08 - SBd - 60 – R7.83/R7.91
EA 1F2600 - Project No. 0814000194
Program Code – 800.100 (HE11)
February 2018

Project Report
For Project Approval

On Archibald Avenue

Between E. Oak Hill Drive

And Monticello Place

At State Route 60 Interchange in the City of Ontario

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:

REBECCA GUIRADO
Deputy District Director
Right of Way

APPROVAL RECOMMENDED:

RAFIH ACHY
Project Manager

CONCURRED BY:

DAVID BRICKER
Deputy District Director
Environmental Planning

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CATALINO A. PINING
Deputy District Director
Traffic Operations

CONCURRED BY:

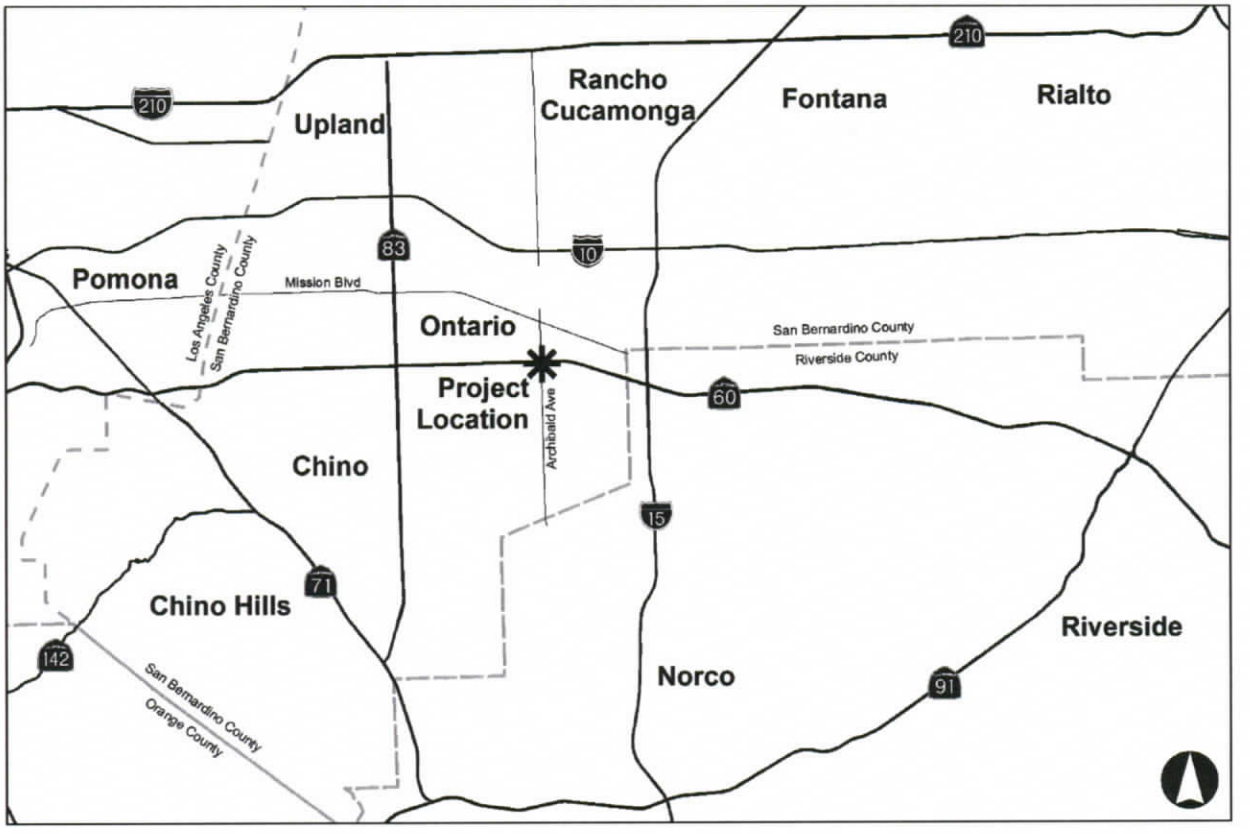
CHRISTY CONNORS
Deputy District Director
Design

APPROVED:

JOHN BULINSKI
District Director

3/8/18
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.

2/12/18

BRANDON REYES
Registered Civil Engineer
Michael Baker International

DATE

SUBMITTED BY:

PAULA BEAUCHAMP
Director of Project Delivery
SBCTA

CONCURRED BY:

DU LU
Branch Chief
Caltrans District 8
Design J Oversight

Table of Contents

1. INTRODUCTION

Project Description

In an effort to improve traffic operations along Archibald Avenue, the City of Ontario (City), in cooperation with the California Department of Transportation (Caltrans) District 8 and the San Bernardino County Transportation Authority (SBCTA), is proposing improvements on Archibald Avenue between East Oak Hill Drive and Monticello Place near the State Route 60 (SR-60) interchange (Project). The Build Alternative proposes improvements to Archibald Avenue and the SR-60 ramps. See *Attachment B* for project maps. Currently, the Project will be funded by SBCTA and the City. Caltrans will be the lead agency for California Environmental Quality Act (CEQA) and has a development category 5 as noted in Table 1 and outlined in *Attachment J – Project Category Agreement.*

Below is a summary of the Project information.

Table 1: Project Summary

Project Limits	08-SBd-60 PM R7.83/PM R7.91	
Number of Alternatives	1 (Build Alternative)	
	Current Cost Estimate:	**Escalated Cost Estimate:**
Capital Outlay Support	$1,435,000	$1,435,000
Capital Outlay Construction	$8,818,700	$9,925,525
Capital Outlay Right of Way	$781,193	$781,193
Funding Source	Development Impact Fee Program (DIF), San Bernardino County Measure I	
Funding Year	2018-2019	
Type of Facility	Interchange	
Number of Structures	3 (1 existing, 2 proposed)	
Environmental Determination or Document	Categorical Exemption (CE) - CEQA	
Legal Description	CONSTRUCTION ON AND ADJACENT TO STATE HIGHWAY	
Project Development Category	*5*	

2. RECOMMENDATION

The document recommends that the Project be approved using the Build Alternative and that the Project proceed to the Plans, Specifications & Estimates (PS&E) phase.

3. BACKGROUND

Project History

The project initiation document (PID) phase was initiated in early 2015 and completed in August, 2016. There has always been a single Build Alternative for the Project, which has not changed from the previous phase. Right of way has yet to be acquired for the Project; appraisals and acquisitions are anticipated to begin in the next phase. The regional location of the Project is shown in *Attachment B – Location Maps.*

The Project is currently listed in SBCTA's Measure I Local Street Capital Improvement Plan and is a part of the City's DIF. The improvement project has $14,563,000 programmed shared by both agencies. SBCTA and the City have attended all pertinent project meetings including the monthly Project Development Team (PDT) meetings since the kickoff of the Project and fully support the Build Alternative.

Community Interaction

Since the Project has been identified as categorically exempt through Caltrans' CEQA determination process, it does not require the preparation and circulation of a draft environmental document. While a formal public meeting is not required for the Project an open house style meeting was held on May 24, 2017 that informed the general public with updates on the progress of the Project. Local residents and businesses were invited to the meeting, which was held at the nearby Ontario Police Department. SBCTA, the City and Caltrans were all in attendance.

Those in attendance at the open house, which were mostly the local business owners/operators, gave positive feedback about the Project and were in support of the need and Build Alternative. Concern was raised about impacts to business accessibility during construction. Follow up meetings with the affected businesses throughout the current and subsequent project phases will be necessary to ensure the necessary communication and coordination takes place to mitigate and/or eliminate business impacts. Another open house will be scheduled prior to construction to provide updates on construction schedule and potential project impacts.

Existing Facility

SR-60 is an east-west transportation route within Los Angeles, San Bernardino and Riverside counties. It connects the Los Angeles metropolitan area with southwest San Bernardino and northwest Riverside counties. The west terminus is located at its junction with I-10 in Los Angeles. Its east terminus is located at the junction with I-10 in Beaumont. It is also a Surface Transportation Assistance Act (STAA) Route for use by oversized trucks. The segment of SR-60 within the Project limit is a divided ten-lane freeway. It has four mixed-flow lanes and one High Occupancy Vehicle (HOV) lane in each direction. Based on Caltrans 2013 Traffic Data, the annual average daily

traffic (AADT) volume to the east and west of the interchange is approximately 215,000.

Archibald Avenue is a north-south arterial in the City of Ontario providing access throughout the City. Per the City's General Plan Roadway Network, Archibald Avenue is identified as a principal arterial. Currently, it is a six-lane divided roadway with a raised median, curbs and sidewalks to the north and south of the interchange. Archibald Avenue ends near the Ontario Airport runway located approximately one mile north of the interchange.

The existing Archibald Avenue undercrossing (UC) is within the boundary of the Project. The Archibald Avenue UC (PM R7.87, Bridge Number 54-0841) is comprised of westbound (WB) and eastbound (EB) structures, each built in 1971. Previously, each structure was a two-span cast-in-place box girder bridge supported by a two-column bent. In 1997, a cast-in-place box girder structure was erected to close the median gap of the SR-60 mainline. The entire structure now measures approximately 164 feet in width by 150 feet in length spanning over eight lanes of Archibald Avenue. The bridge abutments are supported on piles with retaining walls in place to retain the soil in front of them. There are no proposed improvements to the Archibald Avenue UC by the Project.

The interchange is currently a Type L-1 tight diamond interchange. The existing ramps terminate at Archibald Avenue and the ramp termini are signal controlled. The exit ramps are single lane that open to dual lane at the interchange, while the entrance ramps are metered two-lane facilities that reduce to single lane as they enter the freeway. Existing development in the immediate vicinity of the interchange includes a police station, fast-food restaurants, a medical office, a hotel and residential to the south of the interchange. Development to the north of the interchange consists mostly of industrial and warehouse uses.

Archibald Avenue at this location is not a designated bicycle facility, but does have full pedestrian access via sidewalks, crosswalks and curb ramps. In order to provide and maintain the safety and mobility of non-motorized travelers, the Project will upgrade substandard pedestrian features.

4. PURPOSE AND NEED

4A. Problem, Deficiencies, Justification

Purpose:

The purpose of the Project is to:

- Relieve congestion and improve traffic operations on Archibald Avenue between East Oak Hill Drive and Monticello Place near the SR-60 interchange;

- Address increased travel associated with existing and planned development anticipated in the Cities of Ontario and Eastvale, including the Ontario Ranch development to the south; and

Need:

The Project is needed to address the following deficiencies:

- Archibald Avenue currently experiences queuing and congestion at the ingress and egress to SR-60, resulting in delay of travel time to local residents – the condition is expected to continue to decline as forecast volumes increase in this area;

- The forecast increased traffic volumes, due to existing and planned development, in conjunction with deficient left and right-turn storage length from Archibald Avenue to SR-60 are expected to result in the deterioration of traffic operations to level of service F by the design year 2040;

4B. Regional and System Planning

Identify Systems

SR-60 is included in the State Freeway and Expressway System with the Federal Functional classifications of "other freeway or expressway" as a Principal Arterial traversing urbanized and rural areas. SR-60 has been identified in the National Highway System (NHS) and the Goods Movement Action Plan (GMAP). The 1990 Federal Surface Transportation Assistance Act identifies SR-60 as a "National Network" route for STAA trucks. SR-60, within the project limits, is not identified in the Extralegal Load Network (ELLN) according to the Division of Traffic Operations (May 2001).

State Planning

The Build Alternative does not propose any work on the mainline of SR-60.

In June 2017, Caltrans prepared a District System Management Plan (DSMP) for SR-60 in which the freeway is identified as a primary goods movement route, a priority freight corridor and an OmniTrans service area.

The Caltrans Transportation Concept Report (TCR), dated September 2012, identifies the project limits within Segment 1. The TCR also identifies eight mixed flow lanes and two managed lanes for the 2035 concept facility to maintain LOS E through Segment 1 of SR-60. The TCR identifies the Programmed Project to widen the Archibald Avenue off-ramps within post miles 7.6 and 7.8.

Regional Planning

The Build Alternative is described in the Alternatives section of this document (Section 5) and is consistent with the 2017 Federal Transportation Improvement Program (FTIP) and 2016 Regional Transportation Plan (RTP). The 2017 FTIP (ID# 201132) and 2016 RTP (ID# 4M07017) description is as follows:

FTIP - SR-60 AT ARCHIBALD AVENUE WIDEN ON AND OFF RAMPS (ADD 1 LANE), WIDEN WB AND EB EXIT RAMPS (ADD LEFT TURN LANE), ADD ADDITIONAL LEFT TURN LANE FROM ARCHIBALD AVE TO SR-60 ENTRY RAMPS.

RTP - SR-60 AT ARCHIBALD AVENUE WIDEN ON AND OFF RAMPS (2-3 LANES EACH WAY); ADD ADDITIONAL LEFT TURN POCKETS FROM ARCHIBALD TO SR-60 ON RAMPS (NON-CAPACITY ENHANCING ALONG ARCHIBALD).

Local Planning

The Project is consistent with regional and local planning. Within the project limits, Archibald Avenue is included in the City's current Functional Roadway Classification Plan (FRCP), dated September 20, 2016 and is listed as a 6-lane principal arterial and City truck route. As stated in the City's FRCP goals, the Project will: comply with safety standards, meet the needs of multiple transportation modes and users, maintain Level of Service (LOS) E or better at all intersections and to be compatible with streetscape and surrounding land uses. The City will maintain involvement through PS&E and construction to ensure the Project maintains project consistency with their overall goals for the facility.

Transit Operator Planning

Based upon the City's General Plan, the City does not have existing or future plans for transit operations on SR-60 or Archibald Avenue within the project limits. Therefore, current transit planning within the project limits does not address future plans for transit operations. The proposed Build Alternative does not preclude future transit operations within the project limits by providing HOV preferential lanes and ramp metering on all entrance ramps.

4C. Traffic

Current and Forecast Traffic

A Traffic Operations Analysis Report (TOAR) was prepared and approved on September 28th, 2017. The TOAR analyzed traffic forecasts at the intersections, ramps, driveways and mainline; and summarized the findings. Detailed information can be found in the approved TOAR, which is summarized in this section.

Intersection turning movement counts were collected from the field in fall 2015 when schools were in session. Existing signal timing plans at study intersections were obtained from involved jurisdictions including Caltrans and the City of Ontario. Other operational data was also obtained from the field, including travel speeds, vehicle queues and other operational characteristics.

Future traffic forecasts at the study intersections and freeway facilities under the opening year 2020 and design year 2040 were developed utilizing the San Bernardino Transportation Analysis Model (SBTAM) and adjusted using the methodologies delineated in the National Cooperative Highway Research Program Report (NCHRP) 255 published by the Transportation Research Board (TRB). The Base Year (2008) and Future Year (2035) SBTAM models were used to calculate the annual growth at study facilities to generate 2040 volumes. The adjusted forecasts were then balanced along the corridor to ensure that vehicles do not "disappear" in the simulation model. In order to balance the volumes, conservation of flow was applied beginning with the upstream volumes and accounting for any trips entering or exiting the corridor through the study area. Additionally, the opening year 2020 traffic forecasts were developed using linear interpolation between existing volumes and design year 2040 traffic forecasts.

The total truck percentage for Archibald Avenue and the SR-60 ramps is 17.1%. Truck traffic percentages were based on vehicle classification data collected on Archibald Avenue between Philadelphia Street and SR-60. This data was collected by National Data and Surveying Services on June 27, 2013.

Intersection Analysis

Table 2 shows the peak hour volumes at each intersection for the existing conditions along Archibald Avenue.

Table 2: Existing Intersection Traffic Data Summary

Peak Hour Volumes	Left Turn (AM/PM)	Through (AM/PM)	Right Turn (AM/PM)
Archibald Avenue & Philadelphia Street			
EB Philadelphia Street	27/72	94/339	109/364
WB Philadelphia Street	74/218	205/153	46/17
NB Archibald Avenue	383/215	832/270	200/67
SB Archibald Avenue	46/44	249/808	32/51
Archibald Avenue & SR-60 WB Ramp			
NB Archibald Avenue	501/392	1,090/412	N/A
SB Archibald Avenue	N/A	325/1,093	100/385
SR-60 WB Off-Ramp	298/373	1/2	392/198
Archibald Avenue & SR-60 EB Ramp			
NB Archibald Avenue	N/A	1,199/744	338/364
SB Archibald Avenue	106/284	517/1,182	N/A
SR-60 EB Off-Ramp	392/60	1/1	362/455
Archibald Avenue & Oak Hill Drive			
EB Oak Hill Drive	267/288	10/17	36/83
WB Oak Hill Drive	45/67	15/11	80/48
NB Archibald Avenue	122/105	1,127/756	65/45
SB Archibald Avenue	125/164	510/1,154	143/156

Tables 3 and 4 show the forecasted peak hour volumes at each intersection for the respective opening year 2020 and design year 2040 conditions along Archibald Avenue.

Table 3: Opening Year 2020 Intersection Traffic Data Summary

Peak Hour Volumes	Left Turn (AM/PM)	Through (AM/PM)	Right Turn (AM/PM)
Archibald Avenue & Philadelphia Street			
EB Philadelphia Street	40/80	120/360	120/400
WB Philadelphia Street	90/280	210/180	50/20
NB Archibald Avenue	400/240	930/420	240/130
SB Archibald Avenue	50/50	370/980	40/60
Archibald Avenue & SR-60 WB Ramp			
NB Archibald Avenue	530/400	1,230/6,20	N/A
SB Archibald Avenue	N/A	455/1,235	120/520
SR-60 WB Off-Ramp	310/390	0/0	410/230
Archibald Avenue & SR-60 EB Ramp			
NB Archibald Avenue	N/A	1,330/870	355/380
SB Archibald Avenue	165/400	600/1,225	N/A
SR-60 EB Off-Ramp	430/150	0/0	370/470
Archibald Avenue & Oak Hill Drive			
EB Oak Hill Drive	290/300	20/20	40/90
WB Oak Hill Drive	50/70	20/20	100/50
NB Archibald Avenue	130/110	1,225/890	70/50
SB Archibald Avenue	150/175	550/1,160	170/200

Table 4: Design Year 2040 Intersection Traffic Data Summary

Peak Hour Volumes	Left Turn (AM/PM)	Through (AM/PM)	Right Turn (AM/PM)
Archibald Avenue & Philadelphia Street			
EB Philadelphia Street	80/80	210/410	170/540
WB Philadelphia Street	150/490	220/290	50/20
NB Archibald Avenue	450/320	1,420/930	420/350
SB Archibald Avenue	50/50	860/1,630	60/60
Archibald Avenue & SR-60 WB Ramp			
NB Archibald Avenue	550/510	1,870/1,260	N/A
SB Archibald Avenue	N/A	960/2,070	210/680
SR-60 WB Off-Ramp	340/500	0/0	490/400
Archibald Avenue & SR-60 EB Ramp			
NB Archibald Avenue	N/A	1,830/1,410	370/450
SB Archibald Avenue	400/530	900/2,040	N/A
SR-60 EB Off-Ramp	590/360	0/0	440/480
Archibald Avenue & Oak Hill Drive			
EB Oak Hill Drive	300/320	30/20	60/100
WB Oak Hill Drive	60/70	20/20	110/80
NB Archibald Avenue	150/110	1,720/1,450	90/50
SB Archibald Avenue	200/200	840/1,920	200/240

Intersection Analysis – Existing Conditions

Table 5 summarizes the existing AM and PM peak hour delay and corresponding LOS of the study intersections.

Table 5: Existing Intersection Peak Hour Analysis Summary

	Intersection	Control	AM		PM	
			Delay	LOS	Delay	LOS
1	Archibald Avenue/Philadelphia Avenue	Signal	20	B	30	C
2	Archibald Avenue/Monticello Place	Side-street Stop	3	A	35	D
3	Archibald Avenue/IHOP Driveway	Side-street Stop	8	A	4	A
4	Archibald Avenue/Sherwin Williams Driveway	Side-street Stop	5	A	7	A
5	Archibald Avenue/SR-60 WB Ramps	Signal	24	C	38	D
6	Archibald Avenue/SR-60 EB Ramps	Signal	21	C	30	C
7	Archibald Avenue/Denny's Driveway	Side-street Stop	**62**	**F**	40	E
8	Archibald Avenue/Pacific Plaza Driveway	Side-street Stop	5	A	**59**	**F**
9	Archibald Avenue/Hotel Driveway	Side-street Stop	**67**	**F**	**92**	**F**
10	Archibald Avenue/Gas Station	Side-street Stop	32	D	**36**	**E**
11	Archibald Avenue/Oak Hill Drive	Signal	24	C	**82**	**F**

Bold and highlighted text indicates unacceptable level of service.

AM = morning peak hour, PM = evening peak hour, LOS = level of service

1. For signalized intersection, delay shows whole intersection weighted average control delay using methods described in the 2010 HCM.

Source: Fehr & Peers, 2017

During the AM peak hour, all intersections operate at acceptable LOS D or better with the exception of the two driveway intersections south of the interchange, which operate at LOS F.

During the PM peak hour, all intersections operate acceptably at LOS E or better, except for two driveway intersections, the Gas Station and Hotel Driveway and the intersection of Archibald Avenue/Oak Hill Drive which operate at LOS F.

