____ Phone# _____ Date _____
(Print Name)

NOTE: If appropriate, attach additional pages and backup.

Page No. 6 of 6

Attachment H

RIGHT OF WAY DATA SHEET

Memorandum

*Serious Drought!
Help Save Water!*

To: Orlance Lee , Design Manager
Office of Design
District 7, Los Angeles Office

Date: 5/24/2017
EA: 291400
Data Sheet ID NO: ds2570
Project ID # 0712000094

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

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

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

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

Right of Way Certificate (RWC) lead time will require a minimum of 24 months after maps to appraisal (MA). Completed Appraisal maps include HMDD, COS, HW Memo, and RE-49. An executed copy of the new freeway agreement is required for the project. When utility relocation is warranted, utility conflict maps will be required. Additionally a minimum of 18 months will be required after receiving the last revision to the appraisal map. Shorter lead times will require either more right of way resources or an increased number of condemnation suits to be filed and present a risk to the RWC project delivery milestone. Due to the passage of Map 21 and the Buy America provision, the Right of Way Certification process will be longer, if Utility Relocation is necessary.

TO Orliance Lee
 ATTN Barney Vorreiter

R/W DATA SHEET

ID NO ds2570

SENIOR R/W P&M Shahriar Yadegari

Date of Data Sheet 5/24/2017

ROUTE 1

Project Description On Route 1, In Los Angeles County in Malibu, from Guernsey Avenue to Trancas Canyon Road

PM_KM 56.5/56.9

EA 291400

Project ID # 0712000094

ALT 1

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

The estimate is subject to change and revision.

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

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

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

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

RW COST ESTIMATE

	CURRENT VALUE	ESCALATED VALUE
R/ w acq.(incl.contingency G.w.condem.-adm.s'tl.)Permits	\$10,000	\$10,000
Clearance		
RAP (cont rate.)		
Escrow costs (cont rate.)		
Utility relocation costs		
Estimate of Reimbursed Appraisal Fee		
Total estimated cost	\$10,000	\$10,000

Parcel Count and Py Info

ROUTE 1
 PM_KM 56.5/56.9
 EA 291400
 ALT 1

PARCEL DUAL TYPES APPR.		
A		
B		
C		
D		
F		

RIGHTS NEEDED	
FEE	
EASE	
TCE	

TAKES	
FULL	
PART	
TOTAL	

DISPLACEMENT OF UNITS	
SFR	
BUS	
MULTI	

PARCELS WITH RAP

POTENTIAL CLEARANCE PARCELS

POTENTIAL CONDEMNATION PARCELS

POTENTIAL EXCESS PARCELS

UTILITY IMPACTS	
u4-1	
u4-2	
u4-3	
u4-4	
u5-7	
u5-8	
u5-9	

Estimate Of Right Of Way Support Hours

Activity Codes	Function	Hours
225 & 245	Appraisals	
225 & 245	Acquisitions	
200	Utilities	
185.20.40	Utility Potholing	
205	Railroads	
225 & 245	Condemnation	
225 & 245	Clearance	
225 & 245	Relocation	
220 & 300	RW Engineering	
Total		100

UTILITY INFORMATION

Are utility easements required? _____

Are Utility agreements required? _____

Total Current Cost _____

Const. Completion Date 8/15/2021

Utility Escalation Rate 8%

Total Escalated Cost _____

RR INFORMATION

Are RR affected 0

Describe the RR facilities affected, and ownership: no rail
 (i.e. RR name, RR spurs, branch lines, at grade crossings?)

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

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

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

<p>Phase 4 costs: RR Flagging related to construction activity. This cost is a phase 4 construction contract cost. Though noted on the RW datasheet, the estimated flagging cost is not a RW cost, and not a part of the RW Capital. This estimate is provided so it can be added to the engineer's estimate for construction – RR flagging estimate is based on the number of days flagging is needed for construction activity.</p>	
<p>Phase 9 costs: Purchase of rights for construction, agreements, Preliminary Engineering Contracts, RR re-arrangement costs. This figure is included in the RW Capital estimate total.</p>	\$ 0

	<u>DATE</u>
Right of Way Estimate prepared by <u>Victor Lee</u>	<u>5/24/17</u>
Railroad Estimate prepared by <u>Victor Lee</u>	<u>5/24/17</u>
Utilities Estimate prepared by <u>Victor Lee</u>	<u>5/24/17</u>

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

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

CHIEF  6-30-17

Memorandum

*Serious Drought!
Help Save Water!*

To: Orlance C Lee , Design Manager
Office of Design
District 7, Los Angeles Office

Date: 6/28/2017
EA: 291400
Data Sheet ID NO: ds2635
Project ID # 0712000094

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

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

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

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

Right of Way Certificate (RWC) lead time will require a minimum of 24 months after maps to appraisal (MA). Completed Appraisal maps include HMDD, COS, HW Memo, and RE-49. An executed copy of the new freeway agreement is required for the project. When utility relocation is warranted, utility conflict maps will be required. Additionally a minimum of 18 months will be required after receiving the last revision to the appraisal map. Shorter lead times will require either more right of way resources or an increased number of condemnation suits to be filed and present a risk to the RWC project delivery milestone. Due to the passage of Map 21 and the Buy America provision, the Right of Way Certification process will be longer, if Utility Relocation is necessary.

Current Schedule: PRSM

PAED (M 200)	MA (M 224)	RWC (M 410)	RTL (M 460)	CCA (M 600)
6/29/2017	N/A	6/29/2019	6/30/2019	8/15/2021

TO Orlanice C Lee
 ATTN Barney Vorreiter

R/W DATA SHEET

ID NO ds2635

SENIOR R/W P&M Shahriar Yadegari

Date of Data Sheet 6/28/2017

ROUTE 1

Project Description Replace Trancas Creek Bridge in Los Angeles County, Malibu.

PM_KM 56.5/56.9

EA 291400

Project ID # 0712000094

ALT 2

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

The estimate is subject to change and revision.

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

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

This cost estimate is pursuant to the following responses supplied by Orlanice C Lee to the Data Sheet Request Form.

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

RW COST ESTIMATE

	CURRENT VALUE	ESCALATED VALUE
R/ w acq.(incl.contingency G.w.condem.-adm.s'tl.)Permits	\$36,165,427	\$41,528,783
Clearance	\$250,214	\$287,320
RAP (cont rate.)	\$1,176,000	\$1,350,401
Escrow costs (cont rate.)	\$81,388	\$93,457
Utility relocation costs	\$2,437,000	\$3,351,357
Estimate of Reimbursed Appraisal Fee	\$7,500	\$7,500
Total estimated cost	\$40,117,529	\$46,618,818

Escalation Rate Rw .07

Escalation Rate Utilities .08

Cert.date 6/29/19

Parcel Count and Py Info

ROUTE 1
PM_KM 56.5/56.9
EA 291400
ALT 2

PARCEL DUAL TYPES APPR.	
A	
B	5
C	
D	
F	

RIGHTS NEEDED	
FEE	3
EASE	
TCE	2

TAKES	
FULL	1
PART	4
TOTAL	5

DISPLACEMENT OF UNITS	
SFR	1
BUS	
MULTI	

PARCELS WITH RAP	
	1

POTENTIAL CLEARANCE PARCELS	
	3

POTENTIAL CONDEMNATION PARCELS	
	2

POTENTIAL EXCESS PARCELS	

UTILITY IMPACTS	
u4-1	
u4-2	
u4-3	
u4-4	4
u5-7	
u5-8	
u5-9	4

Estimate Of Right Of Way Support Hours

Activity Codes	Function	Hours
225 & 245	Appraisals	875
225 & 245	Acquisitions	1,025
200	Utilities	1,720
185,20.40	Utility Potholing	225
205	Railroads	
225 & 245	Condemnation	630
225 & 245	Clearance	645
225 & 245	Relocation	290
220 & 300	RW Engineering	1,500
	Total	6,910

