Attachment A

Project Title: US 101 HOV Widening Project-Route 12 to Steele Lane

Project Summary for Air Quality Conformity Task Force Meeting: August 2013

Description

- Project will widen US 101 from 4 to 6 lanes for High Occupancy Vehicles (HOV)
- On Northbound 101, construct a collector-distributor road between Route 12 and 3rd Street.
- On both NB and SB 101 widen Route 101 to provide an auxiliary land between College Ave. and Steele Lane.
- Replace the existing Sonoma Ave. Pedestrian Overcrossing with a Pedestrian Undercrossing at the Santa Rosa Creek Bridge.
- Construct a new undercrossing at 6th Street.
- Widen both the northbound and southbound College Ave. off-ramps to increase traffic storage capacity at the intersection with College Ave.
- Slightly realign SB Steele Lane on-ramp to accommodate the Route 101 widening
- Extend the existing SB auxiliary lane between College Avenue and downtown Santa Rosa exit to Route 12.
- Modify on-ramps to accommodate ramp metering.
- Local street improvements: widen 3rd Street to allow for future bicycle lanes; connect 6th Street between Davis and Morgan Streets; widen College Ave. between Morgan Street and Cleveland Ave.

Background

- NEPA process for Environmental Assessment/Environmental Impact Report (EA/EIR) was completed in 2003
- A revalidation was done in March 2010 (The environmental revalidation applied strictly to the College Avenue scope changes because the freeway HOV improvements were already built.)
- All of the project has been completed, except for the widening of College Ave.
- Federal funds are being sought for the College Ave. widening, triggering the requirement of a $PM_{2.5}$ hot-spot analysis

Not a Project of Air Quality Concern (40 CFR 93.123(b)(1))

(i) New or expanded highway projects with significant number/increase in diesel vehicles?

- No change in truck percentages on US 101
- Total truck volumes are far below 10,000 AADT for all segments and only increase due to an overall increase in total traffic due to growth.

(ii) Affects intersections at LOS D, E, or F with a significant number of diesel vehicles?

- Diesel vehicles represent 2.97% of intersection traffic volume
- The College Ave. ramps show improvement to LOS's for both years 2014 and 2035
- No project changes to land use that would affect diesel traffic percentages
-

(iii) New bus and rail terminals and transfer points?—Not Applicable

(iv) Expanded bus and rail terminals and transfer points?—Not Applicable

(v) Affects areas identified in PM_{10} or $PM_{2.5}$ implementation plan as site of violation?

- The state implementation plan for $PM_{2.5}$ has not been approved yet
- Therefore, not identified in plan as an area of potential violation

$PM_{2.5}$ Project Assessment Form for Interagency Consultation

RTIP ID# 230689

TIP ID# SON 110001

Air Quality Conformity Task Force Consideration Date
August 2013

Project Description *(clearly describe project)*

- Project will widen US 101 from 4 to 6 lanes for High Occupancy Vehicles (HOV)
- On Northbound 101, construct a collector-distributor road between Route 12 and 3rd Street.
- On both NB and SB 101 widen Route 101 to provide an auxiliary lane between College Ave. and Steele Lane.
- Replace the existing Sonoma Ave. Pedestrian Overcrossing with a Pedestrian Undercrossing at the Santa Rosa Creek Bridge.
- Construct a new undercrossing at 6th Street.
- Widen both the northbound and southbound College Ave. off-ramps to increase traffic storage capacity at the intersection with College Ave.
- Slightly realign the SB Steele Lane on-ramp to accommodate the Route 101 widening.
- Extend the existing SB auxiliary lane between College Avenue and the downtown Santa Rosa exit to Route 12.
- Modify on-ramps to accommodate ramp metering.
- Local street improvements: widen 3rd Street to allow for future bicycle lanes; connect 6th Street between Davis and Morgan Streets; widen College Ave. between Morgan Street and Cleveland Ave.