Intersection Analysis – Forecast Year 2020 Conditions

Table 6 summarizes the forecast year 2020 AM and PM peak hour delay and corresponding LOS of the study intersections. This analysis was completed for the Build Alternative and a No Build Scenario for comparison.

Table 6: Opening Year 2020 Intersection Peak Hour Analysis Summary

	Intersection	Control	No Build				Build Alternative			
			AM		PM		AM		PM	
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1	Archibald Avenue/Philadelphia Avenue	Signal	19	B	**88**	**F**	19	B	33	C
2	Archibald Avenue/Monticello Place	Side-Street Stop	4	A	**1394**	**F**	4	A	36	E
3	Archibald Avenue/IHOP Driveway	Side-Street Stop	9	A	24	C	9	A	5	A
4	Archibald Avenue/Sherwin Williams Driveway	Side-Street Stop	9	A	24	C	5	A	4	A
5	Archibald Avenue/SR-60 WB Ramps	Signal	27	C	**71**	**E**	18	B	24	C
6	Archibald Avenue/SR-60 EB Ramps	Signal	25	C	**116**	**F**	14	B	21	C
7	Archibald Avenue/Denny's Driveway	Side-Street Stop	**164**	**F**	**105**	**F**	9	A	11	B
8	Archibald Avenue/Pacific Plaza Driveway	Side-Street Stop	9	A	**101**	**F**	6	A	21	C
9	Archibald Avenue/Hotel Driveway	Side-Street Stop	**400**	**F**	**288**	**F**	9	A	10	A
10	Archibald Avenue/Gas Station	Side-Street Stop	**377**	**F**	**140**	**F**	12	B	8	A
11	Archibald Avenue/Oak Hill Drive	Signal	**91**	**F**	**133**	**F**	22	C	29	C

Bold and highlighted *indicates unacceptable level of service.*

AM = morning peak hour, PM = evening peak hour, LOS = level of service

1. For signalized intersection, delay shows whole intersection weighted average control delay using methods described in the 2010 HCM.

Source: Fehr & Peers, 2016

AM Peak Hour

Under the No Build Scenario, all study intersections would operate acceptably, except for three driveway intersections: the Denny's, Hotel and Gas Station driveways. The intersection of Archibald Avenue and Oak Hill Drive, which operates at LOS F, also operates unacceptably under this scenario.

With the Build Alternative, all study intersections would improve to acceptable operations.

PM Peak Hour

Under the No Build Scenario, the majority of the study intersections would operate at LOS E or F, with the exception of two driveway intersections: the IHOP driveway and the Sherwin Williams driveway to the north of the interchange.

With the Build Alternative, all study intersections would improve to acceptable operations.

Intersection Analysis – Forecast Year 2040 Conditions

Table 7 summarizes the forecast year 2040 AM and PM peak hour delay and corresponding LOS of the study intersections. This analysis was completed for the Build Alternative and a No Build scenario for comparison.

Table 7: Design Year 2040 Intersection Peak Hour Analysis Summary

	Intersection	Control	No Build				Build Alternative			
			AM		PM		AM		PM	
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1	Archibald Avenue/Philadelphia Avenue	Signal	61	E	**204**	**F**	22	C	**105**	**F**
2	Archibald Avenue/Monticello Place	Side-Street Stop	**147**	**F**	**1656**	**F**	14	B	**863**	**F**
3	Archibald Avenue/IHOP Driveway	Side-Street Stop	27	D	20	C	13	B	19	C
4	Archibald Avenue/Sherwin Williams Driveway	Side-Street Stop	28	D	23	C	8	A	8	A
5	Archibald Avenue/SR-60 WB Ramps	Signal	40	D	**84**	**F**	20	C	30	C
6	Archibald Avenue/SR-60 EB Ramps	Signal	**71**	**E**	**97**	**F**	22	C	25	C
7	Archibald Avenue/Denny's Driveway	Side-Street Stop	**906**	**F**	**239**	**F**	11	B	15	C
8	Archibald Avenue/Pacific Plaza Driveway	Side-Street Stop	36	E	**93**	**F**	15	C	55	E
9	Archibald Avenue/Hotel Driveway	Side-Street Stop	**1447**	**F**	**752**	**F**	25	D	17	C
10	Archibald Avenue/Gas Station	Side-Street Stop	**618**	**F**	**579**	**F**	25	C	16	C
11	Archibald Avenue/Oak Hill Drive	Signal	**137**	**F**	**143**	F	36	D	33	C

Bold and highlighted text indicates unacceptable level of service.

AM = morning peak hour, PM = evening peak hour, LOS = level of service

1. For signalized intersection, delay shows whole intersection weighted average control delay using methods described in the 2010 HCM.

Source: Fehr & Peers, 2016

AM Peak Hour

Under the No Build Scenario, the majority of the study locations operate unacceptably at LOS E or LOS F, except for three study intersections, including:

- Archibald Avenue/IHOP Driveway
- Archibald Avenue/Sherwin Williams Driveway
- Archibald Avenue/SR-60 Westbound Ramps

With the Build Alternative, all study intersections would improve to acceptable operations.

PM Peak Hour

Under the No Build Scenario all study intersections would operate at LOS F during the PM peak hour, except for the IHOP driveway and Sherwin Williams driveway.

With the Build Alternative, most study intersections would improve and operate acceptably at LOS D or better. Two intersections, including Archibald Avenue/Philadelphia Street and Archibald Avenue/Monticello Place, would continue to operate unacceptably at LOS F. However, the operations at these intersections would improve significantly under the Build Alternative compare to the No Build Scenario. Simulation has determined that unacceptable operations at these intersections will not affect corridor operations, or operations of the ramp terminal intersections. The intersection of Archibald Avenue and Philadelphia Street is under the jurisdiction of the City and due to the reduced delay at this intersections under the Build Alternative, the City has agreed on July 20, 2017 to accept LOS F at this intersection for the purpose of this study.

Freeway Mainline Analysis

Since no improvements are proposed on SR-60 mainline, freeway analysis results are expected to remain the same under the two project scenarios. Because no improvements are proposed to the freeway mainline as part of the Project, changes in freeway operations are due to the increased mainline demand by Opening and Forecast Years. Furthermore, the Project has been recognized as a non-capacity enhancing project. Therefore, mainline analysis is not included in this report, but can be found in detail in the approved TOAR.

Collision Analysis

Caltrans staff provided collision data for the study area for the three-year period between July 2012 and June 2015 through their Traffic Accident Surveillance and Analysis System (TASAS). Collision data for Archibald Avenue was obtained from the City of Ontario Police Department Collision Summary Report, dated January 4, 2018. This report includes collision data for a five-year period between January 2013 and December 2017. In order to provide an effective comparison between Archibald Avenue and SR-60 ramp collision quantities, a three-year period from January 2015 to December 2017 was selected for the analysis of collisions on Archibald Avenue.

Table 8 summarizes the number of collisions and collision rates by analysis location.

Table 8: Ramp Collision Rate

Location	Number of Accidents			Actual Accident Rate (#of accidents/million vehicle miles)			Average Accident Rate (#of accidents/million vehicle miles)		
	Total	Fatal	F+I	Total	Fatal	F+I	Total	Fatal	F+I
SR-60 EB Off-Ramp	15	0	6	**1.25**	0.00	**0.50**	1.01	0.003	0.35
SR-60 EB On-Ramp	13	0	2	**1.63**	0.00	**0.25**	0.63	0.002	0.22
SR-60 WB Off-Ramp	10	0	3	**1.25**	0.00	**0.38**	1.01	0.003	0.35
SR-60 WB On-Ramp	17	0	3	**1.44**	0.00	**0.25**	0.63	0.002	0.22
Archibald Avenue*	25	0	11	N/A	N/A	N/A	N/A	N/A	N/A

Notes: Accident rates are based on statewide average; bold text denotes locations that exceed the average.
*Ontario Police Collision Report does not include accident rates for Archibald Avenue
Source 1: Caltrans TASAS Table B data July 1, 2012 to June 30, 2015
Source 2: Ontario Police Department Collision Report January 1, 2015 to December 31, 2017

As shown in Table 8, a total of 80 collisions occurred in the study area between July 2012 and June 2015. Within the study area 35% of collisions occurred on the EB ramps, 34% occurred on the WB ramps, and 31% of collisions occurred on Archibald Avenue. Actual accident rates at all the analyzed ramps are higher than the statewide average accident rate for similar facilities:

- Eastbound SR-60 off-ramp to Archibald Avenue (24% higher for total collisions and 15% higher for total fatalities and injuries accident rate)
- Eastbound SR-60 on-ramp from Archibald Avenue (100% higher for total collisions and 3% higher for total fatalities and injuries accident rate)
- Westbound SR-60 off-ramp to Archibald Avenue (24% higher for total collisions and 3% higher for total fatalities and injuries accident rate)
- Westbound SR-60 on-ramp from Archibald Avenue (81% higher for total collisions and 3% higher for total fatalities and injuries accident rate)

Table 9 summarizes the collision type by analysis location.

Table 9: Ramp Collision Type

Location	Total	Sideswipe	Rear End	Broadside	Hit Object	Other
SR-60 EB Off-Ramp	15	1	11	3	0	0
SR-60 EB On-Ramp	13	2	7	4	0	0
SR-60 WB Off-Ramp	10	4	4	1	0	1
SR-60 WB On-Ramp	17	5	7	3	1	1
Archibald Avenue	25	6	7	11	1	0
Total	**80**	**18**	**36**	**22**	**2**	**2**

Source 1: Caltrans TASAS Table B data July 1, 2012 to June 30, 2015
Source 2: Ontario Police Department Collision Report January 1, 2015 to December 31, 2017

As shown in Table 9, 36 of the 80 collisions were rear-end collisions making them the most frequent type of collisions in the study area, followed by broadside collisions. Rear end collisions are usually caused by stop and go conditions and/or off ramps at

the end of a downgrade slopes; it is important to look at collision locations to further understand this high frequency collision type.

The Project will upgrade nonstandard ramp shoulders, ADA facilities as well as improve traffic operations all of which are anticipated to help mitigate some of the causes of collision types and factors within the Project limits. Furthermore, the Project does not introduce design exceptions that are anticipated to increase collision rates.

5. ALTERNATIVES

5A. Build Alternatives

The PDT has developed a single Build Alternative that is deemed viable for the Project Approval and Environmental Document (PA&ED) phase. The Build Alternative proposes the widening of Archibald Avenue including the ramps of the existing tight diamond interchange. A No Build was also analyzed in the PSR-PDS phase and subsequent traffic studies and was determined to not meet or satisfy the purpose and need of the Project.

Without the Project, Archibald Avenue near SR-60 would continue to operate with existing geometric deficiencies. The following deficiencies within the project area were identified:

- Non-standard off-ramp shoulders near the ramp termini
- Absence of California Highway Patrol (CHP) enforcement areas at metered on-ramps
- Non-standard outside shoulder along Archibald Avenue between the ramps
- Non-standard Americans with Disabilities Act (ADA) facilities
- Non-standard lane and shoulder width along Archibald Avenue

Proposed Engineering Features

The Build Alternative proposes improvements to Archibald Avenue and the SR-60 ramps.

Archibald Avenue Improvements

Archibald Avenue would be widened to accommodate the following features:

- Additional left-turn lanes in each direction
- Additional right-turn pockets approaching the eastbound and westbound on-ramps
- Extended left-turn lane storage length approximately 190 ft. south of the interchange for northbound traffic accessing the westbound on-ramp
- Standard 6.5 ft. sidewalk widths (including curb) and ADA compliant curb ramps

A Subhorizontal Ground Anchor (SHGA) retaining wall consisting of a 1 ft.-10 in. thick reinforced concrete section and SHGAs is required to retain the soil beneath the abutments as well as the bridge abutment pile loads to accommodate the widening of Archibald Avenue. Due to the large width of the street widening, approximately 22-ft. in each direction, the new SHGA retaining wall will be placed immediately adjacent to the existing abutment footing as shown on *Attachment C – Plans & Typical Sections*. Special attention will be given to ground anchor placement between the existing abutment piles. The SHGA wall at each abutment is estimated to be 164 ft. long and 13 ft. tall. In addition, Type 1 retaining walls approximately 45 ft. long, with heights tapering from 13 ft. tall to 2 ft. tall will be used beyond the end of each abutment to accommodate the sloping grades.

Interchange On and Off Ramp Improvements

All ramps would be widened to provide an additional lane and standard (8 ft. outside & 4 ft. inside) shoulder widths. A 250 ft. long Type 1 retaining wall would be needed along the westbound on-ramp to support the required CHP enforcement area and reduce grading impacts to the nearby business properties. A 225 ft. long Type 1 retaining wall at a proposed CHP enforcement area would also be needed along the eastbound on-ramp to reduce grading impacts to nearby residential properties. These proposed retaining walls would be designed and constructed in accordance with Caltrans Standards.

Structural Section

The structural sections proposed for the Build Alternative are identified in Section 5A. Viable Alternatives – Pavement Life Cycle Cost Analysis and *Attachment H – Life Cycle Cost Analysis for Pavement.* Existing drainage structures would be maintained and extended within the project limits.

Cost Estimate

The estimated cost for roadway improvements is $7,225,700 (non-escalated) and the estimated cost for structures is $1,593,000(non-escalated). The estimated total right of way cost is $781,193(escalated). The total capital outlay support cost is $1,435,000(escalated). Including right of way, the total estimated project cost is $9,600,000 (current construction costs). The project costs for the Build Alternative are detailed in *Attachment E – Preliminary Project Cost Estimate.*

Nonstandard Mandatory and Advisory Design Features

There are seven (7) nonstandard design exceptions associated with the Build Alternative. A fact sheet for the nonstandard design exceptions has been prepared and is under review. The following describes each nonstandard feature and discusses the issues related to each nonstandard feature:

Mandatory Design Exception Features

1. Thru Lane Width, HDM Index 301.1 – Along Archibald Avenue in both directions, 11-foot wide through lanes are proposed at multiple locations to prevent complete reconstruction of the Archibald UC structures, while maximizing turning lane and shoulder widths. The HDM calls for 12-foot lanes along local roads with posted speeds greater than 40 mph.

2. Shoulder Width, HDM Index 308.1 – The outer shoulders along Archibald Avenue, between the WB and EB ramps, are proposed to be 2 feet in width in order to prevent complete reconstruction of the Archibald UC structures, while maximizing turning lane widths. The HDM calls for shoulder widths to be 3 feet wider than the width of the gutter pan, which in this case, would need to be a total of 5 feet.

3. Left-turn Lane Width, HDM Index 405.2(2)a –The innermost left-turn lanes on Archibald Avenue in each direction are 11.5 feet wide beneath the Archibald Avenue UC. The HDM calls for 12-foot left-turn lanes along conventional highways with posted speeds greater than 40 mph. These nonstandard left-turn lane widths are proposed in order to prevent complete reconstruction of the Archibald UC structures, while maximizing sidewalk and shoulder widths.

District Delegated Mandatory Design Exception Features

1. Horizontal Clearance, HDM Index 309.1(3) – The existing columns supporting the Archibald Avenue UC bridges would be approximately 2 feet to the proposed innermost turning lane and the median barrier would against the edge of traveled way in both directions along Archibald Avenue. The HDM calls for horizontal clearance to be at least 4 feet. The proposed layout maximizes turning lane and outer shoulder widths without requiring reconstruction of the bridges. Due to the non-standard horizontal clearance, the columns would be protected via barrier separation.

Advisory Design Exception Features

1. Access Control, HDM Index 504.8 –The property in the northeast quadrant closest to the WB off-ramp and the properties in the southeast quadrant closest to the EB on-ramp currently have access control of approximately 85 feet and 75 feet, respectively. The property in the southwest quadrant of the interchange adjacent to the EB off-ramp currently has access control of 68 feet. The HDM calls for access control to be a minimum of 100 feet beyond the end of the curb return as an advisory condition. Relocating the only points of access to these properties beyond 100 feet is not possible without eliminating circulation to businesses.

2. Turning Traffic: Bike Lane, HDM Index 403.6(1) –The proposed lane configuration on Archibald Avenue does not provide a 6-foot wide bicycle separation between the through and right-turn lanes. The existing lane

configuration does not provide designated bike lanes within the limits of the Project. The HDM calls for a 6-foot wide bicycle separation between through lanes and right-turn lanes when posted speeds are greater than 40 miles per hour. Widening Archibald Avenue an additional 6 feet to accommodate this bike separation would require complete right of way acquisitions in the southeast quadrant of the Project and partial acquisitions in the northwest quadrant. To minimize the impacts to local businesses and avoid costly right of way impacts, the Project proposes that the through and right-turn lanes along Archibald Avenue do not include a separation.

3. Turning Traffic (Optional Right-turn Lane), HDM Index 403.6(1) –The proposed lane configuration on the northerly Archibald Avenue intersection of the interchange in the SB direction provides an optional right-turn lane adjacent to a right-turn only lane in an area where bicycles are permitted. The HDM does not recommend option right-turn lanes used in combination with right-turn-only lanes on roads where bicycle travel is permitted. This configuration is optimal for operations and to construct another right-turn lane would require acquisition of additional right of way, removal of handicap parking spaces, and relocation of existing utilities.

Interim Features

No interim features are proposed for the Build Alternative.

High Occupancy Vehicle (Bus and Carpool) Lanes

Existing HOV preferential lanes on the SR-60 entrance ramps would be maintained and widened to provide a standard 4-foot left shoulder. The Build Alternative will add an additional turning lane onto the entrance ramps, which will add another general purpose lane to receive the traffic; this will ensure the HOV preferential lanes do not create a "trap" lane scenario when the Project is completed.

Ramp Metering

In accordance with the Caltrans District 8 Ramp Meter Design Manual, the Project will provide three-lane metered ramps, with sufficient right of way to accommodate vehicle storage, ramp meter equipment and an HOV preferential lane. All the existing ramp metering will remain to be controlled and monitored remotely.

California Highway Patrol Enforcement Areas

CHP enforcement areas do not currently exist at the metered on-ramps, but will be added with the Project (*Attachment C – Plans & Typical Sections*).

Park-and-Ride Facilities

An existing Park-and-Ride facility is located along Oak Hill Drive at Montecito Baptist Church, in the southwest quadrant of the project limits. Additional Park-and-Ride facilities are not proposed.

Utility and Other Owner Involvement

The Project would require relocation or protection in place of several utility facilities. To prevent impacts to utility facilities and services during construction, the following utilities have been contacted regarding the Project:

Utility	Owner
Cable	Time Warner Cable
	TW Telecom
Electrical	Southern California Edison
Gas	Southern California Gas
Water	Inland Empire Utilities Agency
Wireless	Verizon

The Right of Way Data Sheet and Utility Information Sheet found in *Attachment F – Right of Way Data Sheet* lists the utility companies affected by the Project and which ones will be protected in place.

Railroad Involvement

No railroad involvement is planned as part of the Project because there are no railroad facilities within the Project limits.

Highway Planting

Based on the scope of the Project there will be no proposed landscape improvements. The ramps of the existing interchange are planted with exotic non-native plants. Due to the proposed widening all the disrupted existing vegetation will be constructed to match the existing condition.

Erosion Control

Erosion control will be applied to the graded slopes and disturbed areas affected by the Project. The maximum side slope will be 4:1 within Caltrans right of way, except where steeper conditions are needed to join existing slopes. An Erosion Control Plan will be required to identify specific measures for control of siltation, sedimentation and other

soil materials. The plan will be implemented during the project construction period. A Storm Water Pollution Prevention Plan (SWPPP) will be developed and implemented by the contractor during the construction phase. Permanent erosion control will be installed per the construction plans, Caltrans' Standard Plans and Standard Special Provisions (SSPs) and will include hard surfaces at gore areas, swales and dissipation devices, gravel mulch and preservation of existing vegetation. The City and Caltrans District Landscape Architect will approve these items during design.

Noise Barriers

A Noise Study was not required as part of the Project. An existing noise barrier does exist along the freeway just beyond the limits of the Project and will remain in place.

Nonmotorized and Pedestrian Features

The Project includes construction of pedestrian access improvements along Archibald Avenue. These include standard sidewalk widths and ADA curb ramps at all intersection crossings. The need for right-turn pocket approaching each on-ramp will require reconstruction of existing driveways along the widening of Archibald Avenue. Electrical cabinets, fire hydrants, signs and other fixed objects will need to be placed to provide minimum clearance per ADA standards. Continued pedestrian access and clear width requirements will be accounted for to ensure that the needs of pedestrians, individuals with disabilities and bicyclists are met during construction.

Based upon the City's General Plan, the City does not have existing or future plans for bikeways on Archibald Avenue within the project limits. However, in order to accommodate bicycles, share the road signage along with appropriate detection systems will be provided at both intersection approaches.

Needed Roadway Rehabilitation and Upgrading

The existing ramp pavement is in fair condition with minor surface distress that includes minor cracking and potholes. With the ramps being widened, a rehabilitation consideration is needed to bring the existing pavement up to a similar life expectancy as the new widened portion of the roadway. The Preliminary Material Report (Approved by Caltrans on October 17th, 2017) recommends rehabilitation of the ramps as part of the Project within the limits of the widening. Per section 603.2 of the HDM, the upper 0.15 feet of the existing ramp pavements should be cold planed and overlaid with 0.15 feet of new pavement material. While the Archibald Avenue pavement is in good condition a similar approach may be taken upon further discussion between Caltrans and the City. A final rehabilitation strategy will be provided in the final Materials Report during the PS&E phase.