UTILITY INFORMATION

1) Relocate 4" Water (LA County Water District) in feet	220	300	\$66,000
2) Relocate 6" Water (LA County Water District) in feet	120	450	\$54,000
3) Relocate 16" Water (LA County Water District) in feet	220	1200	\$264,000
4) Relocate 6 5/8" Gas (SCG) in feet	220	1350	\$297,000
5) Relocate 10 Telecom ducts (Verizon) 220 feet per duct	2200	200	\$440,000
6) Relocate Joint Wood Power Poles (SCE)	7	50000	\$350,000
7) Relocate Telephone Pole (Verizon)	1	50000	\$50,000
8) Relocate Fiber Optic Lines (Crown Castle) in feet	900	250	\$225,000
9) Relocate Fiber Optic Lines (Spectrum) in feet	900	250	\$225,000
10) Relocate Fiber Optic Lines (Verizon) in feet	900	250	\$225,000
11) Remove 6" abandoned Water (LA County Water District) in feet	220	450	\$99,000
12) Install Guy Anchors for Power Poles (SCE)	8	10000	\$80,000
13) Adjust Telephone Manhole (Verizon) to grade	1	3000	\$3,000
14) Adjust Gas Valve (SCG) to grade	1	5000	\$5,000
15) Pothole 6 5/8" Gas (SCG)	18	3000	\$54,000

Total Current Cost \$2,437,000

Are utility easements required? No

Const. Completion Date 8/15/2021

Are Utility agreements required? Yes

Utility Escalation Rate 8%

Total Escalated Cost \$3,351,357

RR INFORMATION

Are RR affected NONE

Describe the RR facilities affected, and ownership: None
 (i.e. RR name, RR spurs, branch lines, at grade crossings?)

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

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


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

<p>Phase 4 costs: RR Flagging related to construction activity. This cost is a phase 4 construction contract cost. Though noted on the RW datasheet, the estimated flagging cost is not a RW cost, and not a part of the RW Capital. This estimate is provided so it can be added to the engineer's estimate for construction – RR flagging estimate is based on the number of days flagging is needed for construction activity.</p>	
<p>Phase 9 costs: Purchase of rights for construction, agreements, Preliminary Engineering Contracts, RR re-arrangement costs. This figure is included in the RW Capital estimate total.</p>	\$ 0

	<u>DATE</u>	
Right of Way Estimate prepared by <u>Victor Lee</u>	<u>6/26/17</u>	
Railroad Estimate prepared by <u>Steve Johnson</u>	<u>6/22/17</u>	
Utilities Estimate prepared by <u>Michele Graves</u>	<u>6/26/17</u>	

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

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

CHIEF  6-30-17

Memorandum

*Serious Drought!
Help Save Water!*

To: Orlance C Lee , Design Manager
Office of Design
District 7, Los Angeles Office

Date: 6/28/2017
EA: 291400
Data Sheet ID NO: ds2637
Project ID # 0712000094

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

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

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

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

Right of Way Certificate (RWC) lead time will require a minimum of 24 months after maps to appraisal (MA). Completed Appraisal maps include HMDD, COS, HW Memo, and RE-49. An executed copy of the new freeway agreement if required for the project. When utility relocation is warranted, utility conflict maps will be required. Additionally a minimum of 18 months will be required after receiving the last revision to the appraisal map. Shorter lead times will require either more right of way resources or an increased number of condemnation suits to be filed and present a risk to the RWC project delivery milestone. Due to the passage of Map 21 and the Buy America provision, the Right of Way Certification process will be longer, if Utility Relocation is necessary.

Current Schedule: PRSM

PAED (M 200)	MA (M 224)	RWC (M 410)	RTL (M 460)	CCA (M 600)
6/29/2017	N/A	6/29/2019	6/30/2019	8/15/2021

TO **Orlance C Lee**
 ATTN **Barney Vorreiter**

R/W DATA SHEET

ID NO ds2637

SENIOR R/W P&M **Shahriar Yadegari**

Date of Data Sheet 6/28/2017

ROUTE 1

PM_KM 56.5/56.9

EA 291400

Project ID # 0712000094

ALT 3

Project Description Replace Trancas Creek Bridge in Los Angeles County, Malibu, CA

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

The estimate is subject to change and revision.

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

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

This cost estimate is pursuant to the following responses supplied by Orlance C Lee to the Data Sheet Request Form.

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

RW COST ESTIMATE

	CURRENT VALUE	ESCALATED VALUE
R/w acq.(incl.contingency G.w-condem.-adm.s'tl.)Permits	\$35,629,927	\$40,913,868
Clearance	\$250,214	\$287,320
RAP (cont rate.)	\$1,176,000	\$1,350,401
Escrow costs (cont rate.)	\$80,183	\$92,074
Utility relocation costs	\$4,227,500	\$5,813,648
Estimate of Reimbursed Appraisal Fee	\$7,500	\$7,500
Total estimated cost	\$41,371,324	\$48,464,811

Escalation Rate Rw .07

Escalation Rate Utilities .08

Cert.date 6/29/19

Parcel Count and Py Info

ROUTE 1
PM_KM 56.5/56.9
EA 291400
ALT 3

PARCEL DUAL TYPES APPR.		
A		
B	5	
C		
D		
F		

RIGHTS NEEDED	
FEE	3
EASE	
TCE	2

TAKES	
FULL	1
PART	4
TOTAL	5

DISPLACEMENT OF UNITS	
SFR	1
BUS	
MULTI	

PARCELS WITH RAP	
	1

POTENTIAL CLEARANCE PARCELS	
	3

POTENTIAL CONDEMNATION PARCELS	
	2

POTENTIAL EXCESS PARCELS	

UTILITY IMPACTS	
u4-1	
u4-2	
u4-3	
u4-4	5
u5-7	
u5-8	
u5-9	5

Estimate Of Right Of Way Support Hours

Activity Codes	Function	Hours
225 & 245	Appraisals	875
225 & 245	Acquisitions	1,025
200	Utilities	2,150
185.20.40	Utility Potholing	225
205	Railroads	
225 & 245	Condemnation	630
225 & 245	Clearance	645
225 & 245	Relocation	290
220 & 300	RW Engineering	1,800
	Total	7,640

UTILITY INFORMATION

1) Relocate 4" Water (LA County Water District) in feet	340	300	\$102,000
2) Relocate 6" Water (LA County Water District) in feet	120	450	\$54,000
3) Relocate 16" Water (LA County Water District) in feet	340	1200	\$408,000
4) Relocate 6 5/8" Gas (SCG) in feet	340	1350	\$459,000
5) Relocate 10 Telecom ducts (Verizon) 340 feet per duct	3400	200	\$680,000
6) Relocate Joint Wood Power Poles (SCE)	7	50000	\$350,000
7) Relocate Fiber Optic Lines (Crown Castle) in feet	1100	250	\$275,000
8) Relocate Fiber Optic Lines (Spectrum) in feet	1100	250	\$275,000
9) Relocate Fiber Optic Lines (Verizon) in feet	1100	250	\$275,000
10) Remove 6" abandoned Water (LA County Water District) in feet	340	450	\$153,000
11) Install Steel Power Poles (SCE)	2	400000	\$800,000
12) Install Guy Anchors for Power Poles (SCE)	9	10000	\$90,000
13) Remove Joint Wood Power Poles (SCE)	2	50000	\$100,000
14) Relocate Telephone Pole (Verizon)	1	50000	\$50,000
15) Relocate Fire Hydrant (LA County Water District)	1	20000	\$20,000

Are utility easements required? No

Are Utility agreements required? Yes

Total Current Cost \$4,227,500

Const. Completion Date 8/15/2021

Utility Escalation Rate 8%

Total Escalated Cost \$5,813,648

RR INFORMATION

Are RR affected 0

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

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

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


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

<p>Phase 4 costs: RR Flagging related to construction activity. This cost is a phase 4 construction contract cost. Though noted on the RW datasheet, the estimated flagging cost is not a RW cost, and not a part of the RW Capital. This estimate is provided so it can be added to the engineer's estimate for construction – RR flagging estimate is based on the number of days flagging is needed for construction activity.</p>	
<p>Phase 9 costs: Purchase of rights for construction, agreements, Preliminary Engineering Contracts, RR re-arrangement costs. This figure is included in the RW Capital estimate total.</p>	\$ 0