Type of Project:
Change to existing State highway

County	**Narrative Location/Route & Postmiles 19.5-22.2** **Caltrans Projects – EA#** 245441
SON	

Lead Agency: Solano County Transportation Authority (SCTA)

Contact Person	**Phone#**	**Fax#**	**Email**
Seanna Gause	707-565-5372		sgause@sctainfo.org

Federal Action for which Project-Level PM Conformity is Needed *(check appropriate box)*

Categorical Exclusion (NEPA)	**EA or Draft EIS**	**FONSI or Final EIS**	X **PS&E or Construction**	**Other**

Scheduled Date of Federal Action: October 2013

NEPA Delegation – Project Type (None apply)

Exempt	**Section 6004 – Categorical Exemption**	**Section 6005 – Non-Categorical Exemption**

Current Programming Dates *(as appropriate)*

	PE/Environmental	**ENG**	**ROW**	**CON**
Start	11/99	5/04	5/04	10/13
End	12/31/03 & 3/24/10	5/17/13	4/24/13	11/14

Project Assessment Form for $PM_{2.5}$ Interagency Consultation

Project Purpose and Need (Summary): *(please be brief)* The 101 corridor connects San Francisco and the East Bay with Marin County and the rapidly-growing Sonoma and Mendocino Counties. The corridor is increasingly congested and addressing the interchange operational inefficiencies at this location is vital to Sonoma County, as growth continues throughout the region.
Surrounding Land Use/Traffic Generators *(especially effect on diesel traffic)* The project runs through the City of Santa Rosa and is surrounded by residential and commercial land uses. College Avenue is a city street that runs through a commercial district.
Brief summary of assumptions and methodology used for conducting analysis Truck percentages are taken from 2009 Annual Average Daily Truck Traffic on the California State Highway System (December 2010). Association of Bay Area Governments land use forecasts show no change in land use for the project area, so truck percentages are predicted to remain constant. Total volumes are based on a regional transportation demand model for Sonoma county.

$PM_{2.5}$ Project Assessment Form for Interagency Consultation

Opening Year: If facility is a highway or street, Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

2014 No-Build				
Segment	Direction	AADT total traffic	AADT 2-Axle	% 2-Axle
Son 101 mainline–Route 12 to 3rd	NB	76,916	1,717	2.23
Son 101 mainline–3rd-5th St. to College Ave.	NB	75,874	1,693	2.23
Son 101 mainline–College Ave. to Steele Lane	NB	75,990	1,696	2.23
Son 101 mainline–Route 12 to 3rd	SB	63,500	1,417	2.23
Son 101 mainline–3rd-5th St. to College Ave.	SB	79,127	1,766	2.23
Son 101 mainline–College Ave. to Steele Lane	SB	77,208	1,723	2.23
College Ave. Off-ramp	NB	9,661	216	2.23
College Ave. On-ramp	NB	10,071	225	2.23
College Ave. Off-ramp	SB	8,751	195	2.23
College Ave. On-ramp	SB	12,513	279	2.23
2014 Build				
Segment	Direction	AADT total traffic	AADT 2-Axle	% 2-Axle
Son 101 mainline–Route 12 to 3rd	NB	66,857	1,492	2.23
Son 101 mainline–3rd-5th St. to College Ave.	NB	75,874	1,857	2.23
Son 101 mainline–College Ave. to Steele Lane	NB	75,990	1,862	2.23
Son 101 mainline–Route 12 to 3rd	SB	63,500	1,510	2.23
Son 101 mainline–3rd-5th St. to College Ave.	SB	79,127	1,937	2.23
Son 101 mainline–College Ave. to Steele Lane	SB	77,208	1,893	2.23
College Ave. Off-ramp	NB	9,141	204	2.23
College Ave. On-ramp	NB	9,495	212	2.23
College Ave. Off-ramp	SB	8,779	196	2.23
College Ave. On-ramp	SB	12,581	281	2.23