Needed Structure Rehabilitation and Upgrading

There are no bridges being impacted by the Project.

Cost Estimates

The cost estimate for the Build Alternative is summarized in Table 10 and detailed in *Attachment E – Preliminary Project Cost Estimate*. Capital outlay support costs are estimated at $1,435,000 and are not included in these costs.

Table 10: Alternative Cost Estimates

	Roadway	Structures	Right of Way*	Total**
Build Alternative	$7,225,700	$1,593,000	$781,193	$9,600,000

*Includes escalation per approved Right of Way Data Sheet
**Rounded cost per preliminary cost estimating guidance

Right of Way Data

Right of way costs and impacts have been reported on the right of way data sheets (*Attachment F – Right of Way Data Sheet*) and are summarized in Table 10.

Effects of Projects-Funded-by-Others on State Highway

The Project will be completely funded by the City using DIF and SBCTA using Measure I funds as their sources. The Project is a non-capacity enhancing project that will not add traffic capacity to the SR-60 mainline.

5B. Rejected Alternatives

There were no alternatives that were eliminated during the preparation and approval of the Project Initiation Document for the Project. Caltrans approved the PSR-PDS on August 22, 2016. The approved PSR-PDS discusses a single alternative, the Build Alternative.

6. CONSIDERATIONS REQUIRING DISCUSSION

6A. Hazardous Waste

The Initial Site Assessment (ISA) prepared for the Project, approved on April 5, 2017, revealed the following recognized environmental conditions (REC) in connection with the project site:

- The project area is a potential source of aerially deposited lead (ADL). ADL is a regional condition common along highways and roadways and generally affects near surface soil. This finding is considered a REC. Sampling will be performed during the PS&E phase to evaluate whether ADL is present in the soil at concentrations that would warrant special handling and disposal.
- A review of historic aerial photographs revealed that the project area and surrounding area were used for agriculture (row crops and orchards) from at least 1938. The historical agricultural use and current landscaping identified with the project area is considered a REC due to the potential for pesticide residues to persist in soils at concentrations above health risk levels and/or hazardous waste levels. Sampling will be performed during the construction phase on any export soil to evaluate whether pesticides are present at concentrations that would warrant special handling and disposal.

Typical hazardous materials used during construction (e.g., solvents, paints and fuels) would be handled in accordance with standard procedures. There are standard regulations and Caltrans policies (avoidance and minimization measures) that must be followed with respect to the use, storage, handling, disposal and transport of potentially hazardous materials during construction of the Project to protect human health and the environment.

6B. Value Analysis

Per Caltrans Deputy Directive 99-R1, *Value Analysis (VA);* A VA study is required for all projects on the NHS utilizing federal funds with a total project cost of $50 million or more. This Project does not meet these requirements and a VA will not be implemented.

6C. Resource Conservation

The purpose of the Project is to alleviate existing and future traffic congestion at the interchange. The Project will not generate new vehicular traffic trips since new homes or businesses will not be constructed. The Project would improve traffic flow without increasing the traffic volumes along Archibald Avenue or SR-60. The improved traffic flow would reduce the average greenhouse gas emissions generated per vehicle trip. Therefore, the proposed Build Alternative would not substantially alter long-term greenhouse gas emissions.

Measures proposed to minimize the consumption of resources include innovations such as longer pavement lives, recycling of removed pavements, improved Traffic Management Plans (TMPs) and changes in materials with longer intervals between maintenance and rehabilitation events. Additionally, greenhouse gas emissions from construction equipment vehicles will be controlled by maintaining equipment engines

in good condition and in proper tune per manufacturers' specifications. All construction vehicles on site shall be prohibited from idling in excess of 10 minutes. As required by California law, all on-road heavy-duty diesel vehicles are prohibited from idling for more than five minutes.

6D. Right of Way Issues

Right of Way Required

The Project requires approximately 4,250 square feet of Fee Acquisition, 850 square feet of Permanent Easement (PE) and 3,470 square feet of Temporary Construction Easement (TCE). It affects a total of five parcels, commercial and industrial zoned properties; one parcel is occupied by a bakery located at the northwest quadrant, one parcel is occupied by a paint company located at the northeast quadrant and three parcels occupied by restaurants and an inn located at the southeast quadrant. Reference *Attachment F – Right of Way Data Sheet* for more information.

Relocation Impact Studies

A Relocation Impact Study is not required for the Project as no person or business will be displaced during or upon completion of construction.

Airspace Lease Areas

The Project is not in an area of high land values having potential for future airspace leases.

6E. Environmental Compliance

The Project is Categorically Exempt under 14 CCR 15300 et seq., Class 1 (Existing Facilities) of the State CEQA Guidelines.

Refer to *Attachment A – Categorical Exemption/Categorical Exclusion Determination Form,* dated August 18, 2017, for further information.

Wetlands and Flood Plains

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) (Map Numbers 06071C8636H, 06071C8637H, 06071C8638H and 06071C8639H [August 28, 2008]), the project area falls within Zone X, which is defined as areas determined to be outside the 1 percent annual chance floodplain (100-

year floodplain) as defined by FEMA and is within the 0.2 percent annual chance floodplain (500-year floodplain). A separate technical study is not required for the Project.

6F. Air Quality Conformity

Consistent with the 2017 FTIP and 2016 RTP, the Build Alternative is fully compatible with the design concept and scope.

All construction vehicles and equipment would be required to be equipped with the state-mandated emission control devices pursuant to state emission regulations and standard construction practices. After construction of the Project is complete, all construction-related impacts would cease. Short-term construction particulate matter emissions would be further reduced with the implementation of required dust suppression measures outlined within the South Coast Air Quality Management District Rule 402 and 403. Caltrans Standard Specifications for Construction (Section 14-9.03[Dust Control]) would also be adhered to.

The proposed improvements would not directly generate new heavy truck trips in the project area and the Project would not increase roadway capacity or increase travel demand. As such, traffic during the Build and No Build conditions would be the same and associated vehicle emissions would not increase. Additionally, traffic operations at the study intersections would improve significantly under the Build conditions compared to the No Build scenario. The Project would not be considered a project of air quality concern (POAQC) under 40 CFR 93.123(b)(1), as it would not create a new or worsen an existing particulate matter violation. Carbon monoxide hot-spots impacts would also be less than significant. A qualitative Mobile Source Air Toxic (MSAT) analysis determined that the Project would result in minimal air quality impacts regarding Diesel Particulate Matter and MSAT emissions. There would be no significant impacts arising from the Project's operational condition.

6G. Title VI Considerations

The Project is not receiving federal assistance and therefore does not require adherence to Title VI.

6H. Noise

The project area is surrounded by General Commercial and Regional Commercial land uses, with some single-family residences located in proximity to the west end of the project alignment along the westbound on-ramp. As indicated in the project description, the Project will not add capacity to the existing local roadway or ramps. The roadway currently includes three through lanes in each direction and would remain with three through lanes in each direction following construction. Additional lanes would be added to the on-ramps, however, they would rejoin the existing single lane portion of the on-ramps beyond the meter prior to entering SR-60 and, therefore, would serve only

to store traffic and would not be considered capacity increasing. Since the Project would not add additional capacity, a noise study under CEQA is not required.

7. OTHER CONSIDERATIONS AS APPROPRIATE

Public Hearing Process

The Project possess a CE and does not require a Public Hearing. See Community Interaction section for details of Open House meeting that was held.

Route Matters

The City and Caltrans will negotiate the responsibilities of maintenance of all facilities within Caltrans right of way including walls, slopes, drainage and other facilities. Maintenance of all facilities within the City right of way including roadway, drainage and noise barriers will be the responsibilities of the City.

The Project is proposed to retain the existing roadway and its connections to the existing freeway. The connection agreements will remain consistent to the existing agreements currently in place for the SR-60/Archibald Avenue Interchange. There is no need for a revised or new connection agreement for the Project.

Permits

The following permits, reviews and approvals would be required for project construction, as shown below:

Section 401 Water Quality Certification – Santa Ana Regional Water Quality Control Board – Required for impacts (temporary and permanent) to Waters of the State

1602 Streambed Alteration Agreement – California Department of Fish and Wildlife – Required for impacts (temporary and permanent) to Waters of the State

NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities. (Order No. 2012-0006-DWQ, NPDES No. CAS000002)

Caltrans Permit, Statewide Storm Water Permit and Waste Discharge Requirements for the State of California, Department of Transportation is Order No. 2012-0011-DWQ, NPDES No. CAS000003.

Cooperative Agreements

A Cooperative Agreement (Agreement 08-1619) executed on March 24, 2016 between SBCTA and Caltrans was executed for the improvements on the Archibald Avenue Interchange. The agreement outlines each agency's design, PA&ED and right of way responsibilities for the Project. Caltrans will be responsible for the oversight of project

design and provide an encroachment permit for construction in access-controlled State right of way. SBCTA and the City will be responsible for funding the Project as well as production of all project documentation. A Construction Cooperative Agreement would be prepared to cover the construction phase and would outline the responsibilities of SBCTA and Caltrans during construction.

Report on Feasibility of Providing Access to Navigable Rivers

The Project does not lie within the vicinity of a navigable waterway; therefore no provisions have been made.

Public Boat Ramps

No public boat ramps are planned or impacted as part of the Project.

Transportation Management Plan

A TMP Data Sheet has been developed to provide recommendations to minimize the traffic impacts of construction activities (*Attachment G – Transportation Management Plan Data Sheet*). The TMP Data Sheet was approved on May 23, 2017. Proposed measures in the TMP Data Sheet include: Public outreach and awareness, changeable message signs, Construction Zone Enhanced Enforcement Program (COZEEP), off-peak closures and detours.

There are no long-term ramp closures during project construction anticipated.

Stage Construction

The Project has potential for multiple stages during construction to expedite construction and minimize impacts. There is no long-term lane or business closures anticipated. Aspects of the construction that will require additional consideration are the driveways and final overlay, which if not planned correctly can cause delay to the Project and have significant access restrictions to the Project. Needs of pedestrians, individuals with disabilities, bicycles, as well as the necessary temporary access will be incorporated in construction stages.

Accommodation of Oversize Loads

The aspects of the Project such as lane widening and curb return radii will be designed to accommodate standard STAA truck movements for all turning movements along Archibald Avenue and the SR-60 Ramps.

The existing minimum vertical clearance for the Archibald Avenue UC is 15 ft. 6.5 in., which meets HDM standards for a UC.

Graffiti Control

While the Project is a graffiti prone area, the geometry of an undercrossing does allow for many areas to vandalize. The Project does construct fill retaining walls, but they are not in sight of the public and therefore are not a high target for graffiti.

8. FUNDING, PROGRAMMING AND ESTIMATE

Funding

The Project is not using Federal-aid funding. The PA&ED and PS&E phases are funded by SBCTA via San Bernardino County Measure I funds along with City of Ontario DIF.

Programming

The Project is programmed in the 2016 RTP and 2017 FTIP. Refer to *Section 4 – Regional Planning* for the project description.

The Project is programmed for $14,563,000 with completion of the environmental phase in February 2018 and completion of construction in August 2021. Table 11 summarizes the SBCTA funding project components.

Table 11: Programming

Phase	Funding Source		
	Measure I	DIF	Total
PSR & PA&ED	$268,488	$573,512	$842,000
PS&E	$301,032	$636,968	$938,000
Right of Way	$426,462	$881,538	$1,308,000
Construction	$3,873,075	$7,601,925	$11,475,000
Total	$4,869,057	$9,693,943	**$14,563,000**

Estimate

The total fully escalated project cost estimate for the Build Alternative is $12,150,000 and can be found in *Attachment E – Preliminary Project Cost Estimate*. See *Section 5A. – Cost Estimates* for a summary of the cost estimates.

9. DELIVERY SCHEDULE

Table 12 identifies the tentative project schedule.

Table 12: Project Schedule

Project Milestones		Milestone Date (Month/Day/Year)	Milestone Designation (Target/Actual)
PROGRAM PROJECT	M015	7/2/14	Actual
BEGIN ENVIRONMENTAL	M020	8/22/16	Actual
PA&ED	M200	3/1/18	Target
PROJECT PS&E	M380	4/26/19	Target
RIGHT OF WAY CERTIFICATION	M410	4/10/19	Target
READY TO LIST	M460	4/26/19	Target
FUND ALLOCATION	M470	2018/2019	Target
AWARD	M495	7/30/19	Target
APPROVE CONTRACT	M500	7/30/19	Target
CONTRACT ACCEPTANCE	M600	4/30/21	Target
END PROJECT	M800	4/23/23	Target

10. RISKS

A risk register was created for the Project in order to manage and track risks associated with the Project. Each risk was identified and strategies were developed to assist in risk management.

Potential types of risk categories for the Project include management, environmental, design, right of way and construction. Possible risks associated with each category include the following:

- Environmental: Environmental regulation changes, jurisdictional delineation
- Project Management: Schedule delay
- Design: Nonstandard lane widths, unanticipated design constraints, public opposition, design exception rejections
- Construction: Utility relocation complications
- Right of Way: Additional impacts, driveway access complications, acquisition delays

Each risk would either be accepted, mitigated, or avoided as needed. Refer to *Attachment I – Risk Register* for the detailed risk register.

11. EXTERNAL AGENCY COORDINATION

This PR has been reviewed by Caltrans' Federal Highway Administration (FHWA) Liaison, Sergio Avila on 1/12/18 and is ineligible for federal aid funding. State Route 60 is off the federal interstate system and is exempt from federal approval for design.

12. PROJECT REVIEWS

Headquarters Design Coordinator *LUIS BETANCOURT* Date 11/27/2017
FHWA/Design Liaison *SERGIO AVILA* Date 02/01/2018
Environmental Planning, Caltrans District 8 *RENETTA CLOUD* Date 12/05/2017
Right of Way Agent, Caltrans District 8 *STEVE MCCLAURY* Date 02/13/2018
Traffic Ops Region C, Caltrans District 8 *THERESA SASIS* Date 01/31/2018
Design Oversight, Caltrans District 8 *RAJBINDER S. GILL* Date 02/14/2018

13. PROJECT PERSONNEL

Andrea Nieto — Phone # 909.884.8276
Project Manager - SBCTA

Rafih Achy — Phone # 909.383.4077
Project Manager - Caltrans District 8

Brandon Reyes — Phone # 909.974.4967
Project Manager - Michael Baker International

Court Morgan — Phone # 909.974.4967
Environmental Studies - Power Engineers, Inc.

14. ATTACHMENTS

A. Categorical Exemption/Categorical Exclusion Determination Form
B. Location Maps
C. Plans & Typical Sections
D. Advanced Planning Study
E. Preliminary Project Cost Estimate
F. Right of Way Data Sheet
G. Transportation Management Plan Data Sheet
H. SWDR signed cover sheet
I. Risk Register
J. Project Development Category Agreement

Categorical Exemption/Categorical Exclusion Determination Form

Attachment A

CATEGORICAL EXEMPTION/CATEGORICAL EXCLUSION DETERMINATION FORM

08—SBD—60	7.83/7.91	EA 08-1F2600 PN 0814000194	—N/A—
Dist.-Co.-Rte. (or Local Agency)	P.M./P.M.	E.A/Project No.	Federal-Aid Project No. (Local Project)/Project No.

PROJECT DESCRIPTION: (Briefly describe project including need, purpose, location, limits, right-of-way requirements, and activities involved in this box. *Use Continuation Sheet, if necessary.)*

The project consists of the widening of Archibald Avenue to add an additional left turn lane and right turn pocket, in each direction. Archibald Avenue travels north/south of, and is perpendicular to State Route 60, in the city of Ontario, in San Bernardino County. The bridge itself will not be widened; tie-back walls will be constructed eleven (11) feet behind existing retaining walls, beneath the undercrossing, in order to widen the roadway. The widening would also accommodate standard sidewalk widths and ADA compliant curb ramps. In addition, all on-and off-ramps would be widened to provide an additional lane and standard shoulders. The project would require the partial acquisition of five (5) commercial parcels. No residences or businesses would be displaced as a result of this project.

CEQA COMPLIANCE *(for State Projects only)*

Based on an examination of this proposal and supporting information, the following statements are true and exceptions do not apply (See 14 CCR 15300 et seq.):

- If this project falls within exempt class 3, 4, 5, 6 or 11, it does not impact an environmental resource of hazardous or critical concern where designated, precisely mapped, and officially adopted pursuant to law.
- There will not be a significant cumulative effect by this project and successive projects of the same type in the same place, over time.
- There is not a reasonable possibility that the project will have a significant effect on the environment due to unusual circumstances.
- This project does not damage a scenic resource within an officially designated state scenic highway.
- This project is not located on a site included on any list compiled pursuant to Govt. Code § 65962.5 ("Cortese List").
- This project does not cause a substantial adverse change in the significance of a historical resource.

CALTRANS CEQA DETERMINATION (Check one)

☐ **Not Applicable – Caltrans is not the CEQA Lead Agency**

☐ **Not Applicable – Caltrans has prepared an Initial Study or Environmental Impact Report under CEQA**

☐ **Exempt by Statute.** (PRC 21080[b]; 14 CCR 15260 et seq.)
Based on an examination of this proposal, supporting information, and the above statements, the project is:

☒ **Categorically Exempt. (1).** (PRC 21084; 14 CCR 15300 et seq.)

☐ **Categorically Exempt. General Rule exemption.** [This project does not fall within an exempt class, but it can be seen with certainty that there is no possibility that the activity may have a significant effect on the environment (CCR 15061[b][3].)

RENETTA CLOUD
Print Name: Senior Environmental Planner or Environmental Branch Chief

Renetta Cloud 8-18-17
Signature Date

RAFIH ACHY
Print Name: Project Manager

Rafih Achy 8/18/17
Signature Date

NEPA COMPLIANCE

In accordance with 23 CFR 771.117, and based on an examination of this proposal and supporting information, the State has determined that this project:

- does not individually or cumulatively have a significant impact on the environment as defined by NEPA, and is excluded from the requirements to prepare an Environmental Assessment (EA) or Environmental Impact Statement (EIS), and
- has considered unusual circumstances pursuant to 23 CFR 771.117(b).

CALTRANS NEPA DETERMINATION (Check one)

☐ **23 USC 326:** The State has determined that this project has no significant impacts on the environment as defined by NEPA, and that there are no unusual circumstances as described in 23 CFR 771.117(b). As such, the project is categorically excluded from the requirements to prepare an EA or EIS under the National Environmental Policy Act. The State has been assigned, and hereby certifies that it has carried out the responsibility to make this determination pursuant to Chapter 3 of Title 23, United States Code, Section 326 and a Memorandum of Understanding dated May 31, 2016, executed between the FHWA and the State. The State has determined that the project is a Categorical Exclusion under:

- ☐ **23 CFR 771.117(c): activity (c)(_)**
- ☐ **23 CFR 771.117(d): activity (d)(__)**
- ☐ **Activity ___ listed in Appendix A of the MOU between FHWA and the State**

☐ **23 USC 327:** Based on an examination of this proposal and supporting information, the State has determined that the project is a Categorical Exclusion under 23 USC 327.

—N/A—
Print Name: Senior Environmental Planner or Environmental Branch Chief

Signature Date

—N/A—
Print Name: Project Manager/DLA Engineer

Signature Date

Date of Categorical Exclusion Checklist completion: —N/A—

Date of ECR or equivalent : 08/18/2017

Briefly list environmental commitments on continuation sheet. Reference additional information, as appropriate (e.g., CE checklist, additional studies and design conditions).

CATEGORICAL EXEMPTION/CATEGORICAL EXCLUSION DETERMINATION FORM
Continuation Sheet

08—SBD—60	7.83/7.91	EA 08-1F2600 PN 0814000194	—N/A—
Dist.-Co.-Rte. (or Local Agency)	P.M./P.M.	E.A/Project No.	Federal-Aid Project No. (Local Project)/Project No.

Continued from page 1:

The following technical documentation was prepared in conjunction with determining and addressing applicable California Environmental Quality Act (CEQA) documentation and compliance requirements.