	<u>DATE</u>
Right of Way Estimate prepared by <u>Victor Lee</u>	<u>6/26/17</u>
Railroad Estimate prepared by <u>Presley Burroughs</u>	<u>6/20/17</u>
Utilities Estimate prepared by <u>Michele Graves</u>	<u>6/26/17</u>

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

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

CHIEF  6-30-17

Attachment I

**TRAFFIC MANAGEMENT PLAN
(TMP)**

Memorandum

*Flex your power!
Be energy efficient!*

To: Nho Nguyen, Project Engineer

Date: June 1, 2015

File: LA-01, PM 56.5/56.9
07-291400/0712000094

From: Jocelyn Chiang, Acting STE
Office of District Traffic Manager
DEPARTMENT OF TRANSPORTATION

Subject: Transportation Management Plan (TMP) Data Sheet

Attached are the approved TMP Data Sheet and the preliminary "Lane Requirement Charts" for the above referenced project. If you have any questions, please contact Raymond Shehata of my staff at 7-7940 or myself at 7-1834.



Jocelyn Chiang, P.E., Acting STE
Office of District Traffic Manager

Attachments

Cc: File
Orlance C. Lee Design Manager
Shahriar Yadegari Project Manager

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

Co/Rte/PM LA-01, PM 56.5/56.9 EA 291400 / 0712000094 Alternative No. _____

Project Limit In the City of Malibu in Los Angeles County on Route 1 at Trancas Creek Bridge.

Project Description Replacing the existing Trancas Bridge.

1) Public Information

- a. Brochures and Mailers \$ _____
- b. Press Release \$ _____
- c. Paid Advertising \$ 15,000.00
- d. Public Information Center/Kiosk \$ _____
- e. Public Meeting/Speakers Bureau \$ _____
- f. Telephone Hotline \$ _____
- g. Internet \$ _____
- h. Others _____ \$ _____

2) Motorists Information Strategies

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

3) Incident Management

- a. Construction Zone Enhanced Enforcement Program (COZEEP) \$ 76,000.00
- b. Freeway Service Patrol \$ _____
- c. Traffic Management Team \$ _____
- d. Helicopter Surveillance \$ _____
- e. Traffic Surveillance Stations (Loop Detector and CCTV) \$ _____
- f. Others _____ \$ _____

4) Construction Strategies

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

5) Demand Management

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

6) Alternative Route Strategies

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

7) Other Strategies

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

TOTAL ESTIMATED COST OF TMP ELEMENTS =

\$91,000.00

Project Notes:

1. The scope of work involves replacing existing Trancas Creek Bridge.
2. Public Affairs Campaign cost estimate of \$15,000.00 was provided by David P. White, Public Information Officer, Caltrans Office of Public Affairs and Media Relations, on 4/24/2015.
3. In the instruction to the RE File, inform RE to notify Public Affairs prior to construction to ensure that a PIO is assigned for the project.
4. COZEBP cost estimate of \$76,000.00 was provided by Amjad Obeid, Construction Traffic Advisor-South, on 4/27/2015.
5. It is anticipated work will be performed in accordance with the Lane Requirements Charts provided in the Maintaining Traffic Specifications.
6. Any changes in construction strategy that would result in a different type of closures other than indicated here shall require a revision for the TMP Data Sheet.

PREPARED BY


Raymond Shehata, T.E.

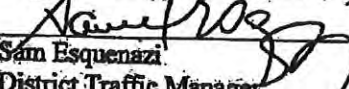
DATE 5/28/15

APPROVAL RECOMMENDED BY


Jocelyn Chiang, Acting S.T.E.

DATE 5/20/15

APPROVED BY


Sam Esquenazi
District Traffic Manager

DATE 5/28/2015

Preliminary Chart
EA 291400 - EFIS 0712000094

Chart no. 1																									
Conventional Highway Lane Requirements and Hours of Work																									
County: <u>LA</u>										Route/Direction: <u>01/NB</u>															
Closure limits: <u>Trancas Creek Bridge</u>																									
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
Mon-Thu	N	N	N	N	N	N	N	N	N	N	1	1	1	1	1	1	N	N	N	N	N	N	N	N	N
Fri	N	N	N	N	N	N	N	N	N	N	1	1	1	1	1	1	N	N	N	N	N	N	N	N	N
Sat	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Sun	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N

Legend:

Delete [cut] any legend not used.
Do not use shading or crosshatching. 1/2-hour increments can be accomplished by splitting the appropriate cell. Place the cursor inside the cell, right click on the mouse, and select split cell.
Edit for right or left shoulder closure. Do not edit if both shoulder closures apply.

1	Provide at least 1 through traffic lane open in direction of travel
N	No work allowed

Edit for the number of through traffic lanes.

REMARKS: The number of through traffic lanes is 2.

Preliminary Chart
EA 291400 - EFIS 0712000094

Chart no. 2 Conventional Highway Lane Requirements and Hours of Work																									
County: <u>LA</u>												Route/Direction: <u>01/SB</u>													
Closure limits: <u>Trancas Creek Bridge</u>																									
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
Mon-Thu	N	N	N	N	N	N	N	N	N	N	1	1	1	1	1	1	N	N	N	N	N	N	N	N	N
Fri	N	N	N	N	N	N	N	N	N	N	1	1	1	1	1	1	N	N	N	N	N	N	N	N	N
Sat	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Sun	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N

Legend:

Delete [cut] any legend not used.
Do not use shading or crosshatching. 1/2-hour increments can be accomplished by splitting the appropriate cell. Place the cursor inside the cell, right click on the mouse, and select split cell.
Edit for right or left shoulder closure. Do not edit if both shoulder closures apply.

1 Provide at least 1 through traffic lane open in direction of travel

N No work allowed

Edit for the number of through traffic lanes.

REMARKS: The number of through traffic lanes is 2.

Attachment J

HAZARDOUS WASTE ASSESMENT

Memorandum


*Serious drought.
Help Save Water!*

To: Karl Price, Environmental Manager
Environmental Planning

Date: February 14, 2017

Attn: Christine Lan, 7-2936

File: 07-LA-01,
PM 56.5/56.9
Trancas Creek Bridge
Replacement

From: Penny Nakashima, PG, SEG 
Branch Chief

EA: 07-291400

Hazardous Waste Unit, North Region

E-FIS: 1847-0712000094

Subject: HAZARDOUS WASTE ASSESSMENT FOR PAED

This hazardous waste assessment is to provide a technical assessment of the hazardous waste concerns pertaining to project construction, right-of-way acquisition (fee and easement), and use in the Project Approval and Environmental Document Approval (PAED) for the above referenced project.

The project proposes to replace the existing Trancas Creek Bridge, #53-0027, with a new structure on the Pacific Coast Highway in the City of Malibu. Based on the latest right-of-way map we received on September 15, 2016 (see Attachment 1), the project will require acquisition of new right-of-way in fee (FEE) of 7,650 square feet (i.e., 3,400 sf to the north and 4,250 sf to the south of the existing right-of-way line), and temporary construction easements (TCE) of 108,065 square feet (i.e., 70,850 sf to the north and 37,215 sf to the south of the existing right-of-way line).

We have conducted an Initial Site Assessment (ISA) for the project.

Database Research

We have contracted our environmental consultant, Stantec Consulting Services Inc. (Stantec), to perform a database search of records and compiled information on sites that generate, store, transfer, treat or dispose of hazardous substances and/or petroleum products and sites for which the presence or likely presence of hazardous substances due to a release, under conditions indicative of a release, or under conditions that pose a threat of a future release to the environment. Stantec performed the work under Contract 07A3963, Task Order No. 09, completed in October 2016. The Environmental Data Resources (EDR) search was conducted for the project area, including the construction footprint, the Fee and TCE areas, and the surrounding areas within a defined radius.

The database search revealed four sites within a radius of 1/8 mile (0.125 mile) from our project area as recognized environmental conditions (RECs) that have or may have been impacted by hazardous substances and petroleum products. The key records on these four sites are as

follows:

1. Mobil Oil Station, #11-GT1, located at 30735 Pacific Coast Highway, Malibu, about 0.037 mile away from the project site, had an underground tank in the past, for which an abatement was completed and the case was closed on 08/29/1996. No information was available on Geotracker indicating that the extent of contamination was delineated or if a cleanup action was required. This site is a REC and requires further investigation to determine any impacts to the project area.
2. Trabucas Cleaners, located at 30765 Pacific Coast Highway, Malibu, about 0.064 mile from the project site, was shown on record as "No violation found". This is a potential source of tetrachlorethylene (PCE) and the site will be investigated to determine any impacts to the project area.
3. Chevron USA SS 3357, located at 30811 W. Pacific Coast Highway, Malibu, about 0.105 mile from the project site, has multiple underground tanks that are being actively monitored by various agencies. Geotracker reports that the releases from the LUSTs were detected at maximum concentrations of TPHg (6100 µg/L), benzene (1.5 µg/L), toluene, ethylbenzene, xylene, and MTBE (5.5 µg/L) groundwater (Cambria Second Quarter 2006 Groundwater Monitoring and Status Report, June 16, 2006). Groundwater was encountered at 18 to 24 ft below ground surface in the groundwater monitoring wells. An investigation performed in 1991 reported detections of tetrachlorethylene (PCE) up to 2.0 mg/kg at 6 ft bgs. The source of the PCE was not identified. A cleanup action on the site consisted of removal of 25 cy of soil near the dispenser islands. No groundwater remediation was mentioned. In July 2006, the site was still an active fueling station but received closure with the condition that some of the groundwater monitoring wells remain and be monitored. Geotracker does not have any groundwater monitoring reports posted after June 2016 report. Based on the information of a impacts to groundwater that may have been closed with residual contamination in soil and groundwater with no cleanup action, the site is a controlled REC (CREC) and requires further investigation to determine any impacts to the project area.
4. LA County DPW Trancas Plant, located 6338 Paseo Canyon Drive, Malibu, is approximately 0.124 mile from the project site, and its case was closed on 02/06/2003.

We recommend that a site investigation be performed to identify any impact from these past land uses on the soil and/or groundwater beneath our project area (see Hazardous Waste concerns in later sections). Please request a site investigation during PS&E and allow at least four months for the site investigation and report.

We have reviewed other historical sources included aerial photographs and topographic maps. Our review of these documents indicates that a roadway in the current alignment of the Pacific Coast Highway was first shown in 1928 aerial photograph and 1929 topographic map. The areas surround the roadway and the bridge, i.e., the FEE and TCE areas, have appeared to be vacant and stayed in a natural, undisturbed state since the start of records with an exception of a small piece at the south side of the easement area towards the east, where it became a part of a paved parking lot in mid 1960s and has stayed as such since.

We have also researched our internal library and have not found any past site investigation within the project's limits. For reference purpose, a Site Investigation (Library ID 7A03), conducted in 2012 at locations about 15 miles east of our project site, found that site to be clear of hazardous waste contamination. Another Site Investigation (Library ID 7Q01), conducted in 2000 at locations approximately 15 miles west of our project site, revealed that the surface soil containing lead levels exceeded the hazardous waste standards. Based on the information available, we recommend that aerially deposited lead (ADL) be considered present in the unpaved soil along the edge of the roadway.

Field Reconnaissance

We conducted a field reconnaissance of the subject FEE and TCE parcels on November 14, 2016. The project surrounding areas appear generally undeveloped with open, green space sloped towards the Trancas Creek bed on the north side of the road and wide, sandy ocean beach on the south. The only exception is a small area at the eastern edge of the TCE south of the roadway, where it is currently paved as a part of a large parking lot that extends to the east. Our field observation did not discover any signs of existing or past hazardous waste contamination in the project area. A collection of field photos are included in Attachment 2.

However, we noted abandoned rusty metal pipes under the bridge that are to be removed from the site. These pipes could contain asbestos or lead based paint. Therefore, we recommend that the pipes be tested during the design phase to identify whether they contain materials that are hazardous.

Hazardous Waste Concerns for Construction

The existing bridge will be demolished due to its seriously deteriorating condition. During the proposed demolition process, there is a hazardous waste concern that Asbestos-Containing Materials (ACM) and lead-based paint (LBP) might exist in the bridge structure or structural elements as well as in the rusty, abandoned pipes under the bridge. To meet the National Emission Standards for Hazardous Air Pollutants (NESHAP), an asbestos survey by a certified asbestos consultant (CAC) will be required during PS&E phase by Stantec, our A&E contractor, to determine if ACM is present in the bridge structure. If the bridge contains ACM, abatement is

Karl Price
EA 291400
February 14, 2017
Page 4 of 5

required by a certified asbestos abatement contractor not associated with the ACM survey contractor. A lead-based paint survey by a certified lead inspector will be required to determine the concentration of lead in the paint on the bridge and in the surrounding soil. These surveys will determine worker protection, removal, and disposal requirements for the abatement work plan of any ACM and LBP. Prior to demolition of the bridge, proper notification to the air quality management district and Cal/OSHA are required. The notification to the air quality management district must be accompanied by the ACM and LBP surveys, Removal Procedures, and a fee (based on square feet). At least ten working days is required for approval by the air quality management district of the notification. Additionally, a health and safety plan for protection of workers (i.e., providing training to working personnel, use of personal protective equipment, and medical surveillance) are required.

Based on the latest plans, ground water will be encountered during construction that requires dewatering. The groundwater needs to be tested during the PS&E phase. The test data will be needed for applying for NPDES permit and Waste Discharge Requirements (WDRs) from the Regional Water Quality Control Board for discharge to storm drain, applying for a permit from the Sanitation District for discharge to the sewer, or disposal. The ground water test will also address potential contamination due to nearby sources (Chevron USA or the dry cleaner - see above section on Database Research) and confirm any impacts from releases.

There is a possibility that the project will disturb the soil adjacent to the bridge abutments. Typically the top 2 feet soil in the unpaved area is considered ADL contaminated. For soil excavated from the State right-of-way, it must be profiled, handled and disposed in compliance with the "2016 DTSC-Caltrans Soil Management Agreement for Aerially Deposited Lead-Contaminated Soils", which took effect on July 1, 2016. It is recommended that a project-specific Aerially Deposited Lead (ADL) site investigation shall be conducted in the PS&E phase to adequately evaluate and determine the extent of the ADL contamination in soil. For the engineer's estimate, it is recommended to assume the top 2 feet of soil as non-RCRA (California) hazardous waste (Type Z-2) to be transported and disposed at a Class I facility in California. A Lead Compliance plan will be required.

The project will remove MBGR wood posts, which typically were treated with preserving chemicals to protect against insect attack and fungal decay. DTSC requires that treated wood waste (TWW) be disposed of as a hazardous waste. Our field visit of the existing MBGRs did not see any asbestos shim at the locations we checked.

Related to stage construction, the project will remove yellow traffic stripe, which may generate materials that are considered hazardous waste.

We recommend a re-evaluation during the PS&E phase as more detailed engineering design becomes available. A site investigation is recommended during the design phase to address the

Karl Price
EA 291400
February 14, 2017
Page 5 of 5

hazardous waste issues identified above, including testing for possible ACM in the bridge structure and pipes, LBP on the bridge structure, ADL in soil, and the quality of ground water from other hazardous substances and petroleum products.