- **COMMUNITY RESOURCES / IMPACTS**
  - An informal Open House Community Meeting was conducted for the proposed project on May 24, 2017 from 5:00 p.m. to 7:00 p.m. at the City of Ontario Police Department. A total of four individuals signed in at the Open House. No areas of public controversy were identified by attendees during the Open House. However, representatives attending the Open House that are associated with the Denny's Restaurant located at 2421 South Archibald Avenue, Ontario, California did express their interest in maintaining adequate access to the restaurant during construction and upon project completion.
  - **RIGHT OF WAY** - The proposed project would require partial acquisition from a total of five commercial properties – no residences or businesses would be displaced as a result of the project. In addition, and given the nature of proposed improvements, the project would not physically divide an established community.
- **HYDROLOGICAL RESOURCES - CONCEPTUAL DRAINAGE STUDY REPORT – February 2017**
  - Preliminary hydrological and hydraulic analyses indicate that the proposed drainage facilities (inlets and storm drains) would be sufficient to drain the project pursuant to pertinent requirements set forth in Caltrans' Highway Design Manual. However, a more detailed hydrologic and hydraulic analysis (Final Drainage Report) will be prepared during the final design phase of the project to confirm project-related drainage design requirements.
- **HYDROLOGICAL RESOURCES - SUMMARY FLOODPLAIN ENCROACHMENT REPORT – December 2016**
  - The project site is located within FEMA-mapped floodplain Zone X, defined as a 0.2% Annual Chance Flood Hazard Zone. Therefore, the proposed project would not affect a FEMA-designated 100-year floodplain.
- **CULTURAL RESOURCES - HISTORICAL RESOURCES COMPLIANCE REPORT/ARCHAEOLOGICAL SURVEY REPORT – May 2017**
  - Pursuant to Public Resources Code 5024 Memorandum of Understanding Stipulation IX.A.2, Caltrans has determined that a Finding of No State-owned Historical Resources Affected is appropriate for the proposed project because there are no historical resources within the Project Area Limits, as defined in CEQA Guidelines Section 15064.5(a).
- **BIOLOGICAL RESOURCES - NATURAL ENVIRONMENT STUDY (MINIMAL IMPACTS) – January 2017**
  - No special-status plant or animal species are expected to be directly or indirectly impacted from implementation of the proposed project. Therefore, it has been determined that implementation of this project will have "no effect" on special-status species.
  - The proposed project would not impact resources (drainages) subject to the jurisdiction of the U.S. Army Corps of Engineers, Santa Ana Regional Water Quality Control Board, or California Department of Fish and Wildlife.
- **WATER QUALITY / STORM WATER - SCOPING QUESTIONNAIRE FOR WATER QUALITY ISSUES – April 2017**
  - Through compliance with Caltrans' National Pollutant Discharge Elimination System (NPDES) Statewide Permit Order No. 2012-0011-DWQ, NPDES No. CAS000003, as amended by Order WQ 2014-0006-EXEC, Order WQ 2014-0077-DWQ and Order WQ 2015-00036-EXEC (for improvements within Caltrans right-of-way) and the San Bernardino County NPDES Permit and Waste Discharge Requirements for the San Bernardino County Flood Control District, the County of San Bernardino, and the Incorporated Cities of San Bernardino County within Santa Ana Region - Order No. R8-2010-0036, NPDES No. CAS618036 (for improvements outside Caltrans right-of-way), in conjunction with implementation of treatment control best management practices, the proposed project would not contribute to violations of the water quality standard or objectives.
- **ENVIRONMENTAL ENGINEERING / AIR QUALITY - AIR QUALITY ASSESSMENT REPORT – June 2017**
  - The proposed project is not considered a project of air quality concern under Title 40 Code of Federal Regulations (CFR) Part 93.123(b)(1), as it would not create a new or worsen an existing particulate matter violation. Carbon monoxide hot-spots impacts would also be less than significant. The qualitative Mobile Source Air Toxic (MSAT) analysis determined that the proposed project would result in minimal air quality impacts in regards to diesel particulate matter and MSAT emissions. Therefore, there would be no significant impacts arising from the proposed project's operational condition.
- **ENVIRONMENTAL ENGINEERING / NOISE**
  - This project is not a Type I project under Title 23 CFR Part 772.7; therefore, a noise study is not required. No adverse noise impacts from construction would occur because construction would be conducted in accordance with Caltrans Standard Specifications Section 14-8.02 (Noise Control) and applicable local noise standards.

CATEGORICAL EXEMPTION/CATEGORICAL EXCLUSION DETERMINATION FORM
Continuation Sheet

08—SBD—60	7.83/7.91	EA 08-1F2600 PN 0814000194	—N/A—
Dist.-Co.-Rte. (or Local Agency)	P.M./P.M.	E.A/Project No.	Federal-Aid Project No. (Local Project)/Project No.

Continued from page 2:

- **ENVIRONMENTAL ENGINEERING / HAZARDOUS WASTE - PHASE I INITIAL SITE ASSESSMENT – February 2017**
  - Project area soils may include pesticides and herbicides associated with past agricultural activities – this represents a Recognized Environmental Condition (REC).
  - The areas adjoining State Route 60 represent a potential source of aerially deposited lead (ADL) – this finding is considered a REC.
  - Phase II Environmental Site Investigations will be conducted during the project's final design phase to determine if pesticide residues and ADL persist in soils at concentrations above health risk levels and/or hazardous waste levels and appropriate handling and disposal requirements.
- **PALEONTOLOGICAL RESOURCES**

  Due to the nature of the project description, and because the project site is previously disturbed and no work would occur within previously undisturbed soils, no paleontological studies are required for this project.
- **VISUAL RESOURCES TECHNICAL MEMORANDUM – December 2016**
  - The project would not adversely affect any "Designated Scenic Resource" as defined by CEQA, or by Caltrans policy.
  - The proposed project would not impact a designated State scenic highway, or otherwise degrade the existing visual character of the project site.

In conjunction with the results of the above technical documentation, the Avoidance, Minimization, and/or Mitigation Measure(s) included in the Environmental Commitments Record (ECR), are expected to be implemented, as applicable.

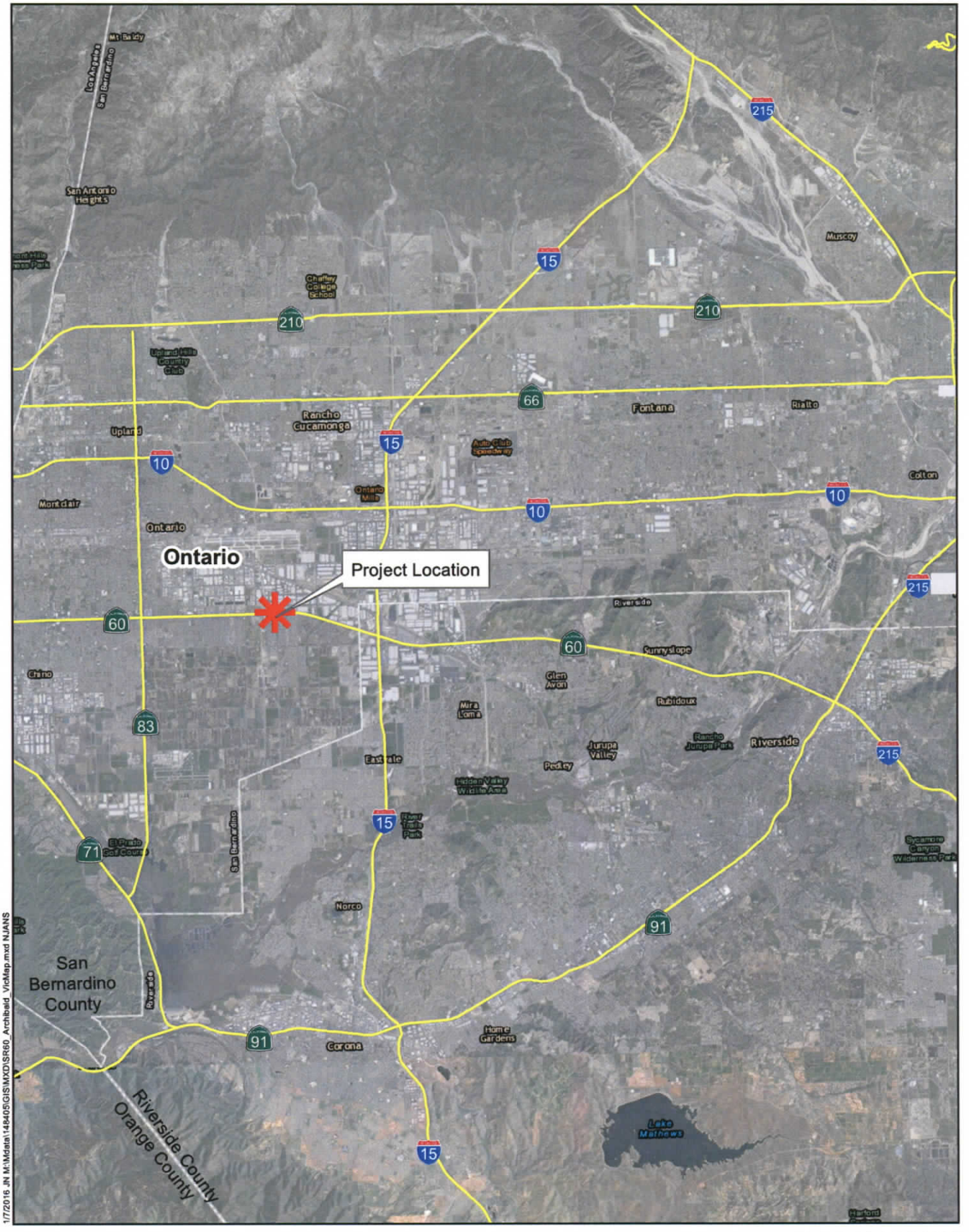
Changes to the project's scope of work, project limits, construction strategy and/or staging and storage requirements, and/or the timeframe of construction, as well as final design efforts not addressed during preliminary engineering (PA&ED), will require that the District's Division of Environmental Planning be notified in a timely manner, to determine if the CEQA compliance determination issued for this project remains valid and/or if an Environmental ReEvaluation is necessary. Updates to the original Technical Studies, or preparation of new Technical Studies may be required and/or a new CE/CE Determination Form may need to be completed, and/or an Environmental Document may need to be prepared and approved to document the project's compliance with all applicable NEPA and CEQA requirements.

If an Environmental ReEvaluation is determined to be necessary, it would need to be completed before the associated scope of work (or project limits) change(s) being considered for the project were implemented. An Environmental Certification will be required at the end of the Plans, Specifications, and Estimates phase.

The District's Division of Environmental Planning also needs to be notified in a timely manner, if any of the aforementioned occurs during the Construction Phase, to determine if an Environmental Re-Evaluation (including possible updates to the original Technical Studies, or preparation of new Technical Studies) is required, and/or a new CE/CE Determination Form may need to be completed, and/or an Environmental Document may need to be prepared and approved to document the project's compliance with all applicable NEPA and CEQA requirements. If an Environmental ReEvaluation is determined to be necessary, and/or additional analysis is required, all such efforts would be required to be completed before the scope of work (or project limits) change(s) being considered for the related portion of the project were implemented. Construction work consistent with the project scope included in the Environmental Certification issued for the project could continue, however, advance coordination with the Senior Environmental Planner assigned to this project would be necessary. Completion of a Certificate of Environmental Compliance At Construction Contract Acceptance will be required following completion of construction of the project.

Location Maps

Attachment B



1/7/2016 JN M:\Mdata\148405\GIS\MXD\SR60_Archibald_VicMap.mxd NJANIS

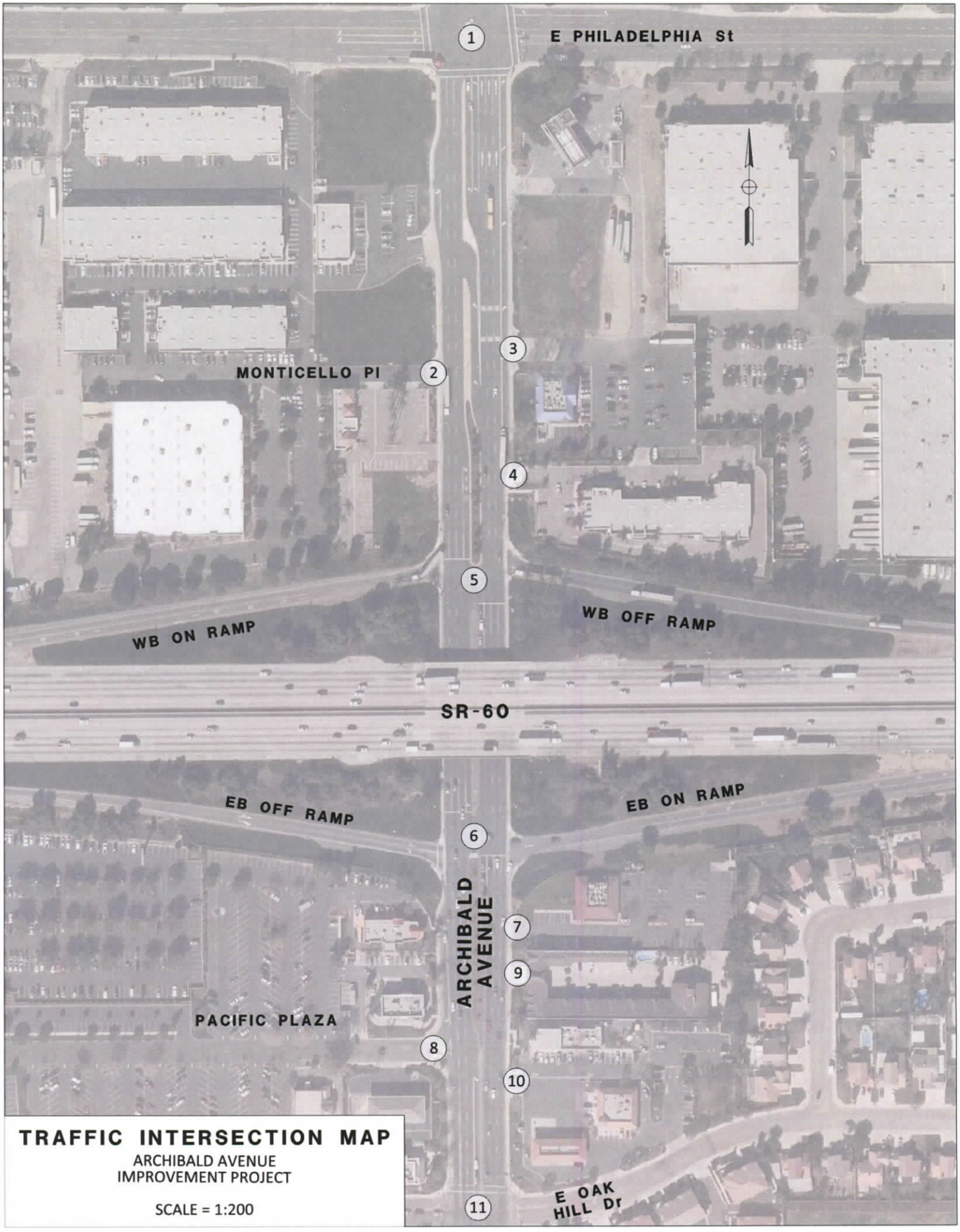
Michael Baker INTERNATIONAL

0 0.5 1 2 Miles

Source: Esri

ARCHIBALD AVENUE IMPROVEMENT PROJECT

Vicinity Map



TRAFFIC INTERSECTION MAP

ARCHIBALD AVENUE
IMPROVEMENT PROJECT

SCALE = 1:200

Plans & Typical Sections

Attachment C

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	SBd	60	R7.83/R7.91		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — No. — Exp. — CIVIL — STATE OF CALIFORNIA

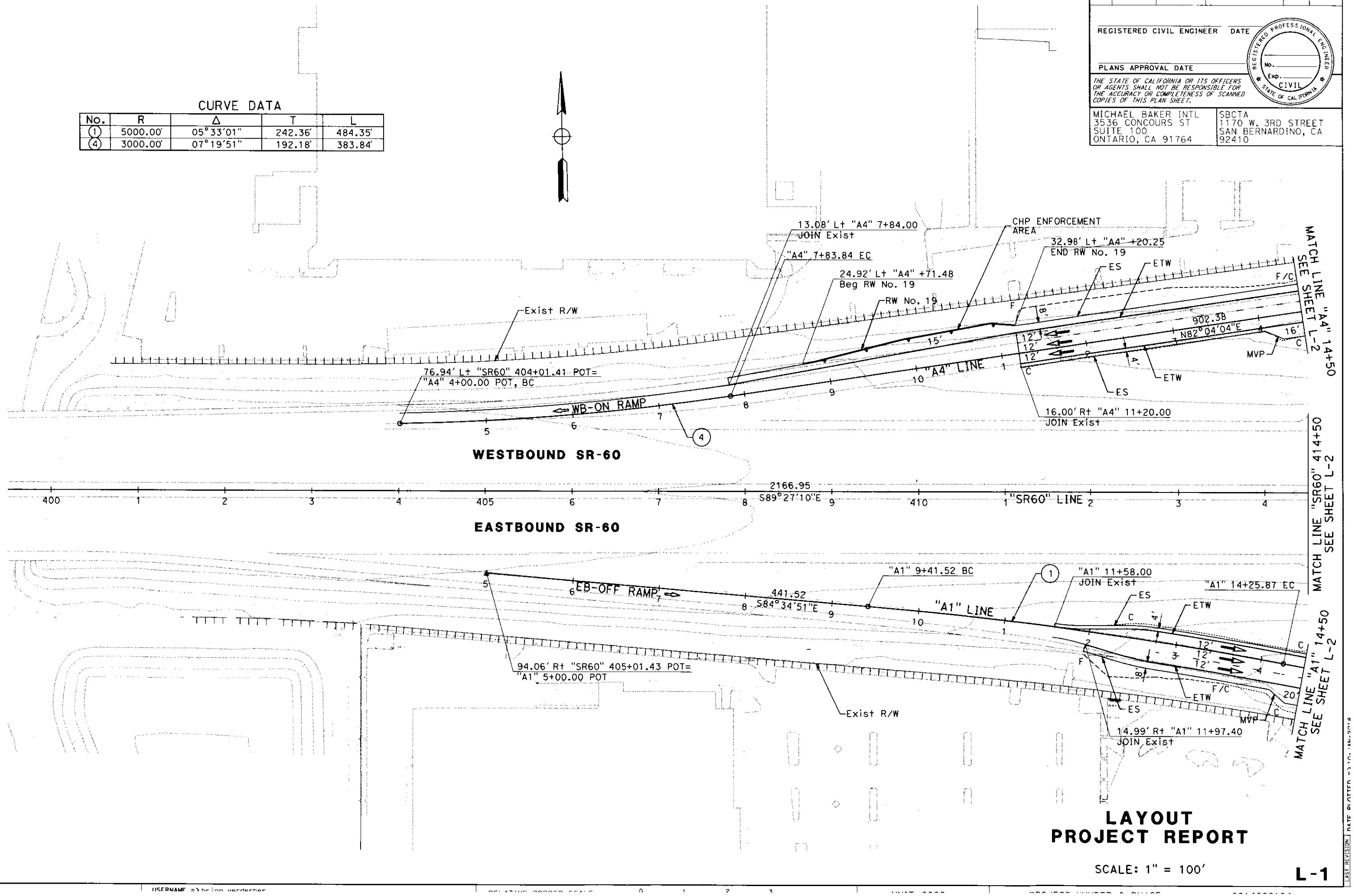
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

MICHAEL BAKER INTL
3536 CONCOURS ST
SUITE 100
ONTARIO, CA 91764

SBCTA
1170 W. 3RD STREET
SAN BERNARDINO, CA
92410

CURVE DATA

No.	R	Δ	T	L
(1)	5000.00'	05°33'01"	242.36'	484.35'
(4)	3000.00'	07°19'51"	192.18'	383.84'



LAYOUT
PROJECT REPORT

SCALE: 1" = 100'

L-1

REVISED BY | DATE REVISED | CALCULATED-DESIGNED BY | CHECKED BY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION | CONSULTANT FUNCTIONAL SUPERVISOR

Caltrans

USERNAME => brian.verdecher

LAST REVISION | DATE PLOTTED => 10-JAN-2018

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	SBd	60	R7.83/R7.91		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — No. Exp. CIVIL — STATE OF CALIFORNIA

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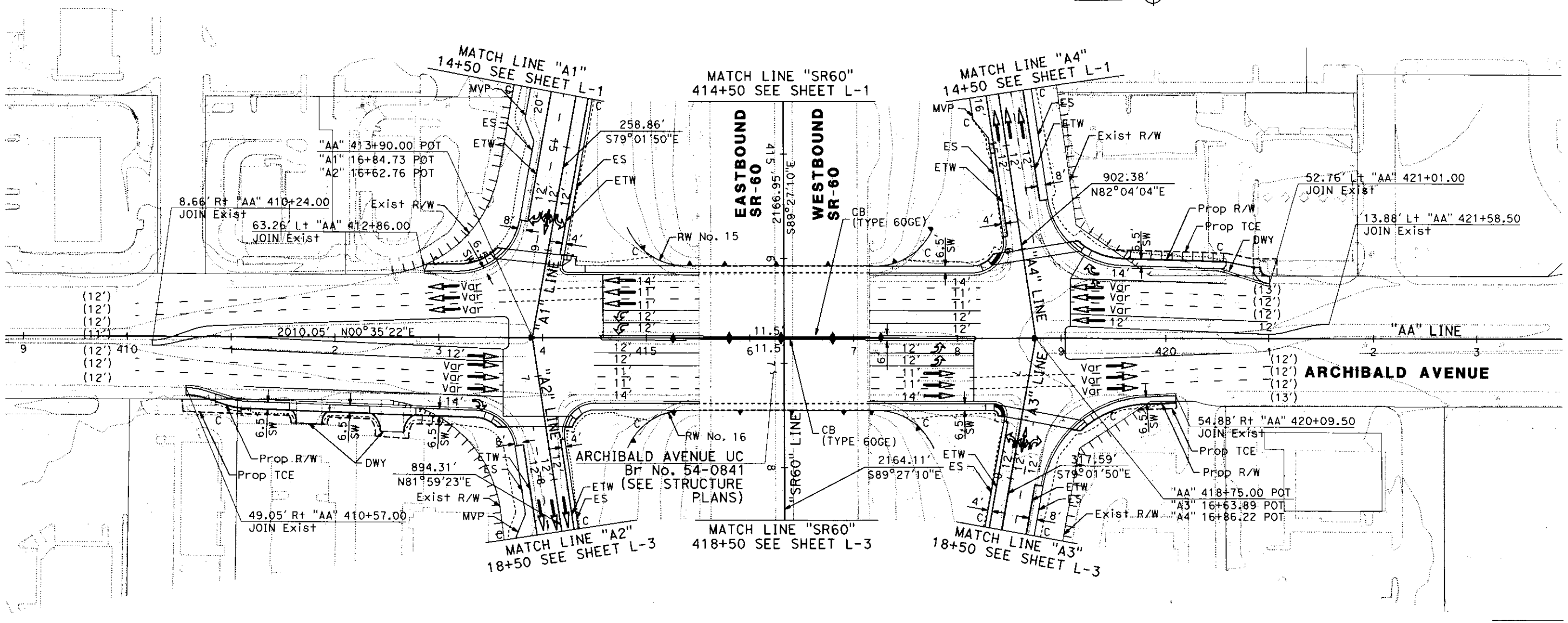