Hazardous Waste Concerns for Right-of-Way Acquisitions

The Initial Site Assessment reported herein is only a preliminary assessment to help identify REC, HRECs, and CRECs that have or indicate a release of hazardous substances and petroleum products. It is a requirement that all permanent right-of-way acquisition (Fee and easement) and temporary construction easement (TCE) must be investigated for potential hazardous waste contamination for the proposed right-of-way after the appraisal map is developed during the PS&E phase. It may be necessary to perform an additional visit of the site during the design phase to update the field conditions and status of the subject properties. Additional research, if needed, field reconnaissance, and site investigation performed during PS&E will identify the sources, types, and concentrations of contaminants, the lateral and vertical extent of contamination, that are a necessary part of the hazardous waste clearance required for right-of-way acquisition.

Please inform us of any changes made to the scope of work. If you have any questions or need additional information, please call me at extension 7-6117 or Nathan Chou of my staff at 7-4718.

Attachments: 1. Current Right-of-Way Map
2. Field Photos

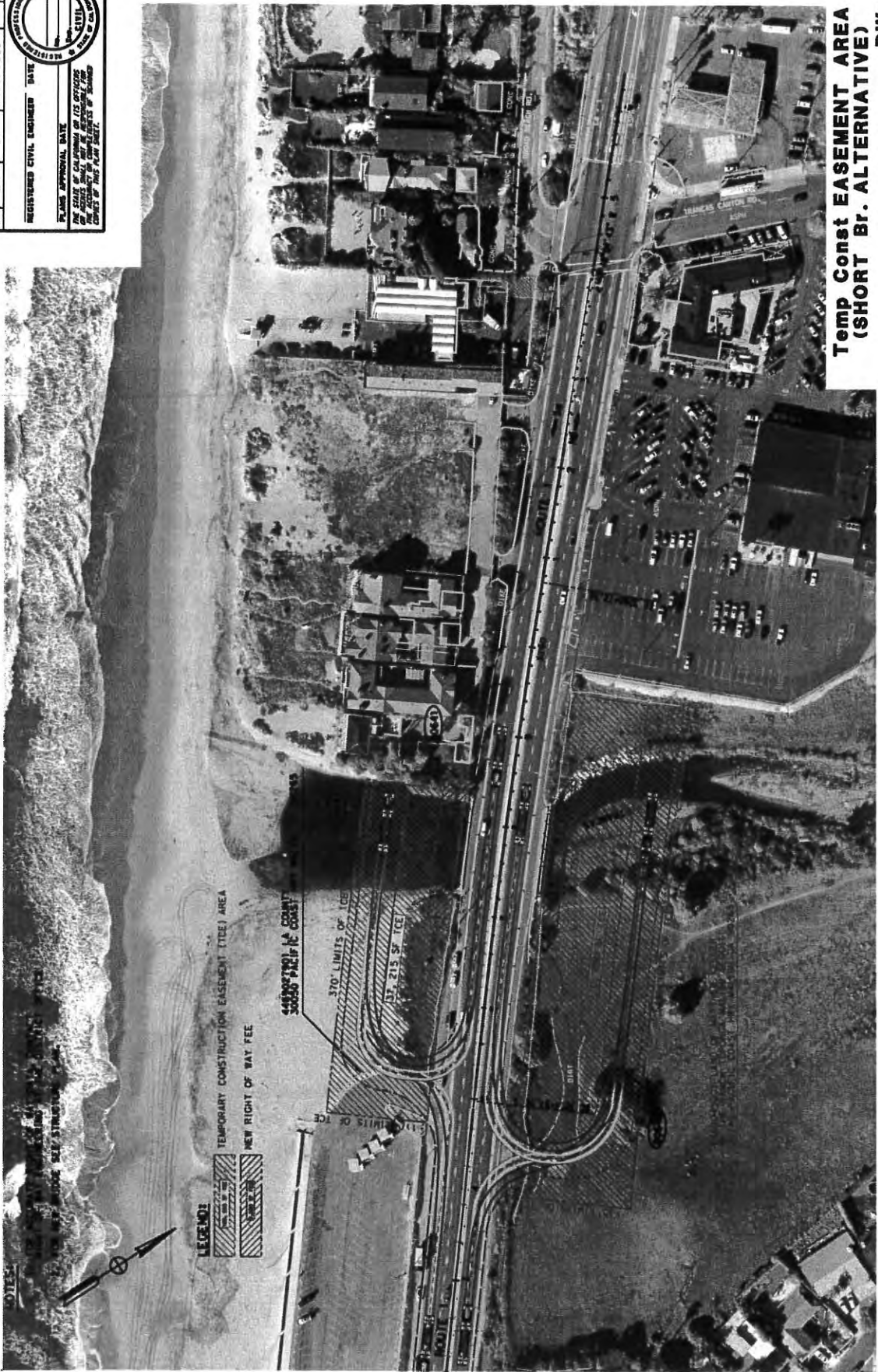
Enclosure: EDR Search Report

EA 291400

Attachment 1

Current Right-of-Way Map

SHEET NO. **01** OF **01**
 COUNTY **LA** PROJECT NO. **56-3/56.9**
 REGISTERED CIVIL ENGINEER DATE
 PLANS APPROVAL DATE
 THE SEAL OF CALIFORNIA OR ITS OFFICE
 IS REQUIRED FOR ALL PLANS OF RECORD
 DESIGNED BY THIS FIRM AND SEAL.



Temp Const EASEMENT AREA
(SHORT BR. ALTERNATIVE) RW-1
 SCALE: 1" = 50'

DATE PLOTTED: 03/11/10
 09-12-10

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	OC LEE	CHECKED BY	DATE REVISED
DESIGNED BY	BARBARA S. VOHMEIER	REVISOR	REVISOR	REVISOR

BORROW LAST REVISED 7/2/2010
 USERNAME: 03/BSES
 DSN FILE: 03 WEDGET
 RELATIVE BORDER SCALE
 IS IN INCHES
 UNIT 1814
 PROJECT NUMBER & PHASE 0712000094

EA 291400

Attachment 2

Field Photos

Karl Price
EA 291400
December 29, 2016

Attachment 2
Field Photos



Karl Price
EA 291400
December 29, 2016

Attachment 2 (continued)
Field Photos



Karl Price
EA 291400
December 29, 2016

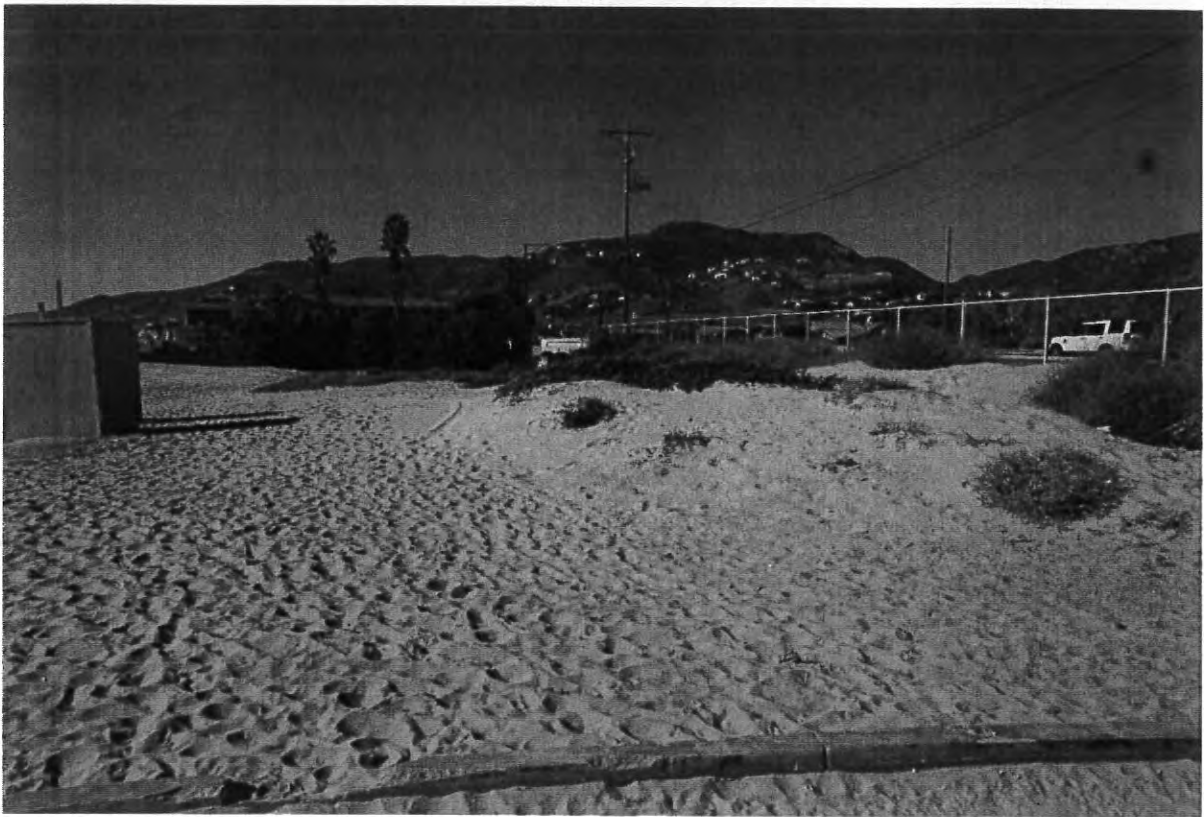
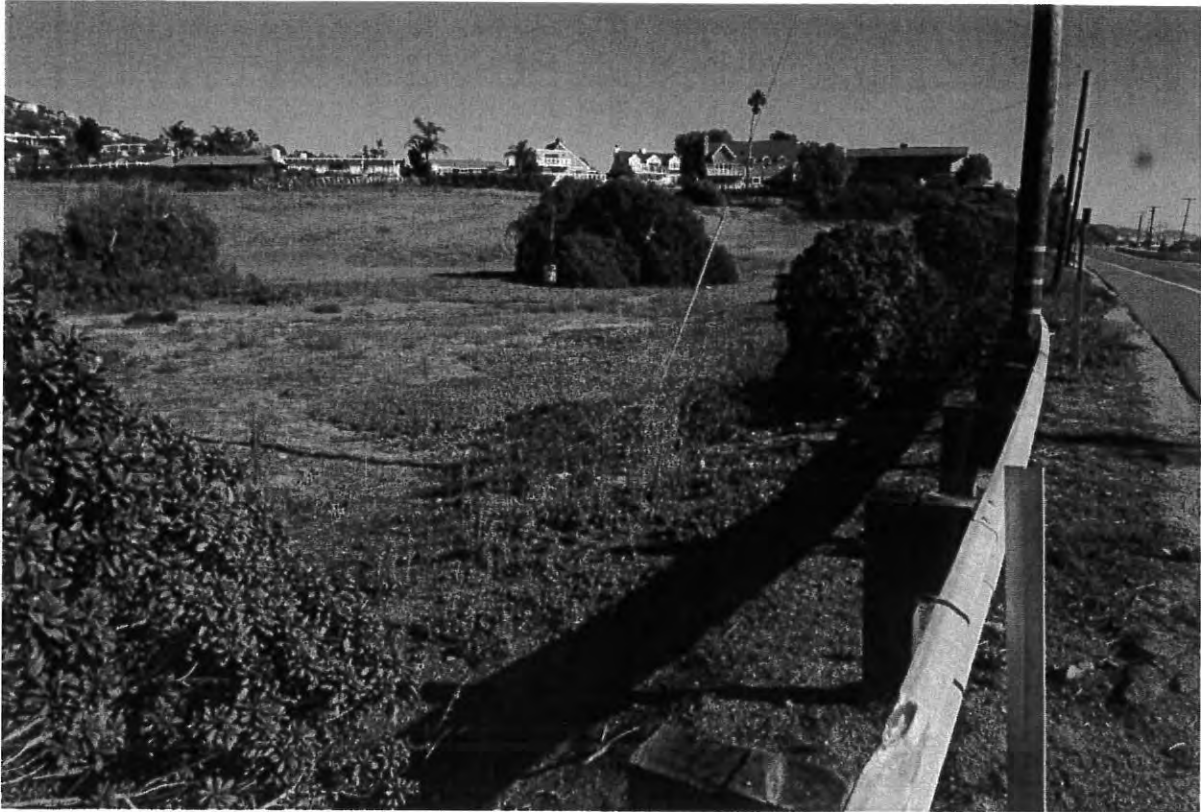
Attachment 2 (continued)
Field Photos



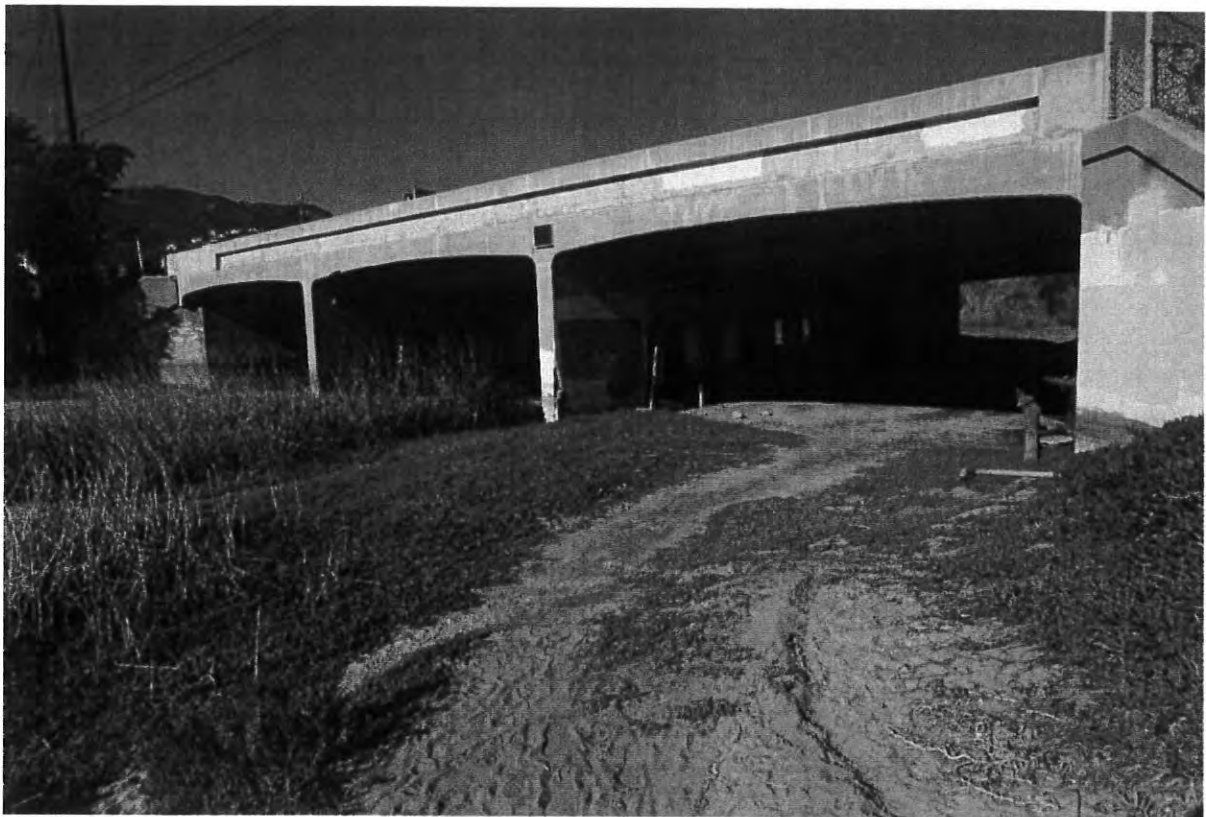
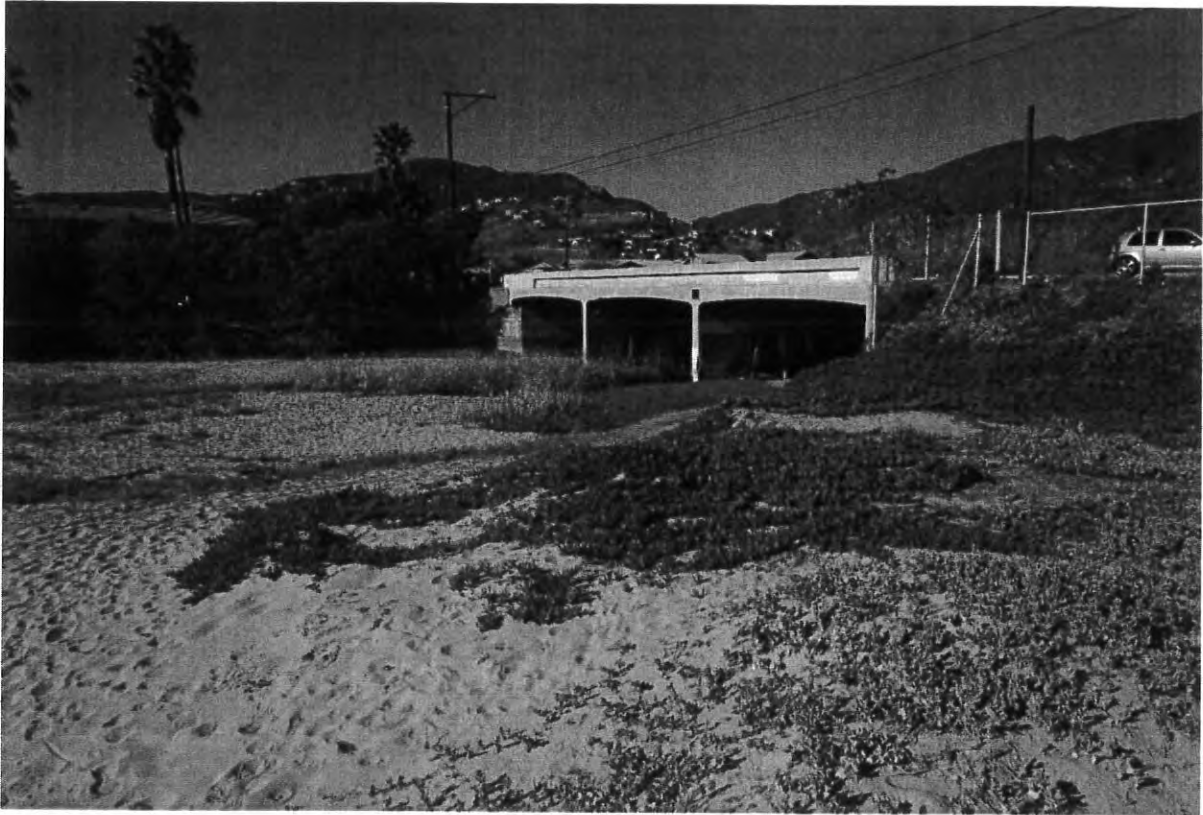
Karl Price
EA 291400
December 29, 2016