LAYOUT PROJECT REPORT

SCALE: 1" = 100'

L-2

STATE OF CALIFORNIA — DEPARTMENT OF TRANSPORTATION

Caltrans

CONSULTANT FUNCTIONAL SUPERVISOR

CALCULATED-DESIGNED BY

CHECKED BY

REVISED BY

DATE REVISED

USERNAME =>brian.verderber

RELATIVE PLOTTED SCALE 0 1 2 3

LAST REVISION

DATE PLOTTED => 10-JAN-2018

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	SBd	60	R7.83/R7.91		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA

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92410

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CALCULATED-DESIGNED BY | CHECKED BY

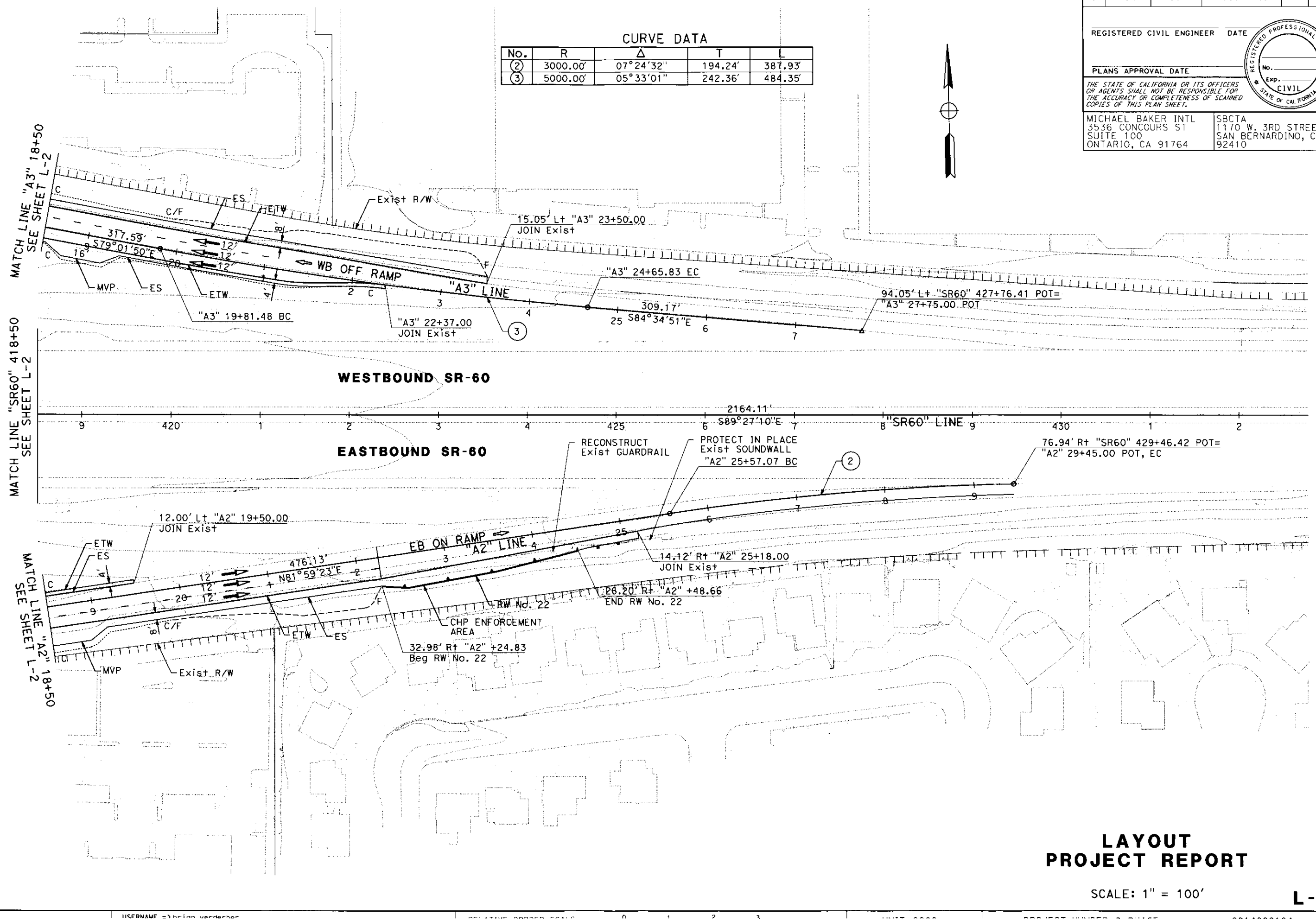
CONSULTANT FUNCTIONAL SUPERVISOR

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

CURVE DATA

No.	R	Δ	T	L
(2)	3000.00′	07°24′32"	194.24′	387.93′
(3)	5000.00′	05°33′01"	242.36′	484.35′



LAYOUT
PROJECT REPORT

SCALE: 1" = 100′

L-3

LAST REVISION | DATE PLOTTED

USERNAME =>brian.verderber

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	SBd	60	R7.83/R7.91		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — BRANDON REYES — No. 79226 — Exp. 03-31-18 — CIVIL — STATE OF CALIFORNIA

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REVISED BY | DATE REVISED

CALCULATED-DESIGNED BY | CHECKED BY

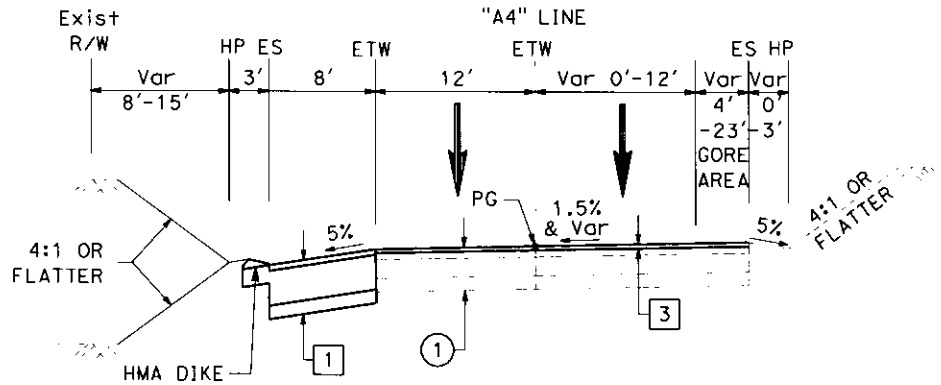
CONSULTANT FUNCTIONAL SUPERVISOR

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Gibbons

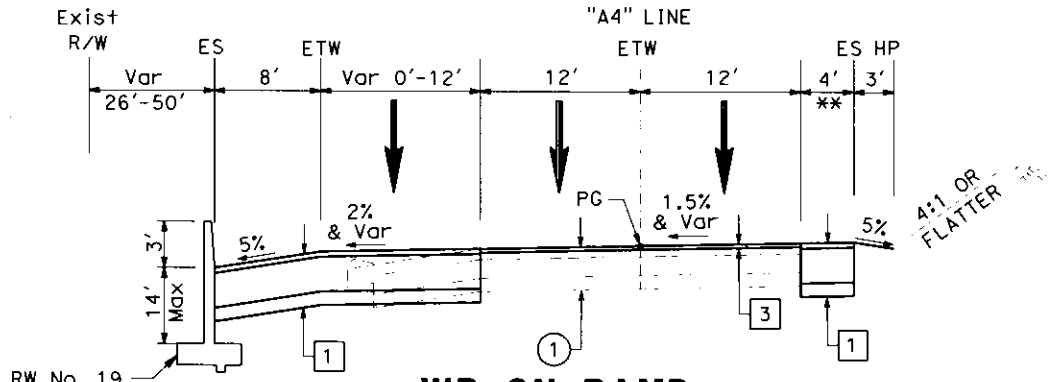
ABBREVIATIONS

OEP	OUTSIDE EDGE OF PAVEMENT
IEP	INSIDE EDGE OF PAVEMENT
V_p	POSTED SPEED LIMIT
V_{ML}	DESIGN SPEED OF MAINLINE
V	DESIGN SPEED
RSC	RAPID STRENGTH CONCRETE
BB	BOND BREAKER
LCBRS	LEAN CONCRETE BASE RAPID SET



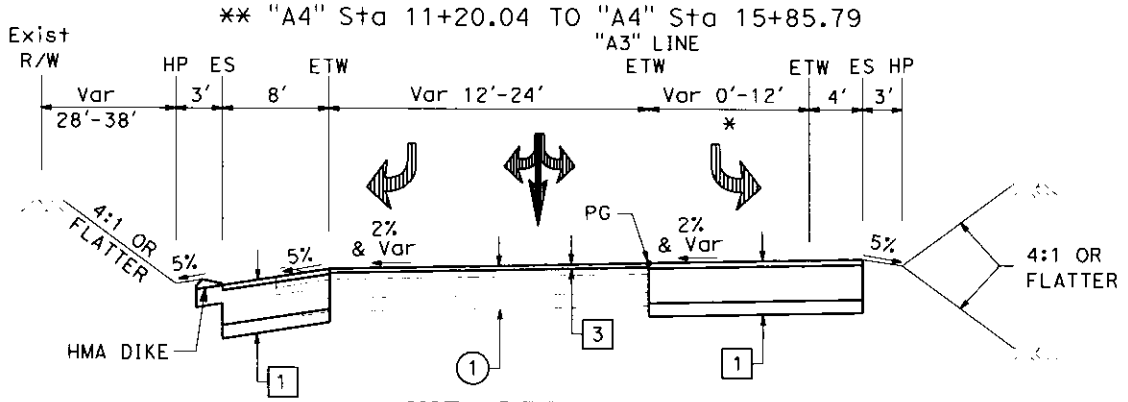
WB ON RAMP

"A4" Sta 7+84.00 TO "A4" Sta 8+71.48



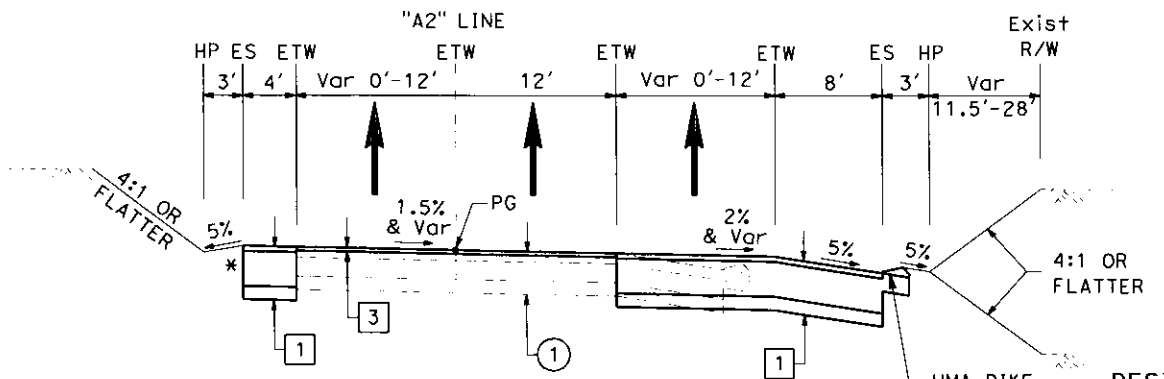
WB ON RAMP

"A4" Sta 8+71.48 TO "A4" Sta 15+56.17
* "A4" Sta 8+71.48 TO "A4" Sta 11+20.25
** "A4" Sta 11+20.04 TO "A4" Sta 15+85.79



WB OFF RAMP

"A3" Sta 17+37.15 TO "A3" Sta 23+50.00
* "A3" Sta 17+37.15 TO "A3" Sta 22+37.06
4 RAMP TERMINI LIMITS TO BE DETERMINED IN PS&E



EB ON RAMP

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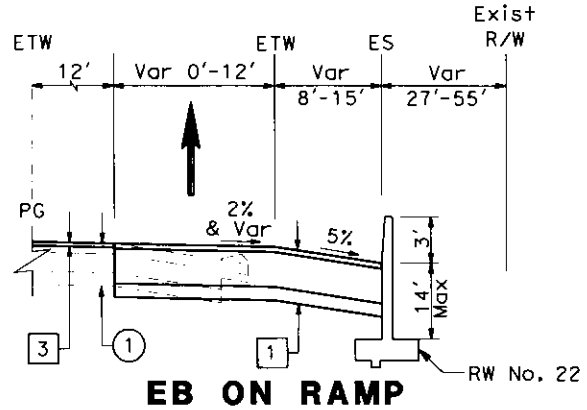
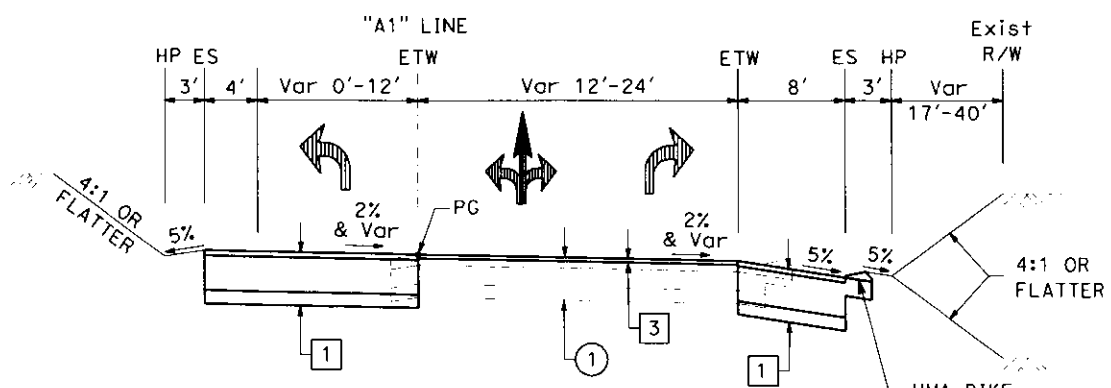
* "A2" Sta 17+63.65 TO "A2" Sta 19+50.04



EB ON RAMP

"A2" Sta 22+24.83 TO "A2" Sta 24+48.66



EB OFF RAMP

"A1" Sta 11+58.00 TO "A1" Sta 16+02.06
4 RAMP TERMINI LIMITS TO BE DETERMINED IN PS&E

DESIGN DESIGNATION (ROUTE 60 RAMPS)

ADT (2020) = 11,700 — T = 17.1%
ADT (2040) = 17,386 — V_{ML} = 70 MPH
$ESAL_{20}$ = 17,873,234 — TI_{20} = 12.5
CLIMATE REGION = INLAND VALLEY

DESIGN DESIGNATION (ARCHIBALD AVENUE)

ADT (2020) = 45,200 — D = 65%
ADT (2040) = 67,165 — T = 17.1%
DHV_{20} = 2,645 — V_p = 45 MPH
$ESAL_{20}$ = 34,524,367 — V = 45 MPH
CLIMATE REGION = INLAND VALLEY — TI_{20} = 13.5

TYPICAL STRUCTURAL SECTIONS

(#) NEW PAVEMENT

1
- 0.20' RHMA (TYPE G)
- 1.30' HMA (CLASS A)
- 0.50' AB (CLASS 2)

2
- 0.20' RHMA (TYPE G)
- 0.50' HMA (CLASS A)
- 1.25' AB (CLASS 2)

3
- 0.15' RHMA (TYPE G)

4
- 1.15' RSC
- BB
- 0.50 LCBRS

(#) Exist PAVEMENT

(1)
- 0.40' AC (TYPE B)
- 0.70' RMCTB (CLASS A)
- 0.50' AS (CLASS 3)

(2)
- 0.40' AC (TYPE B)
- 0.50' AB (CLASS 2)

TYPICAL CROSS SECTIONS PROJECT REPORT

NO SCALE

X-1

LAST REVISION DATE PLOTTED = 12-JAN-2018

USERNAME =>brian.verderber

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
8	SBd	60	R7.83/R7.91		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
BRANDON REYES
No. 79226
Exp. 03-31-18
CIVIL
STATE OF CALIFORNIA

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SUITE 100
ONTARIO, CA 91764

SBCTA
1170 W. 3RD STREET
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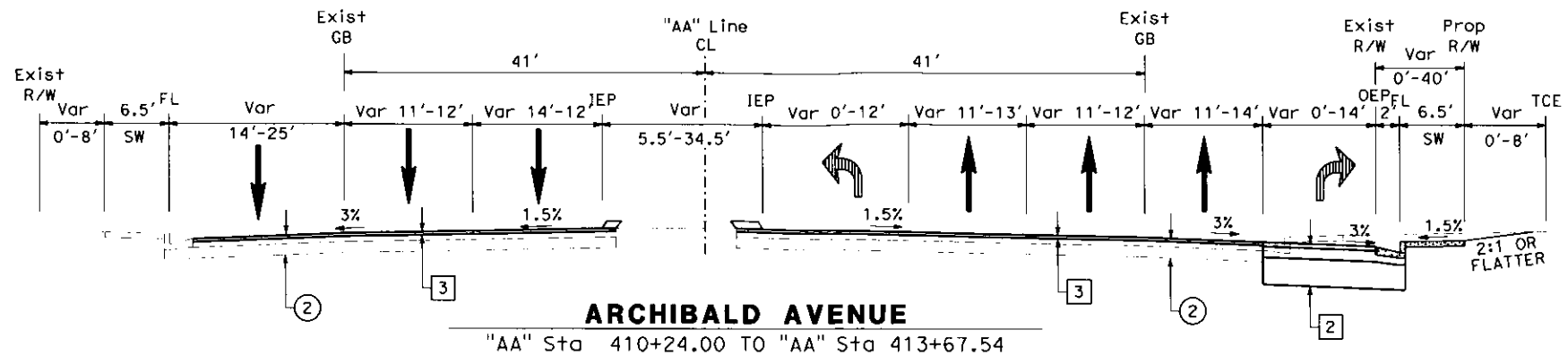
92410



ARCHIBALD AVENUE

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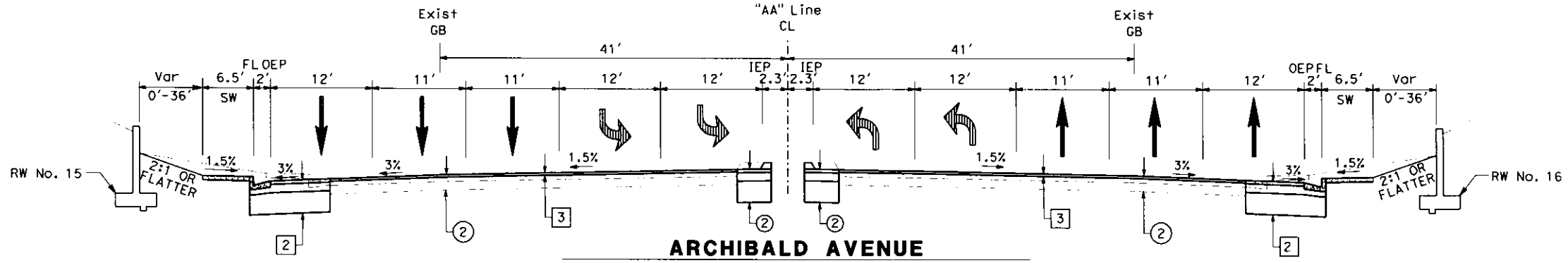