Karl Price
EA 291400
December 29, 2016



Karl Price
EA 291400
December 29, 2016



Attachment K

RISK REGISTER

RISK REGISTER CERTIFICATION (ACCOUNTABILITY CHECKPOINTS)
 Form PM-0001 (Rev. 4/2013)

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

Project Information	<input checked="" type="checkbox"/> Capital Project <input type="checkbox"/> Major Maintenance Project (Check One)
Project ID/District-EA	EFIS ID:0712000094/EA:07-29140
Project Description	LA-001-55/58-IN LOS ANGELES IN CITY OF MALIBU AT TRANCAS CREEK BRIDGE (53-0027) - BRIDGE REPLACEMENT
Project Manager (PM)	YADEGARI, SHAHRIAR
Project Risk Manager (for Risk Level 3 Projects)	
<input type="checkbox"/> No Risk Register Certification Required -- Check Box if project is less than \$1 million in total cost and risk register not prepared. Sign below and submit this form with PID, PA&ED, PS&E submittal, and RE Handoff File (as applicable).	
Project Manager Signature	Date: _____

PID (Recommended for Capital Projects Only excluding Minor Projects)	
Project Manager	Date: _____
Deputy District Director, Planning	Date: _____
Deputy District Director*, Design**	Date: _____
Deputy District Director, Project Management	Date: _____

PA&ED (Required for Capital Projects Only)	
Project Manager	Date: 6/29/17
Deputy District Director*, Environmental	Date: 6/30/17
Deputy District Director*, Design**	Date: 6/30/17
Deputy District Director, Project Management	Date: 6/30/17

Prior to PS&E (Required for Capital Projects and Maintenance Projects)	
Project Manager	Date: _____
Deputy District Director*, Design**	Date: _____
Deputy District Director*, Construction	Date: _____
Deputy District Director*, Right of Way	Date: _____
Deputy District Director*, Environmental	Date: _____
Deputy District Director, Project Management**	Date: _____

RE File Hand-Off (Recommended for Capital Projects and Major Maintenance Projects)	
Project Manager	Date: _____
Deputy District Director*, Design**	Date: _____
Deputy District Director*, Construction	Date: _____
Deputy District Director, Project Management**	Date: _____

*or the respective Project Delivery Division Chief signatures in the North Region or Central Region
 **or Deputy District Director, Maintenance signature for HM Projects designed by the District Maintenance Division

ADA Notice For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 654-6410 or TDD (916) 654-3880 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