ARCHIBALD AVENUE

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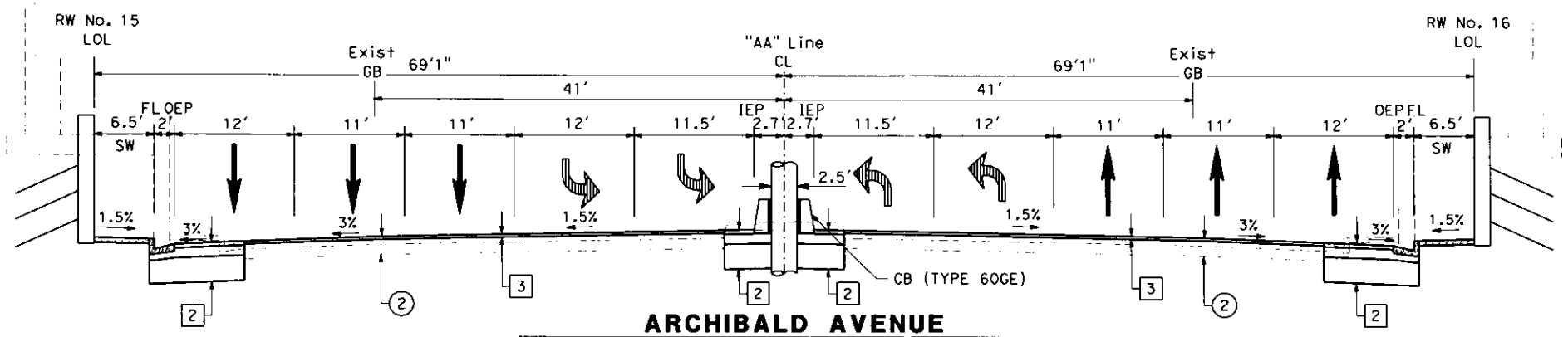
"AA" Sta 417+12.00 TO "AA" Sta 418+18.26



ARCHIBALD AVENUE

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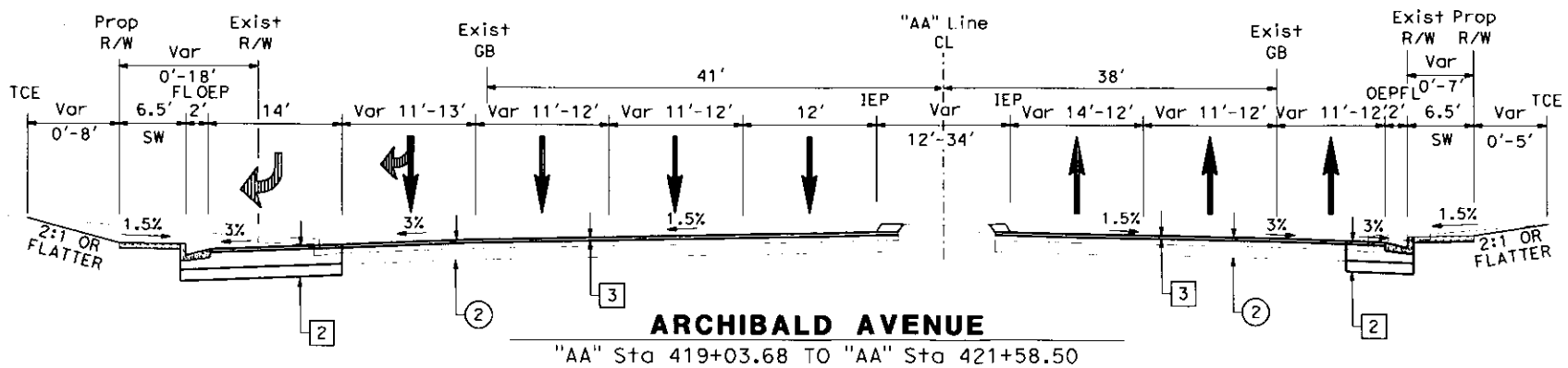


ARCHIBALD AVENUE

"AA" Sta 419+03.68 TO "AA" Sta 421+58.50

TYPICAL CROSS SECTIONS PROJECT REPORT

NO SCALE

X-2

REVISED BY | DATE REVISED
CALCULATED-DESIGNED BY | CHECKED BY
CONSULTANT FUNCTIONAL SUPERVISOR
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

USERNAME => brian.verdecher

LAST REVISION | DATE PLOTTED => 12-JAN-2018

Advanced Planning Study

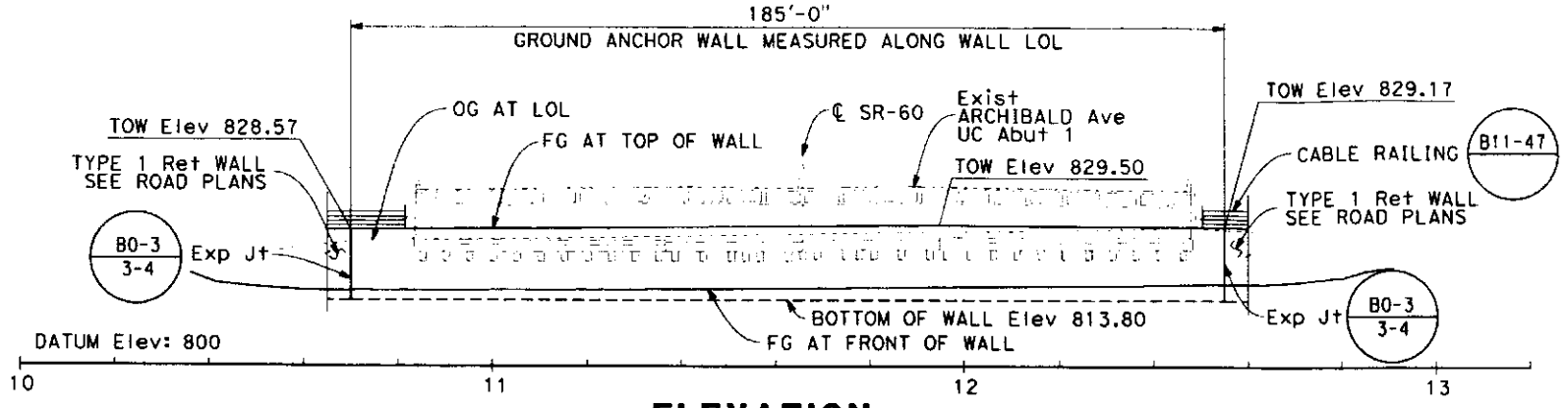
Attachment D

PREPARED FOR THE STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT
8	Sbd	60	R7.83/R7.91

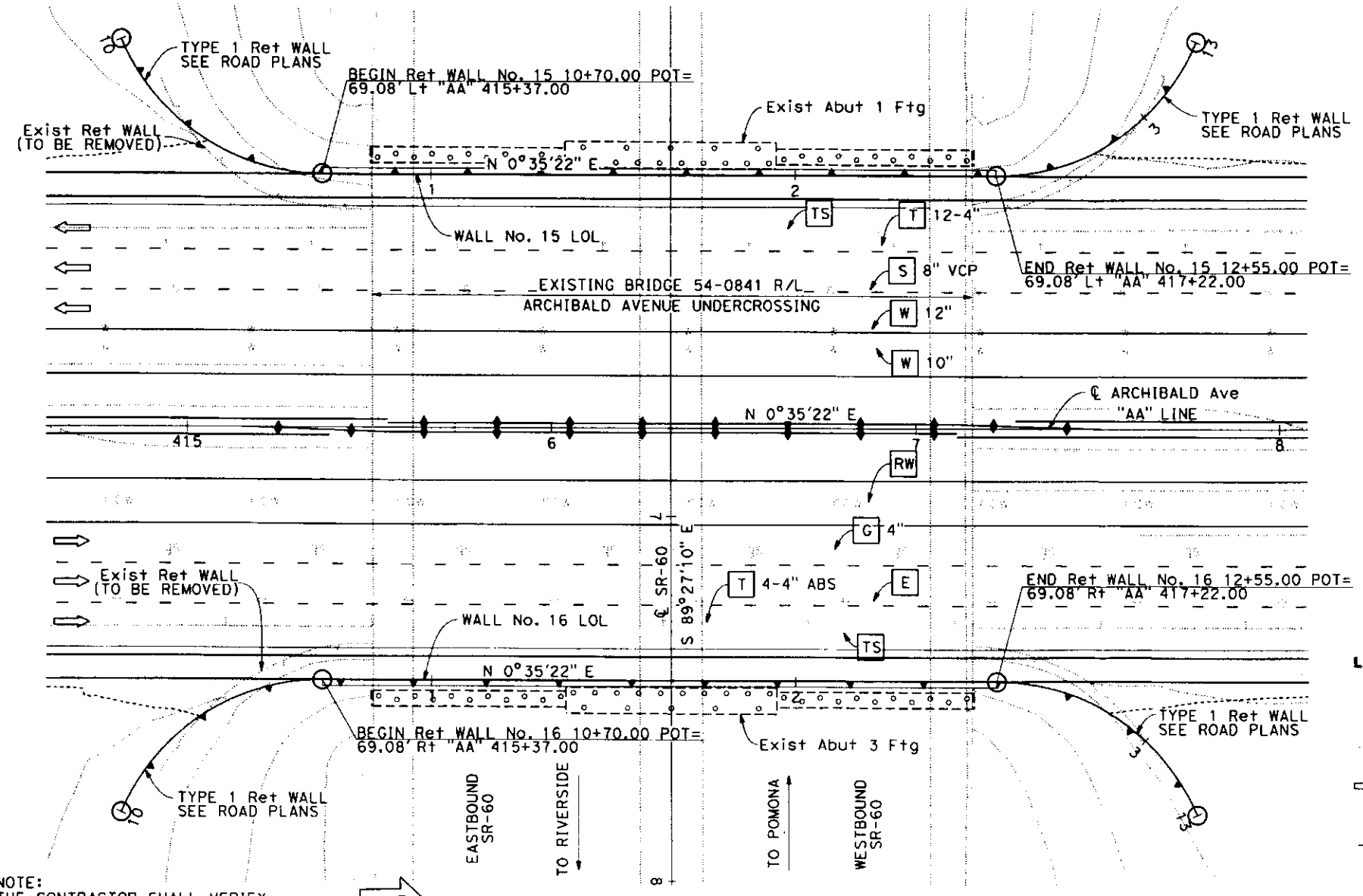
SBCTA
1170 W. 3RD STREET
SAN BERNARDINO, CA 92410

MICHAEL BAKER INTL
3536 CONCOURS ST, SUITE 100
ONTARIO, CA 91764



ELEVATION

(SOUTHBOUND SHOWN, NORTHBOUND SIMILAR)
SCALE: 1" = 20'

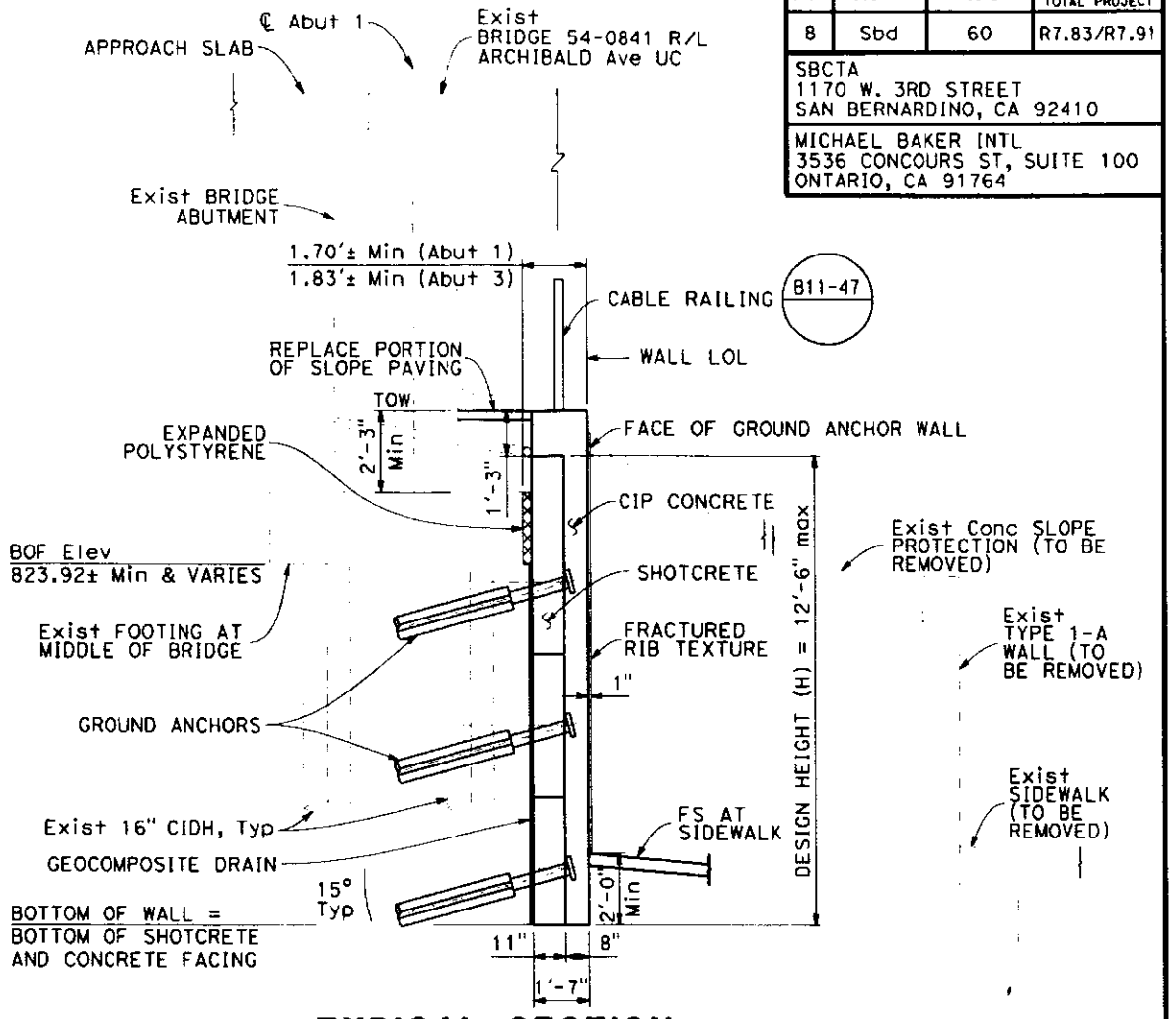


PLAN

SCALE: 1" = 20'

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIALS.

DESIGN OVERSIGHT
3/8/17
SIGN OFF DATE



TYPICAL SECTION

(Abut 1 SHOWN, Abut 3 SIMILAR)
SCALE: 3/8" = 1'-0"

LEGEND:

- EXISTING LANES ALIGNMENT
- PROPOSED LANES ALIGNMENT
- DIRECTION OF TRAVEL
- UTILITY
- Ret WALL

EXISTING UTILITIES:

S	SEWER LINE (PROTECT IN PLACE)
W	WATER LINE (PROTECT IN PLACE)
RW	RECYCLED WATER LINE (PROTECT IN PLACE)
G	GAS LINE (PROTECT IN PLACE)
T	TELEPHONE LINE (RELOCATE)
E	ELECTRICAL LINE (PROTECT IN PLACE)
TS	TRAFFIC SIGNAL LINE (RELOCATE)

DATE OF ESTIMATE	2/6/17
HEIGHT	= 13'-3" Avg
LENGTH	= 370'-0"
AREA	= 5,664 SF
COST/Sq Ft INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	= $282
TOTAL COST	= $1,593,000

DESIGNED BY	Z. DANIEL	DATE	2/6/17
DRAWN BY	J. CHAN	DATE	2/6/17
CHECKED BY	B. MIELKE	DATE	2/6/17
APPROVED		DATE	

Brad Mielke
PROJECT ENGINEER

PLANNING STUDY

ARCHIBALD AVE UC GROUND ANCHOR WALLS

BRIDGE NO. 54-0841 R/L	UNIT: 08
SCALE: AS SHOWN	PROJECT NUMBER & PHASE: 0814000194

CONTRACT NO.: X

ADVANCE PLANNING STUDY SHEET (ENGLISH) (REV. 7/16/10)

FILE => 148405_54-0841rt-a-gp01.dgn

USERNAME => JChon
DATE PLOTTED => 03-FEB-2017
TIME PLOTTED => 11:38

State of California
DEPARTMENT OF TRANSPORTATION

Business. Transportation and Housing Agency

Memorandum

Serious Drought.
Help Save Water!

To: **JIM SUN**
D8 Project Manager

Date: March 8, 2017

File: 08-SBD-60, PM R7.83- R7.91
Archibald Avenue UC
Bridge No. 54-0841 R/L
EA 08-1F260

From: **ROBERT ZEZOFF**
Senior Bridge Engineer
Office of Special Funded Projects & Structure Local Assistance
Division of Engineering Services

Subject: Advanced Planning Study (APS) Review

The Office of Special Funded Projects has reviewed the Advanced Planning Study for the following structure:

- Archibald Avenue UC Ground Anchor Wall #15

Signatures were placed on the Planning Study sheets.

If you have any questions, please call Robert Zezoff at (916) 227-9881.

c: Chad Harden, Project Manager Michael Baker International
Dennis Saylor, SB CTA Project Manager
Sudhakar Vatti, Chief, Office of SFP and SLA
File

Preliminary Project Cost Estimate

Attachment E

PRELIMINARY
PROJECT COST ESTIMATE

Archibald Avenue Improvement Project Cost Estimate

Project ID: 0814000194

Type of Estimate : PA/ED
Program Code : 800.100 (HE11)
Project Limits : PM R7.83/PM R7.91
Description: Add turning lanes along Archibald Avenue and widen ramps
Scope : Pavement widening, ramp improvements, construct tieback walls
Alternative : Build (Tight Diamond)

	Current Cost	Escalated Cost
ROADWAY ITEMS	$ 7,225,700	$ 8,132,589
STRUCTURE ITEMS	$ 1,593,000	$ 1,792,936
SUBTOTAL CONSTRUCTION COST	$ 8,818,700	$ 9,925,525
RIGHT OF WAY	$ 781,193	$ 781,193
TOTAL CAPITAL OUTLAY COST	**$ 9,600,000**	**$ 10,707,000**
PR/ED SUPPORT	$ 520,000	$ 520,000
PS&E SUPPORT	$ 410,000	$ 410,000
RIGHT OF WAY SUPPORT	$ 55,000	$ 55,000
CONSTRUCTION SUPPORT	$ 450,000	$ 450,000
TOTAL CAPITAL OUTLAY SUPPORT COST*	**$ 1,435,000**	**$ 1,435,000**
TOTAL PROJECT COST	**$ 11,050,000**	**$ 12,150,000**

If Project has been programmed enter Programmed Amount $ -

	Month / Year
Date of Estimate (Month/Year)	1 / 2018
Estimated Date of Construction Start (Month/Year)	8 / 2019
Number of Working Days	440 Working Days
Estimated Mid-Point of Construction (Month/Year)	5 / 2020
Number of Plant Establishment Days	365 Days

Estimated Project Schedule

PID Approval	8/2016
PA/ED Approval	2/2018
PS&E Approval	4/2019
RTL	4/2019
Begin Construction	8/2019

Approved by Project Manager

Andrea Nieto	1/10/2018	909-884-8276
Project Manager	**Date**	**Phone**

I. ROADWAY ITEMS SUMMARY

	Section		Cost
1	Earthwork	$	281,300
2	Pavement Structural Section	$	1,758,600
3	Drainage	$	486,900
4	Specialty Items	$	681,600
5	Environmental	$	173,000
6	Traffic Items	$	1,189,100
7	Detours	$	-
8	Minor Items	$	274,300
9	Roadway Mobilization	$	242,300
10	Supplemental Work	$	449,000
11	State Furnished	$	425,200
12	Contingencies	$	942,500
13	Overhead	$	321,900
	TOTAL ROADWAY ITEMS	**$**	**7,225,700**

Estimate Prepared By :	Brian Verderber	1/10/2018	909-974-4931
	Name and Title	Date	Phone
Estimate Reviewed By	Brandon Reyes	1/10/2018	909-974-4967
	Name and Title	Date	Phone

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

SECTION 1: EARTHWORK

Item code		Unit	Quantity		Unit Price ($)			Cost
160102	Clearing & Grubbing	LS	1	x	19,800.00	=	$	19,800
170101	Develop Water Supply	LS	1	x	10,000.00	=	$	10,000
190101	Roadway Excavation	CY	8,168	x	10.00	=	$	81,680
192037	Structure Excavation (Retaining Wall)	CY	1,541	x	37.00	=	$	57,017
193013	Structure Backfill (Retaining Wall)	CY	2,560	x	42.00	=	$	107,520
198001	Imported Borrow	CY	1,045	x	5.00	=	$	5,225

TOTAL EARTHWORK SECTION ITEMS	$	281,300

SECTION 2: PAVEMENT STRUCTURAL SECTION

Item code		Unit	Quantity		Unit Price ($)			Cost
150771	Remove Asphalt Concrete Dike	LF	2,810	x	2.00	=	$	5,620
153240	Remove Concrete (Curb, Gutter & Sidewalk)	CY	440	x	270.00	=	$	118,800
260203	Class 2 Aggregate Base	CY	1,887	x	45.00	=	$	84,915
280015	Lean Concrete Base (Rapid Setting)	CY	404	x	400.00	=	$	161,600
360200	Bond Breaker	SQYD	2,422	x	3.00	=	$	7,266
390132	Hot Mix Asphalt (Type A)	TON	5,691	x	100.00	=	$	569,100
390137	Rubberized Hot Mix Asphalt (Gap Graded)	TON	2,688	x	100.00	=	$	268,800
394071	Place Hot Mix Asphalt Dike	LF	3,530	x	5.00	=	$	17,650
401055	Jointed Plain Concrete Pavement (RSC)	CY	928	x	350.00	=	$	324,800
731510	Minor Concrete (Curb, Gutter, Sidewalk and Driveway)	CY	400	x	500.00	=	$	200,000