LEVEL 2 - RISK REGISTER				Project Name: Trancas Creek Bridge Replacement Project			DIST- EA	07-29140	Project Manager	Shahriar Yadegari			PAED			
Risk Identification							Risk Assessment					Risk Response				
Status	ID #	Type	Category	Title	Risk Statement	Current status/assumptions	Probability	Cost Impact	Cost Score	Time Impact	Time Score	Rationale	Strategy	Response Actions	Risk Owner	Updated
Active	1	Threat	PM	Scope Creep	As a result of a requirement mandated by the Los Angeles County Dept. of Public Works, a 50 year burned and bulked storm event design is required for this project, which will necessarily raise the profile grade of the bridge and/or build a longer bridge span and result in increased costs and schedule delays.	Scope is still shifting. Right of way, mitigation, transportation needs during construction and other issues have not yet been locked down. The additional flood control requirements will result in the project cost increasing from \$11M to \$60M.	5-Very High	16 - Very High	80	8 -High	40	Scope is still shifting. New project footprints and scope will impact existing studies and push back existing schedule.	Mitigate	Lock down project scope as soon as possible	PM/Design/PDT	6/5/2017
Active	2	Threat	Environmental	LA County Beach and Harbors 4(f) Concurrence	As a result of possible additional right of way impacts that may arise at a later time, an updated 4(f) concurrence may be required, which may require a re-negotiation agreement between Caltrans and County of Los Angeles.	The 4(f) document is already signed. Assuming that right of way take will not change for the 2 alternatives.	3-Moderate	2 -Low	6	2 -Low	6	The project is located adjacent to the Zuma County Beach. Additionally there are some scope changes relating to right of way happening right now.	Avoid	Environmental to maintain dialog with LA Beaches and Harbors throughout the project. Do what we can to not create additional impacts to the Zuma County Beach.	Environmental	6/5/2017
Active	3	Threat	Environmental	Environmental Document Type	As a result of significant impact discoveries during the next phase of this project, a higher level environmental document may be required, which may impact the cost and schedule of this project.	Not likely at this time; however, scope is still shifting and new impacts can be uncovered if the project footprint changes.	2-Low	2 -Low	4	1 -Very Low	2	We will have to find an impact that is significant and unmitigable to trigger an elevation in environmental document type, which is unlikely.	Mitigate	Environmental will continue to provide advice to the PDT on proposed scope changes and their foreseeable impacts to the environmental resources.	Environmental	6/5/2017
Active	4	Threat	Environmental	Compensatory Mitigation	As a result of the project being located within the coastal zone, compensatory wetland mitigation pursuant to the Clean Water Act is required for the short alternative, which may impact the cost and schedule of this project.	Depending on the permitting requirements the ratio of the compensatory mitigation can range from 1:1 (unlikely) to over 3:1. The cost and time impacts were taken into account during the PAED stage.	4-High	2 -Low	8	2 -Low	8	If we choose the short alternative we will definitely need to mitigate for the wetland impacts.	Mitigate	Environmental will identify and work with the permitting agencies to achieve the lowest compensatory mitigation ratio possible.	Environmental	6/5/2017
Active	5	Threat	Environmental	Cultural Mitigation	As a result of the project footprint being near a cultural site, archeological impacts may change during the construction phase, which may impact the cost and schedule of this project.	Not likely at this time since the cultural site is a bit away from the project site and is highly disturbed.	2-Low	4 -Moderate	8	4 -Moderate	8		Mitigate	Environmental staff and RW staff will work together to ensure the minimum amount of impacts to the cultural site.	Environmental/ Right of Way	6/5/2017
Active	6	Threat	PM	Public Controversy	As a result of possible public controversy, public hearings may be required, which will lead to potential delays the project.	The taking of a residential home may create public controversy.	3-Moderate	2 -Low	6	2 -Low	6	The residential home owner is not happy about the taking of his property. May raise up community concerns.	Accept	PDT will discuss and address if it arises	PM/PDT	6/5/2017
Active	7	Threat	ROW	Relocation	As a result of a possible objection by a residential property owner, the state may need to go through condemnation, which may result in a possible delay to the cost and schedule of this project.	Home owner will not pursue legal action.	4-High	2 -Low	8	4 -Moderate	16	The homeowner has mentioned that he does not want to lose his property and would consider legal actions if necessary.	Accept	Environmental and right of way will keep contact with the homeowner and provide assistance where possible.	Environmental/ Right of Way	6/5/2017
Active	8	Threat	PM	Programming	As a result of the program advisor not being able to fund the project due to the excessive right of way acquisition costs, the project may not be funded, which would lead to the project being removed from the delivery list.	This is a critical route and attaining the necessary funding should not become an issue.	4-High	8 -High	32	2 -Low	8	There is a large cost discrepancy between the PSR and PAED phases.	Accept	This is a late discovery that the project will have to comply with the LACDPW flood control requirements, thus Caltrans is obligated to follow through in order to deliver this project.	PM	6/29/2017
Active	9	Threat	PM	Litigation	As a result of the City of Malibu's wish to incorporate a pedestrian underpass and a right turn lane at Trancas Canyon Road into this project, Caltrans may oppose the project, which would lead to a possible litigation between the State and City of Malibu.	The City of Malibu intends to follow their future master plan.	3-Moderate	2 -Low	6	4 -Moderate	12	The City of Malibu intends to follow their master plan.	Accept	Caltrans will communicate with the City of Malibu to explain that this is not part of this project's scope and since it's part of the City's master plan, any additional work will have to be done in a separate project by the City of Malibu.	PM	6/29/2017

Attachment L

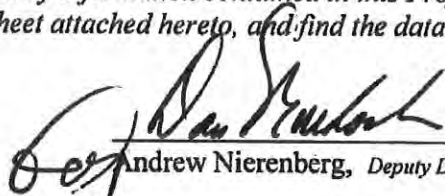
PROJECT STUDY SUMMARY REPORT

(Cover Page)

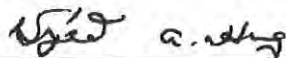
**PROJECT SCOPE SUMMARY REPORT
(STRUCTURE REHABILITATION)
To
Request Programming in the 2014 SHOPP**

On Route LA-001
Between Guernsey Avenue (PM 56.5)
And Trancas Canyon - Broad Beach Road (PM 56.9)

I have reviewed the right of way information contained in this Project Scope Summary Report and the R/W Data Sheet attached hereto, and find the data to be complete, current and accurate:


Andrew Nierenberg, Deputy Director - Right of Way

APPROVAL RECOMMENDED:


Syed Huq, Project Manager

CONCURRED:


Aziz Elattar, Deputy Director - Planning


Gregg Magaziner, Acting Deputy Director - Design

APPROVED:


Michael Miles, District Director

4/19/13
Date

Attachment M

ENVIRONMENTAL DOCUMENT
(Cover Page)



Trancas Creek Bridge Replacement Project

Mitigated Negative Declaration/ Finding of No Significant Impact and Section 4(f) Evaluation

*State Route 1 (Pacific Coast Highway)
City of Malibu, Los Angeles County,
California*

*District 7 – LA – 1 (PM 56.4/56.9)
EA: 07-29140/EFIS #: 0712000094*

Prepared by the State of California Department of Transportation

The environmental review, consultation, and any other action required in accordance with applicable federal laws for this project is being, or has been, carried-out by Caltrans under its assumption of responsibility pursuant to 23 USC 327.



June 2017

**Trancas Creek Bridge Replacement Project
State Route 1 Between Guernsey Rd. and Trancas Canyon – Broad Beach Rd.
In the City of Malibu, Los Angeles County
Post Mile 56.5 to 56.9**

**INITIAL STUDY/ENVIRONMENTAL ASSESSMENT
and Section 4(f) Evaluation**

**Submitted Pursuant to: (State) Division 13, California Public Resources Code
(Federal) 42 USC 4332(2)(C) and 49 USC 303**

**The environmental review, consultation, and any other action required in accordance
with applicable federal laws for this project is being, or has been, carried-out by Caltrans
under its assumption of responsibility pursuant to 23 USC 327.**

**THE STATE OF CALIFORNIA
Department of Transportation
Lead Agency**

**City of Malibu
Los Angeles County Beaches and Harbors Department
California Transportation Commission (CTC)
Responsible Agencies**

April 21, 2017
Date of Approval


**Ronald Kosinski
Deputy District Director
Division of Environmental Planning – District 7
California Department of Transportation**

For additional information concerning this environmental document, contact:

Karl Price, Senior Environmental Planner
Caltrans District 7
100 S. Main St., Ste. 100
Los Angeles, CA 90012
karl.price@dot.ca.gov

Christine Lan, Associate Environmental Planner
Caltrans District 7
100 S. Main St., Ste. 100
Los Angeles, CA 90012
christine.lan@dot.ca.gov

**CALIFORNIA DEPARTMENT OF TRANSPORTATION
FINDING OF NO SIGNIFICANT IMPACT (FONSI)**

for

Trancas Creek Bridge Replacement Project

The California Department of Transportation (Caltrans) has determined that alternative 3- Long Bridge Replacement will have no significant impact on the human environment. This FONSI is based on the attached Environmental Assessment which has been independently evaluated by Caltrans and determined to adequately and accurately discuss the need, environmental issues, and impacts of the proposed project and appropriate mitigation measures. It provides sufficient evidence and analysis for determining that an Environmental Impact Statement is not required. Caltrans takes full responsibility for the accuracy, scope, and content of the attached Environmental Assessment and incorporated technical reports.

The environmental review, consultation, and any other action required in accordance with applicable Federal laws for this project is being, or has been, carried-out by Caltrans under its assumption of responsibility pursuant to 23 USC 327.

Notwithstanding any other provision of law, a claim arising under federal law seeking judicial review of the permit, license or approval issued by a federal agency for a highway or public transportation project shall be barred unless it is filed within 180 days after publication of a notice in the Federal Register announcing that the permit, license, or approval is final pursuant to the law under which agency action is taken, unless a shorter time is specified in the federal law pursuant to which judicial review is allowed.

June 29, 2017

Date



Ronald Kosinski
Deputy District Director
Division of Environmental Planning, District 7
California Department of Transportation