TOTAL STRUCTURAL SECTION ITEMS	$	1,758,600

SECTION 3: DRAINAGE

Item code		Unit	Quantity		Unit Price ($)			Cost
150204	Abandon Culvert	LF	48	x	20.00	=	$	960
150221	Abandon Inlet	EA	1	x	1,500.00	=	$	1,500
155003	Cap Inlet	EA	2	x	1,500.00	=	$	3,000
155232	Sand Backfill	CY	3	x	90.00	=	$	288
650018	24" RCP Pipe	LF	475	x	110.00	=	$	52,250
650026	36" RCP	LF	5	x	140.00		$	630
723070	Rock Slope Protection (Type III and Method B)	CY	34	x	120.00	=	$	4,080
729011	Rock Slope Protection Fabric	SQYD	130	x	5.00	=	$	650
721420	Concrete (Ditch Lining)	CY	40	x	1,500.00	=	$	60,000
194001	Excavation Volume	CY	25	x	30.00		$	750
520101	Miscellaneous Iron and Steel	LB	6,790	x	5.00	=	$	33,950
510502	Minor Concrete (Minor Structure)	CY	41	x	2,000.00		$	82,000
XXXXXX	Infiltration Testing	LS	12	x	3,500.00	=	$	42,000
194001	Bioswale	CY	1,622	x	30.00		$	48,660
210600	Compost	SQFT	7,872	x	0.30		$	2,362
XXXXXX	Construction BMP	LS	1	x	120,000.00	=	$	120,000
710166	Remove OSD	EA	3	x	2,000.00		$	6,000
150820	Remove Inlet	EA	2	x	3,000.00	=	$	6,000
150809	Remove Undersidewalk Drain	LF	45	x	25.00		$	1,125
390132	Hot Mixed Asphalt (Type A)	TON	3	x	200.00		$	564
394090	Place Hot Mixed Asphalt (Miscellaneous Area)	SQYD	18	x	100.00	=	$	1,800
650014	18" RCP Undersidewalk Drain	LF	122	x	150.00	=	$	18,300

TOTAL DRAINAGE ITEMS $ 486,900

SECTION 4: SPECIALTY ITEMS

Item code		Unit	Quantity		Unit Price ($)			Cost
070012	Progress Schedule (Critical Path Method)	LS	1	x	10,000.00	=	$	10,000
510060	Structural Concrete (Retaining Wall)	CY	1,100	x	450.00	=	$	495,000
520103	Bar Reinf. Steel (Retaining Wall)	LB	50,000	x	1.15	=	$	57,500
832005	Midwest Guardrail System	LF	500	x	30.00	=	$	15,000
839521	Cable Railing	LF	300	x	30.00	=	$	9,000
839585	Alternative Flared Terminal System	EA	2	x	2,800.00	=	$	5,600
839607	Crash Cushion	EA	2	x	25,000.00	=	$	50,000
839742	Concrete Barrier *(Type 60)*	LF	395	x	100.00	=	$	39,500

TOTAL SPECIALTY ITEMS $ 681,600

SECTION 5: ENVIRONMENTAL

5A - ENVIRONMENTAL MITIGATION

Item code		Unit	Quantity		Unit Price ($)		Cost	
					Subtotal Environmental			*$ -*

5B - LANDSCAPE AND IRRIGATION

Item code		Unit	Quantity		Unit Price ($)		Cost	
200001	Highway Planting	LS	1	x	50,000.00	= $	50,000	
204099	Plant Establishment Work	LS	1	x	25,000.00	= $	25,000	
208000	Irrigation System	LS	1	x	25,000.00	= $	25,000	
					Subtotal Landscape and Irrigation			*$ 100,000*

5C - NPDES

Item code		Unit	Quantity		Unit Price ($)		Cost	
074032	Temporary Concrete Washout Facility	EA		x		= $	-	
	Total Section 1-8	$	2,057,300		3.5%	= $	72,006	
					Subtotal NPDES (Without Supplemental Work)			*$ 73,000*

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

**Applies to both SWPPPs and WPCP projects.

*** Applies only to project with SWPPPs.

TOTAL ENVIRONMENTAL	**$**	**173,000**

SECTION 6: TRAFFIC ITEMS

6A - Traffic Electrical

Item code		Unit	Quantity		Unit Price ($)			Cost
860090	Maintain Existing Traffic Management System Elements During Construction	LS	1	x	5,000.00	=	$	5,000
860810	Inductive Loop Detectors	EA	20	x	500.00	=	$	10,000
860460	Lighting & Sign Illumination	LS	1	x	25,000.00	=	$	25,000
8607XX	Interconnection Facilities	LS	1	x	5,000.00	=	$	5,000
860250	Signals & Lighting	LS	2	x	250,000.00	=	$	500,000
861101	Ramp Metering System (Location 1&2)	LS	2	x	100,000.00	=	$	200,000

Subtotal Traffic Electrical $ *745,000*

6B - Traffic Signing and Striping

Item code		Unit	Quantity		Unit Price ($)			Cost
120090	Construction Area Signs	LS	1	x	25,000.00	=	$	25,000
566011	Roadside Sign (One Post)	EA	25	x	270.00	=	$	6,750
566012	Roadside Sign (Two Post)	EA	10	x	630.00	=	$	6,300
84XXXX	Permanent Pavement Delineation	LS	1	x	50,000.00	=	$	50,000

Subtotal Traffic Signing and Striping $ *88,050*

6C - Stage Construction and Traffic Handling

Item code		Unit	Quantity		Unit Price ($)			Cost
120100	Traffic Control System	LS	1	x	250,000.00	=	$	250,000
120165	Channelizer	EA	250	x	40.00	=	$	10,000
128650	Portable Changeable Message Signs	EA	2	x	5,000.00	=	$	10,000
129000	Temporary Railing (Type K)	LF	5,000	x	15.00	=	$	75,000
129100	Temp. Crash Cushion Module	EA	50	x	200.00	=	$	10,000
129099A	Traffic Plastic Drum	EA	10	x	100.00	=	$	1,000

Subtotal Stage Construction and Traffic Handling $ *356,000*

TOTAL TRAFFIC ITEMS $ **1,189,100**

SECTION 7: DETOURS

Include constructing, maintaining, and removal

Item code	Unit	Quantity	Unit Price ($)	Cost
			TOTAL DETOURS	**$ -**

SUBTOTAL SECTIONS 1-7 $ 4,570,500

SECTION 8: MINOR ITEMS

8A - Americans with Disabilities Act Items							
ADA Items			1.0%	$	45,705		
8B - Bike Path Items							
Bike Path Items			0.0%	$	-		
8C - Other Minor Items							
Other Minor Items			5.0%	$	228,525		
Total of Section 1-7	$	4,570,500	x 6.0%	= $	274,230		
			TOTAL MINOR ITEMS			**$**	**274,300**

SECTIONS 9: MOBILIZATION

Item code								
999990	Total Section 1-8	$	4,844,800	x	5%	= $	242,240	
					TOTAL MOBILIZATION			**$ 242,300**

SECTION 10: SUPPLEMENTAL WORK

Item code		Unit	Quantity		Unit Price ($)		Cost
066063	Traffic Management Plan - Public Information	LS	1	x	32,250.00	= $	32,250
066090	Maintain Traffic	LS	1	x	25,000.00	= $	25,000
066098	Partnering	LS	1	x	35,000.00	= $	35,000
066100	Dispute Review Board	LS	1	x	16,500.00	= $	16,500
066610	Partnering	LS	1	x	20,000.00	= $	20,000
066921	Dispute Resolution Advisor	LS	1	x	5,000.00	= $	5,000
	*Cost of **NPDES** Supplemental Work specified in Section 5C*					= $	73,000
	Total Section 1-8	$	4,844,800		5%	= $	242,240
					TOTAL SUPPLEMENTAL WORK		**$ 449,000**

SECTION 11: STATE FURNISHED MATERIALS AND EXPENSES

Item code		Unit	Quantity		Unit Price ($)		Cost
066105	RE Office	LS	1	x	158,311.11	=	$158,312
066062A	COZEEP Expenses	LS	1	x	85,500.00	=	$85,500
066004	Miscellaneos State Furnished Materials	LS	1	x	100,000.00	=	$100,000
869001	Miscellaneous Electrical	LS	1	x	30,000.00	=	$30,000
066916	Annual Construction General Permit Fee	LS	2	x	1,432.00		$2,864
	Total Section 1-8	$	4,844,800		1%	= $	48,448

TOTAL STATE FURNISHED	$425,200

SECTION 12: TIME-RELATED OVERHEAD

Estiamted Time-Releated Overhead (TRO) Percentage (0% to 10%) = 5%

Item code		Unit	Quantity		Unit Price ($)		Cost
					Total of All Contract Items Only	$	6,437,800
					Total Project Cost	$	7,554,300
070018	Time-Related Overhead	WD	440	X	731.5909091	=	$321,900

TOTAL TIME-RELATED OVERHEAD	$321,900

SECTION 13: CONTINGENCY

(Pre-PSR 30%-50%, PSR 25%, Draft PR 20%, PR 15%, after PR approval 10%, Final PS&E 5%)

Total Section 1-11	$	6,283,200	x	15%	= $942,480

TOTAL CONTINGENCY	$942,500

II. STRUCTURE ITEMS

Bridge 1

DATE OF ESTIMATE	02/06/17	00/00/00	00/00/00
Bridge Name	Ground Anchor Walls	xxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxx
Bridge Number	54-0841 R/L	57-XXX	57-XXX
Structure Type	Tie Back Walls (Both)	xxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxx
Width (Feet) [out to out]	13.25 LF	0.00 LF	0.00 LF
Total Bridge Length (Feet)	370.00 LF	0.00 LF	0.00 LF
Total Area (Square Feet)	5664 SQFT	0 SQFT	0 SQFT
Structure Depth (Feet)	0.00 LF	0.00 LF	0.00 LF
Footing Type (pile or spread)	N/A	xxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxx
Cost Per Square Foot	$282.00	$0.00	$0.00

COST OF EACH STRUCTURE	**$1,593,000.00**	**$0.00**	**$0.00**
Total Length (Feet)	0.00 LF	0.00 LF	0.00 LF

TOTAL COST OF BRIDGES	**$1,593,000.00**
TOTAL COST OF BUILDINGS	**$0.00**

TOTAL COST OF STRUCTURES[1]	**$1,593,000.00**

Estimate Prepared By: Per guidance, see approved APS of this attachment
XXXXXXXXXXXXXXXX ------ Division of Structures

Date

[1]Structure's Estimate includes Overhead and Mobilization.
Add more sheets if needed. Call them 9a, 9b, 9c, ..., etc

III. RIGHT OF WAY

Fill in all of the available information from the Right of Way data sheet.

A)	A1)	Acquisition, including Excess Land Purchases, Damages & Goodwill,	$	499,408
	A2)	SB-1210	$	0
B)		Acquisition of Offsite Mitigation	$	0
C)	C1)	Utility Relocation (State Share)	$	100,500
	C2)	Potholing (Design Phase)	$	0
D)		Railroad Acquisition	$	0
E)		Clearance / Demolition	$	0
F)		Relocation Assistance (RAP and/or Last Resort Housing Costs)	$	0
G)		Title and Escrow	$	0
H)		Environmental Review	$	0
I)		Condemnation Settlements 20% (Items G & H applied to items A + B)	$	80,785
J)		Design Appreciation Factor 0%	$	0
K)		Utility Relocation (Construction Cost)	$	100,500

L) **TOTAL RIGHT OF WAY ESTIMATE** **$781,193**

(Excluding Item #8 - Hazardous Waste)

M) **TOTAL R/W ESTIMATE: Escalated** **$781,193**

N) **Right of Way Support $ 300,000**

Support Cost Estimate Prepared By	Andrea Nieto	909-884-8276
	Project Coordinator[1]	Phone
Utility Estimate Prepared By	Marie Marston	714-699-9060
	Utiliy Coordinator[2]	Phone
R/W Acquistion Estimate Prepared By	Maile Kop	562-304-2000
	Right of Way Estimator[3]	Phone

[1] When estimate has Support Costs only [2] When estimate has Utility Relocation [3] When R/W Acquisition is required

Right of Way Data Sheet

Attachment F

To: Rebecca Guirado
District Division Chief
Division of Right of Way

Date: 4/25/2017

Attn: Lawrence Kelly
District Branch Chief
R/W Local Programs

Co. SBd Rte. 60
Expense Authorization 1F2600

Subject: **RIGHT OF WAY DATA SHEET – LOCAL PUBLIC AGENCIES**

Project Description:

Right of way necessary for the subject project will be the responsibility of **San Bernardino County Transportation Authority (SBCTA).**

The information in this data sheet was developed by **Overland, Pacific & Cutler, Inc. in collaboration with Michael Baker International, Inc.**

I. Right of Way Engineering

Will Right of Way Engineering be required for this project?

- No ☐
- Yes ☒ (If yes, submit a copy of the *Right of Way Engineering Surveys and Mapping Services checklist for Locally Funded Projects.* This checklist includes, but is not limited to, the following items.)

  - Hard copy (base map) ☒
  - Appraisal map ☒
  - Acquisition documents ☒
  - Property Transfer Documents ☒
  - R/W Record Map ☒
  - Record of Survey ☒

II. *Engineering Surveys*

1. Is any surveying or photogrammetric mapping required?
   No ☐ Yes ☒ if yes, complete the following:

   Photogrammetric mapping was completed during the PA&ED phase based on control established by Caltrans. In addition, the photogrammetric mapping has been through the ABC Caltrans process. Photogrammetric mapping and engineering surveying will be once again initiated during the PS&E phase.

2. Datum Requirements

   Yes ☒ Project will adhere to the following criteria:
   - Horizontal - datum policy is NAD 83, CA HPGN, EPOCH 1991.35 and English system of units and measures.
   - Vertical - datum policy is NAVD 88.
   - Units – US Survey Feet.

3. Will land survey monument perpetuation be scoped into the project, if required?

Yes ☒
No ☐ Provide explanation on additional page.

III. *Parcel Information (Land and Improvements)*

Are there any property rights required within the proposed project limits?

No ☐ Yes ☒ (Complete the following.)

	Part Take	Full Take	Estimate $
A. Number of Vacant Land Parcels	0	0	$0
B. Number of Single Family Residential Units	0	0	$0
C. Number of Multifamily Residential Units	0	0	$0
D. Number of Commercial/Industrial Parcels	5	0	$403,927
E. Number of Farm/Agricultural Parcels	0	0	$0
F. Permanent and/or Temporary Easements	0	0	$0
G. Other Parcels (define in "Remarks" section)	0	0	$0
Totals*	**5**	**0**	**$403,927**

*** Costs include 20% contingency & escalated for 2 years at 3% per year.**

Provide a general description of the right of way and excess lands required (zoning, use, improvements, critical, or sensitive parcels, etc.).

This project requires approximately 4,250 square feet of Fee Acquisition, 850 square feet of Permanent Easement (PE) and 3,470 square feet of Temporary Construction Easement (TCE). It affects a total of five parcels, commercial and industrial zoned properties; one parcel is occupied by a bakery located at the northwest quadrant, one parcel is occupied by a paint company located at the northeast quadrant, and three parcels occupied by restaurants and an inn located at the southeast quadrant.

2421 S Archibald (Denny's Restaurant) – Proposed driveway is within Caltrans access control. Assumed mandatory design exception can be filed. Assumed potential damages to the business due to temporary loss of use of a portion of the driveway during construction.

2425 S Archibald (America's Best Value Inn) – Assumed similar monument sign configuration and size cannot be replaced as currently situated within the Right of Way in the after condition. Assumed a different type of sign may be necessary in order to replace the sign within the remaining Right of Way. Assumed potential damages to the business due to temporary loss of use of a portion of the driveway during construction (loss of goodwill). Costs to Cure include a new monument sign configuration/type to remedy the sign placement issue in the after condition. Costs also include an allowance for replacement windows for the front units adjacent to the street; this allowance is intended to remedy any impacts to the business due to any potential sound/noise which may result from bringing the street closer to the front

units. Construction of the proposed driveway modification must include the relocation of current park drain.

2455 S Archibald Ave (McDonalds Restaurant) – Assumed ADA ramp is reconstructed by the project. Assumed drive-through remains operational during construction without obstruction. Assumed damages to the business due to temporary loss of ADA ramp during construction and various construction activities.

IV. *Dedications*

Are there any property rights which have been acquired, or anticipate will be acquired, through the "dedication" process for the Project?

No ☒ Yes ☐ (Complete the following.)

Number of dedicated parcels 0

Have the dedication parcel(s) been accepted by the municipality involved?

There are no dedications anticipated by surrounding developers / property owners.

V. *Excess Lands/Relinquishments*

Are there Caltrans property rights which may become excess lands or potential relinquishment areas?

No ☒ Yes ☐ (Provide an explanation on additional page.)

VI. *Relocation Information*

Are relocation displacements anticipated?

No ☒ Yes ☐ (Complete the Following.)

A. Number of Single Family Residential Units		
Estimated RAP Payments	N/A	$0
B. Number of Multifamily Residential Units		
Estimated RAP Payments	N/A	$0
C. Number of Business/Nonprofit		
Estimated RAP Payments	N/A	$0
D. Number of Farms		
Estimated RAP Payments	N/A	$0
E. Other (define in the "Remarks" section)		
Estimated RAP Payments	N/A	$0
Total	N/A	$0

No property relocation is anticipated for this project.

VII. *Utility Relocation Information*

Do you anticipate any utility facilities or utility rights of way to be affected?

No ☐ Yes ☒ (Complete the following.)

	Facility	Owner	Estimated Relocation Expense: State Obligation	Local Obligation	Utility Owner Obligation
A	Telephone/Cable	Charter Communications	$0	TBD	TBD
B	Electric	Southern California Edison (SCE)	$0	TBD	TBD
C	Telecommunication	Frontier Communications	$0	TBD	TBD
D	Water	City of Ontario	$0	TBD	TBD
	Totals		$0*	$100,500	$100,500
	Number of Facilities	4			

*This amount reflects the estimated total financial obligation by the State.

Any additional information concerning utility involvement on this project?

See the attached utility information sheet for additional information concerning utility involvement.

VIII. *Rail Information*

Are railroad facilities or railroad rights of way affected?

No ☒ Yes ☐ (Complete the following.)

Describe the railroad facilities to be affected.

Owner's Name	Transverse Crossing	Longitudinal Encroachment
A.		
B.		
C.		
D.		

Discuss types of agreements and rights required from railroads. Are grade crossings that require services contracts, or grade separations that require construction and maintenance agreements involved?

IX. *Clearance Information*

Are there improvements that require clearance?

No ☒ Yes ☐ (Complete the following.)

A. Number of structures to be Demolished: 0
Estimated Cost of Demolition: $0

Demolition of structures within proposed right of way is not anticipated as part of this project.

X. *Hazardous Materials/Waste*

Are there any site(s) and/or improvements(s) in the Project Limits that are known to contain *hazardous materials*? None ☒ Yes ☐ (Explain in the "Remarks" section.)

Are there any site(s) and or improvement(s) in the Project Limits that are suspected to contain *hazardous waste*? None ☐ Yes ☒ (Explain in the "Remarks" section.)

* Refer to the attached Phase I Initial Site Assessment prepared by Stantec Consulting Services Inc. dated 12/9/16 for a detailed description of the RECs identified below:

- Stantec identified the SR60, adjoining the Project Area, as a potential source of aerially deposited lead (ADL) and recommends shallow soil sampling in the Project Area with samples analyzed for total and soluble lead.
- The historical agricultural use and current landscaping identified within the Project Area is considered a REC due to the potential for pesticide residues to persist in soils at concentrations above health risk levels and/or hazardous waste levels. If there is any export soil for this project, Stantec recommends shallow soil sampling in the Project Area and analysis for organochlorine pesticides and arsenic.

XI. *Project Scheduling*

	Proposed lead time		Completion Date
* Preliminary Engineering Surveys	1	months	10/2016
* R/W Engineering Submittals	18	months	06/2018
* R/W Appraisals/Acquisition	14	months	10/2018
Proposed Environmental Clearance	2	months	08/2018
Proposed R/W Certification	1	months	12/2018

XII. *Proposed Funding*

	Local	State	Federal	Other Utility Owner Obligation
Acquisition	$403,927	$0	$0	
Utilities	$100,500	$0	$0	$100,500
Relocation Assistance Program	$0	$0	$0	
Loss of Business Goodwill	$95,481	$0	$0	
Structures Testing + Demolition	$0	$0	$0	
Condemnation	$80,785	$0	$0	
R/W Support Cost*	$300,000	$0	$0	
TOTAL	$980,693	$0	$0	
COMBINED TOTAL	**$1,081,193**			

The proposed funding allocation above is conceptual based upon preliminary discussions with the project team. Condemnation costs based on 20% of the acquisition costs. Acquisition, Loss of Business Goodwill and Condemnation costs include 20% contingency & escalated for 2 years at 3% per year.
* R/W support costs provided by SBCTA.

XIII. *Remarks*

Regarding Hazardous Material in Section X above, please refer to the attached Phase I Initial Site Assessment prepared by Stantec Consulting Services Inc. dated 12/9/16 for a detailed description of the RECs identified below:

- Stantec identified the SR60, adjoining the Project Area, as a potential source of aerially deposited lead (ADL) and recommends shallow soil sampling in the Project Area with samples analyzed for total and soluble lead.
- The historical agricultural use and current landscaping identified within the Project Area is considered a REC due to the potential for pesticide residues to persist in soils at concentrations above health risk levels and/or hazardous waste levels. If there is any export soil for this project, Stantec recommends shallow soil sampling in the Project Area and analysis for organochlorine pesticides and arsenic.

Project Sponsor Consultant
Prepared by:

Maile Kop
Overland, Pacific & Cutler, Inc.

4/25/2017
Date

Project Sponsor
Reviewed and Approved by:

Paula Beauchamp
SBCTA

4/25/2017
Date

Caltrans
Reviewed and approved based on information provided to date:

Steve McClaury
Associate Right of Way Agent
Department of Transportation
District 8 – San Bernardino Office

5/10/17
Date

Transportation Management Plan Data Sheet

Attachment G

For DTM use		Caltrans District 8 (Riverside & San Bernardino)	
Developer		TMP Request form & developed TMP (Ver. Sep. 2014)	

Transportation Management Plan (TMP) Data Sheet is for PID, PSR, PR and PS&E considering DTM's requirements. The validity of this TMP expires at the same time the associated LRCs expires.

The TMP Data Sheet includes background & signature, TMP elements & TMP estimate

Requester: *Complete section (A) & (B) of this page only*

Requester: Submit separate request for each roadway (Type the information in the cells with yellow background ONLY)

Please note that

Project shall not be certified without the approval of the Lane Requirement Charts (LRCs) & the TMP by the DTM

(A) Requester's info.

1-Date of request	4/24/2017	2-Department	Construction
3-Full name	Marie Marston	4- Phone No.	714-966-9060
5-E-mail address	mmarston@civilworksengineers.com		
6-Project Manager's name	Rafih Achy		
7-Project Manager's E-mail	rafih.achy@dot.ca.gov		

(B) Project information

		1-EA#/ID#	1F260 / 0814000194
2-County/Route	San Bernardino / SR-60	3-phase/subobject	PA/ED
4-Post mile (From-To)	R7.83 - R7.91		
5-Short description of job	State Route 60 Archibald Interchange On/Off ramps (4) and Street Improvements		

Construction period per WPS

6-Estimated start date	8/9/19	8-# of working days	450
7-Estimated end date	05/30/21	9-Estimated Proj. cost	$ 9,000,000

10- Requester: Use section (H), in the buttom of the page, to add any otehr information that helps developing the TMP

11- Documents to send → *Requester: Please attach the location map in jpeg/pdf format to your E-mail*

12- If hard copies are requested, Send or bring them to the DTM office located on the south side of 11th. Floor, Attn: Al Afaneh. Questions: call 383-6262

13- E-mail the request to: al_afaneh@dot.ca.gov

Following is for DTM use >>>>>>>>>>> Developer: Fill info in green cells only

C) BACKGROUND INFORMATION

		Date request received		Job assigned to	
# of working days	450				
Estimated Project cost ($)	9,000,000	Per E-mail dated	01/31/17		
TMP estimate($)	**$167,750**	Equal to **1.86%**	Of the project cost		

D) IMPACT	High	Medium	Low	NA
State Hwy.			x	
Local road		x		
Ramp/connector		x		

Developer: (*Briefly, explain the high impact/mitigation): One lane closure, lane shift, and merging taper to be used in each direction on Archibald Avenue for the Archibald Avenue widening construction. One lane closure and lane shift to be used for the eastbound and westbound off-ramp construction.*

E) Developer: Complete the info

Developed by	Marie Marston	Original signed by:	Marie Marston	Date	4/24/2017
Title	TMP Manager				
E-mail	mmarston@civilworksengineers.com				
Phone/Fax	714-966-9060				

F) Approved by

		Original signed by:	Al Afaneh	Date	
Name:	Al Afaneh				
Title	District Traffic Manager				
E-mail	al_k_afaneh@dot.ca.gov				
Phone/Fax	383 6262/383 1068				

G) District's info:

Department of Transportation		
District:	8	
Address:	464 W. Fourth St., San Bernardino, Ca., 92401-1400	
Operations, DTM, MS >>>>	1150	

H) Remarks:

Form was developed by Saleh Yadegari (September 2014)

TMP Elements	EA #/ID#	1F260 / 0814000194	Date	4/24/2017

Note: An X in the check box means you need to include this in the project unless staging, material, or work hour changes eliminate the need for the item. A ? in the box means TMP anticipates this - please check into this. A blank box means the item is not needed at this time based on the information received.

			Cost
1	Public Information/Public Awareness Campaign (PAC)		
	BEES 066063 (Traffic Management Plan-Public Information). Cost to be reduced by Public Affairs (PA) and Construction Liaison (CL) only. Show under **State Furnished** as the **total** of PA+CL.		
1.1		Include Rideshare information in PA/CL project material to encourage vehicles reduction in work area	
1.2	x	Brochures and Mailers	$ 10,000
1.3	x	Media Releases (& minority media sources)	$ 1,250
1.4		Paid Advertising	
1.5		Public Information Canter/Kiosk	
1.6	x	Public Meetings/PAC Mtgs./Speakers Bureau (show cost also for room rental)	$ 10,000
1.7	x	Hand deliver notices to vicinity	$ 1,000
1.8		Broadcast fax service	
1.9		Telephone Hotline OR	
1.10		1-800-COMMUTE (The telephone number is shown on CS-Info signs) -	
1.11		Visual Information (videos, slide shows, etc.)	
1.12		Local cable TV and News	
1.13		Traveller Information System (Internet)	
1.14	x	Internet, E-mail	$ 10,000
1.15	x	Notification to targeted groups:	
		Revised Transit Schedules/maps	
		Rideshare organizations	
	x	schools	
		organizations representing people with disabilities	
		bicycle organizations	
1.16		Include PA/CL/Consultant resources in WPS	
1.17		Commercial traffic reporters/feeds - e.g. brief Traffic Information people (TIP) group	
1.18		Insert SSP's	
		"A representative of the Contractor, at Superintendent level or higher, and authorized to commit the Contractor, shall attend and participate in all Public Awareness Campaign meetings. Time commitment for the meeting(s) varies from two to four hours per month."	
1.19		Others	
		Section 1 Total	$ 32,250
2	Traveller Information Strategies Project team needs to coordinate with Traffic Design!		
2.1		Existing Electronic Message Signs (Stationary) - list locations. See Note 5	
		New Installation (Stationary) - BEES 860532 CHANGEABLE MESSAGE SIGN SYSTEM - list locations. See Note 5	
2.2	x	Portable Changeable Message Signs (PCMS).BEES 128650	$ 50,000
		These PCMS advise motorists to divert at remote advance decision points - outside the usual work limits. Unlike stationary CMS, you are allowed to use them for advance motorist information - e.g. a week ahead. Their placement may need to be cleared **environmentally** so that they can be included in plans and SSP later. They may be **in addition** to Traffic Design's PCMS for regular traffic handling in and next to a work area.	

TMP Elements	EA #/ID#	1F260 / 0814000194	Date	4/24/2017

Placement Details: units to be placed in the direction of travel towards the closure at 1 mile and 1/2 mile before getting to the closure. Total No. of PCMSs needed is units for 6 months ( )= $

2.3 ☐ Lane Closure Web Site
2.4 ☐ Caltrans Highway Information Network (CHIN)
2.5 ☐ Radar Speed Message Sign (Spectre sign) BEES 066064 (approx. EA @ $30,000)
2.6 ☐ Bicycle and pedestrian information, e.g. Detour maps
2.7 ☐ Others

Section 2 Total	$ 50,000

3 Incident Management

3.1 CHP's Construction or Maintenance Zone Enhanced Enforcement Program – COZEEP or MAZEEP. BEES 066062 - show under "State or Agency furnished" in the Cost Estimate.

Make sure to consider the LC hours and add CHP driving time to/from their office

Day COZEEP: To protect active closures

# of days	hours/day	CHP vehicles	# of officers.	Rate/Hr.	
45	4	1	1	$ 95	$ 17,100

Night COZEEP: To protect active closures

# of nights		hours/night	CHP vehicles	# of officers. Nights need 2	Rate/Hr.	
45		8	1	2	$ 95	$ 68,400

3.2 BLANK

3.3 **Freeway Service Patrol (FSP) for Construction (CFSP)** $/hr/truck $55

BEES 066065 - show under "State or Agency furnished" in the Cost Estimate

Short duration or remote area CFSP usually is bid with much higher hourly rates. If enhancement of program FSP feasible, CFSP could tie into the lower long-term FSP rates.

	# of trucks	# of days	Hours per day	
A For service within the regular FSP hours				$0
For service outside the regular FSP hours				
B Extended Peak hour coverage				$0
C Night support during structure freeway closures and major traffic shifts				$0
D Weekend support				$0

Local agency (SAFE) support 8% $0
8% of truck cost

CFSP CHP support 5% $0
5% of truck cost only if within regular FSP and area

Equipment/Supplies 10% $0
% of truck cost unless more detail available

Consult with the Inland Empire division of CHP or the border division in the southern Riverside county to select the method which is acceptable for the B,C,D that are outside the regular FSP hours or area.
Method 1

TMP Elements	EA #/ID#	1F260 / 0814000194	Date	4/24/2017

CFSP/CHP support 20% $0

20% of truck cost or

CFSP Dispatcher @

# of days		# of nights	hours	# of FSP	Rate	# of FSP vehicles	
			0		$45		$ -
			0				

CFSP CHP Officers (See Cozeep rate)

# of days		# of nights	hours	# of officers	Rate	# of CHP vehicles	
0		0	0	1	45	0	$ -
0		0	0	2	0	0	$ -

☐ Cooperative Agreement or Task Order with SAFE
for $0

☐ Task Order with CHP (State-wide Master Agreement for FSP support).
for $0
Contact District FSP Coordinator for task orders.

☐ Service Contract
☐ Local Agency will arrange CFSP with SAFE
☐ Local Agency will arrange CFSP administration with CHP

3.3 Total $0

Section 3 Total	$ 85,500

4 Construction Strategies

Contact DTM, at 909-383-6262, to get Delay Calculations, Lane Requirement Charts (LRC), Table Z and Special events list. Inform DTM of any concerns/commitments Re special LC days, times, seasons, events; environmental restrictions; if work may be affected by snow and low or high temperatures. E.g. desert heat may delay AC dig out curing which may increase traffic impact when vehicles overheat in the queue; etc. IF traffic volumes vary significantly between seasons, consider 2 sets of LRCs to avoid CCOs.

4.1 This TMP presumes that work is planned as below. If different, TMP needs to be revised. The Lead Project Engineer is responsible to include all appropriate closure charts.

- [x] Off peak
- [x] Night
- [x] Weekend

4.2

- [ ] Flagging
- [x] Shoulder
- [x] Lane
- [x] Street
- [x] Ramp
- [ ] Connector*
- [ ] Extended Weekend Closures*
- [ ] Total Facility Closures*

*Consult with TMP developer and the DTM regarding Cozeep & other costs. Show your detour and traffic diversion plans.

CAUTION: If the Lane Requirement Chart (LRC) for full mainline closures, of one or both directions on a highway or freeway, does not show the maximum number of allowable closures, the PSE cannot be certified by DTM/TMP.

4.3 [x] Coordinate with adjacent construction and planned projects - also on detour routes.
Use SSP 07-850

4.4 ☐ BEES 066008 Incentives/Disincentives

4.5 ☐ Strictly enforce Constr. Progress Schedule (CPM)

4.6 ☐ Include Specification 12-220

☐ Funds for paragraph 11 and 12:

TMP Elements	EA #/ID#	1F260 / 0814000194	Date	4/24/2017

BEES 066022 (Traffic) Right of Way delay. Show in supplemental work. If State (or agency) denies an approved closure or orders the contractor an earlier pick up, this shall be used to pay damages, e.g. for AC cold load, etc.

4.7 [ ] 10-Min. Delay Penalty — Contact DTM at 909-838-6262 for 10 Min. Delay penalty Calculations. Note that Delay Penalty is different from the R/W Delay shown above!

4.8 [ ] Others

Section 4 Total $ -

5 Demand Management (DM)

Project team needs to coordinate with RCTC/SANBAG/CVAG

Traffic diversion may increase available work hours.

5.1 [x] A coop will be executed - mentioned in PSR or PR.

[ ] Instead of a coop, 15% is added to the cost of DM elements since the payment to the local agency will be routed through the contractor.

[ ] Instead of a coop, the local agency will make their own arrangements with RCTC/SANBAG.

[ ] PA/CL or local agency need to inform commuters through RCTC/SANBAG. Funds part of PA/CL.

5.2 [x] HOV Lanes/Ramps (New or Convert)

5.3 [ ] Park-and-Ride Lots

[ ] Leased spaces (Sponsored spaces may be feasible in exchange for signs and print coverage)

5.4 [ ] Parking Management/Pricing (Coordination with local agency is required)

5.5 [ ] BEES 066067 Rideshare Promotion

5.6 Rideshare Incentives -

Section 5 Total $ -

6 Alternate Route Strategies

Caution - signed detours may require environmental clearance. Traffic diversion may increase available work hours. Please work with Traffic Design.

6.1 [ ] Add Capacity to Freeway connector

6.2 [ ] Ramp Closures

6.3 [ ] Temporary Highway Lanes or Shoulder Use

6.4 [ ] Parking Restrictions

6.5 [x] Street Improvements

[x] State R/W - Signals, Widen, etc.

[x] Local R/W - Signals, Widen, etc. Coop or Permit may be needed

6.6 [ ] Local Street USE - Coop or Permit may be needed

6.7 [ ] Traffic Control Officers (see 3.1 Cozeep)

6.8 [ ] Signed detour - using State routes

6.9 [ ] Signed detour - using local streets and roads

6.10 [x] Adjust signals

6.11 [ ] Temporary bicycle or pedestrian facilities

6.12 [ ] Others

Section 6 Total $ -

7 Other Strategies

7.1 [ ] Application of new technology

7.2 [ ] Innovative products

7.3 [ ] Others

Section 7 Total $ -

SWDR Signed Cover Sheet

Attachment H

Dist-County-Route: 08-SBD-60
Post Mile Limits: R7.83/R7.91
Type of Work: Interchange Improvement
Project ID (EA): 0814000194 (1F2600)
Program Identification: 800.100 (HE11)
Phase: ☐ PID ☒ PA/ED ☐ PS&E

Regional Water Quality Control Board(s): Santa Ana Regional Water Quality Control Board
Total Disturbed Soil Area: 6.60 ac Post Construction Treatment Area: 2.29 ac
Alternative Compliance (acres): Not Applicable (An excess of 0.45 acres is available for other projects within the same watershed to use)
Estimated Const. Start Date: 7/1/2019 Estimated Const. Completion Date: 05/31/2021
Risk Level: RL 1 ☐ RL 2 ☒ RL 3 ☐ WPCP ☐ Other: _____
Is the Project within a TMDL watershed? Yes ☐ No ☒
TMDL Compliance Units (acres): 0
Notification of ADL reuse (if yes, provide date): Yes ☐ Date: TBD at PS&E 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.

Jacqueline Hernandez, Registered Project Engineer — 12/6/17 Date

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

Rafih Achy, Project Manager — 12/15/17 Date

Leonard Estrella, Designated Maintenance Representative — 12/18/2017 Date

Rose Bishop, Designated Landscape Architect Representative — 12/18/2017 Date

[Stamp Required at PS&E only]
Jon Bumps, District Storm Water Coordinator — 12/19/17 Date

AN
12/19/2017

Risk Register

Attachment I

LEVEL 1 - RISK REGISTER		Project Name:	Archibald Ave Improvement Project			DIST- EA	1F2600	Project Manager	Rafih Achy		
Risk Identification						Risk Rating		Risk Response			
Status	ID #	Type	Category	Title	Risk Statement	Current status/assumptions	Priority Rating	Rationale for Rating	Strategy	Response Actions	Risk Owner	Updated
Active	1	Threat	PM	Schedule Delay	As a result of the Overlapping Schedule, delays and schedule difficulties may occur, which would lead to a delay in the completion of the PID phase.	Team has bought in to schedule.	Low		Mitigate		Consultant Team	6/9/2017
Active	2	Threat	Design	Nonstandard Lane Width	As a result of the limited width on Archibald, Caltrans rejection of non-standard lanes may occur, which would lead to a delay in the completion of the project.	To avoid structure replacement, this acceptance is critical.	High	Non-standard lanes should be acceptable, but the impact would be very high if they get accepted.	Mitigate		Consultant Team	6/9/2017
Active	3	Threat	ROW	Right of Way Impacts	As a result of widening, ROW acquisition along Archibald will occur, which could lead to a complete project rescope and delay.	Retaining walls may be used in certain locations to mitigate impacts.	Medium		Avoid		Consultant Team	6/9/2017
Active	4	Threat	ROW	Driveways	As a result of widening, significant driveway impacts may occur that affect business access, which would lead to a complete project rescope and delay.	An Open House took place on 5/24/17 for the public to provide their comments and concerns. Business owners were shown driveway improvements for the first time and will continue to kept in the loop throughout the design phase. Driveways impacts are not substantial in the current design.	Low		Avoid		Consultant Team	6/9/2017
Active	5	Threat	ROW	Right of Way Acquisition Delays	As a result of property acquisitions required from adjacent properties, acquisition delays may occur, which would lead to overall project delays.	Right of way schedule is on track.	Medium		Mitigate	Resolve objections to Right of Way acquisition in a timely manner.	Project Manager	6/9/2017
Active	6	Threat	Construction	Utility Relocation Difficulties	As a result of relocating utilities, delays in coordination with utility companies may occur, which would lead to overall project delays or increase in project cost.	Utilities impacts have been idetified and are minimal to the project schedule/cost.	Medium	Utility coordination challenges have a moderate probability with moderate impacts to project.	Mitigate	Proactively coordinate with utility agency to find solution and/or agreement.	Project Manager	6/9/2017
Active	7	Threat	Design	Design Constraints	As a result of unanticipated right of way or other physical constraints, supplemental design exceptions may occur, which would lead to overall project delays or increase in project cost.	Design is currently at 30% completion with only one build alternative. There is low risk of the geometry changing.	Low	Unanticipated design exceptions have a moderate probability, the impacts to the project are moderate.	Mitigate	Develop fact sheets to apply for design exceptions, otherwise change design to avoid design exceptions.	Project Manager	6/9/2017
Active	8	Threat	Environmental	Environmental Regulation Changes	As a result of changes made to environmental regulations, plan changes may occur, which would lead to overall project delays or increase in project cost.	It is confirmed that the project will proceed as a CE/CE. The PA/ED phase will be completed by the end of 2017 and changes in regulations are not expected to happen in the short time period.	Medium		Accept	Understand environmental impacts due to change, update design and supporting documents in a timely fashion.	Project Manager	6/9/2017
Active	9	Threat	Design	Public Support	As a result of public and stakeholder input, project scope changes may occur, which would lead to overall project delays or increase in project cost.	An Open House has been hosted inviting the public to provide their comment and concerns. Public showed low interest of concern for the project.	Low	Major scope changes have a low probability, with a high impact.	Accept	Redevelop design based on scope change, and understand next steps to get project back on track.	Project Manager	6/9/2017
Active	10	Threat	Design	Design Exceptions	Design exceptions are not approved in the PA/ED phase, which would lead to increase to overall project cost and schedule	Design exceptions have been reviewed in May 2017 and no discussion was made about eliminating a design exception.	High		Accept		Project Manager	6/9/2017
Active	11	Threat	Environmental	Jurisdictional Delineation	Channel along WB on-ramp is identified as water of the state, leading to additional coordination with the state, which would lead to overall project delays and increase in project cost.	The 30% design is not impacting the channel.	Medium		Accept		Project Manager	6/9/2017

Project Development Category Agreement

Attachment J

October 13, 2017

Ms. Christy Connors
Deputy District Director
Caltrans, District 8
464 W. 4th Street
San Bernardino, CA 92401

Dear Ms. Connors,

Subject: Archibald Avenue Improvements Project (EA 1F260)
Project Category Assignment

The San Bernardino County Transportation Authority (SBCTA) is seeking approval for assignment of the Archibald Avenue Improvements Project to Category 5, minimal economic, social or environmental significant, in accordance with requirements in Chapter 8, Section 5 of the Caltrans Project Development Procedures Manual.

The project proposes modifications to the existing tight diamond interchange, including the following improvements to Archibald Avenue and the SR-60 ramps:

- Additional left-turn lanes in each direction
- Additional right-turn pockets approaching the eastbound and westbound on ramps
- Extended left lane storage length south of the interchange for northbound traffic accessing the westbound on ramp
- Standard sidewalk widths and ADA compliant curb ramps

The project qualifies for a Categorical Exemption (CE) under the California Environmental Quality Act.

Should you need any additional information, please contact Andrea Nieto, Project Manager, at (909) 884-8276.

Sincerely,

Paula Beauchamp
Director of Project Delivery

Cc: Du Lu, Caltrans
Rafih Achy, Caltrans
Louis Abi-Younes, City of Ontario

Approved:

DL
Christy Connors
Deputy District Director
Design

10/18/17
Date