Project Assessment Form for $PM_{2.5}$ Interagency Consultation

2014 No-Build				
Segment	Direction	AADT total traffic	AADT 3-Axle & Above	% 3-Axle & Above
Son 101 mainline–Route 12 to 3rd	NB	76,916	2,283	2.97
Son 101 mainline–3rd-5th St. to College Ave.	NB	75,874	2,252	2.97
Son 101 mainline–College Ave. to Steele Lane	NB	75,990	1,696	2.97
Son 101 mainline–Route 12 to 3rd	SB	63,500	1,417	2.97
Son 101 mainline–3rd-5th St. to College Ave.	SB	79,127	1,766	2.97
Son 101 mainline–College Ave. to Steele Lane	SB	77,208	1,723	2.97
College Ave. Off-ramp	NB	9,661	287	2.97
College Ave. On-ramp	NB	10,071	299	2.97
College Ave. Off-ramp	SB	8,751	260	2.97
College Ave. On-ramp	SB	12,513	279	2.97
2014 Build				
Segment	Direction	AADT total traffic	AADT 3-Axle & Above	% 3-Axle & Above
Son 101 mainline–Route 12 to 3rd	NB	66,857	1,984	2.97
Son 101 mainline–3rd-5th St. to College Ave.	NB	83,412	2,470	2.97
Son 101 mainline–College Ave. to Steele Lane	NB	83,418	2,476	2.97
Son 101 mainline–Route 12 to 3rd	SB	67,655	2,008	2.97
Son 101 mainline–3rd-5th St. to College Ave.	SB	86,808	2,577	2.97
Son 101 mainline–College Ave. to Steele Lane	SB	84,819	2,518	2.97
College Ave. Off-ramp	NB	9,141	271	2.97
College Ave. On-ramp	NB	9,495	282	2.97
College Ave. Off-ramp	SB	8,779	261	2.97
College Ave. On-ramp	SB	12,581	373	2.97

$PM_{2.5}$ Project Assessment Form for Interagency Consultation

2014 Level of Service (LOS)					
Segment	Direction	No-Build		Build	
		AM	PM	AM	PM
Son 101 mainline–Route 12 off-ramp to 3rd-5th St. on-ramp	NB	F	F	C	C
Son 101 mainline–3rd-5th St. on-ramp to College Ave. off-ramp	NB	F	F	C	C
Son 101 mainline–College Ave. off-ramp to College Ave. on-ramp	NB	F	E	D	D
Son 101 mainline–College Ave. on-ramp to Steele Lane off-ramp	NB	E	D	C	F
Son 101 mainline–Steele Lane off-ramp to Steele Lane on-ramp	NB	C	C	C	E
Son 101 mainline–Steele Lane off-ramp to Steele Lane on-ramp	SB	E	F	F	E
Son 101 mainline–Steele Lane on-ramp to College Ave. off-ramp	SB	D	E	F	C
Son 101 mainline–College Ave. off-ramp to College Ave. on-ramp	SB	C	D	F	F
Son 101 mainline–College Ave. on-ramp to 3rd-5th St. off-ramp	SB	F	C	F	F
Son 101 mainline–3rd-5th St. off-ramp to Route 12 off-ramp	SB	F	D	F	F
Son 101 mainline–Route 12 off-ramp to WB Route 12 on-ramp	SB	F	C	F	F
Son 101 mainline–WB Route 12 on-ramp to EB Route 12 on-ramp	SB	F	D	F	F
College Ave./Route 101 Ramps	NB	D	F	B	B
College Ave./Route 101 Ramps	SB	C	D	B	B

Project Assessment Form for $PM_{2.5}$ Interagency Consultation

RTP Horizon Year / Design Year: If facility is a highway or street, Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

2035 No-Build				
Segment	Direction	AADT total traffic	AADT 2-Axle	% 2-Axle
Son 101 mainline–Route 12 to 3rd	NB	85,331	1,904	2.23
Son 101 mainline–3rd-5th St. to College Ave.	NB	81,709	1,824	2.23
Son 101 mainline–College Ave. to Steele Lane	NB	81,256	1,813	2.23
Son 101 mainline–Route 12 to 3rd	SB	74,143	1,655	2.23
Son 101 mainline–3rd-5th St. to College Ave.	SB	91,669	2,046	2.23
Son 101 mainline–College Ave. to Steele Lane	SB	90,015	2,009	2.23
College Ave. Off-ramp	NB	11,446	255	2.23
College Ave. On-ramp	NB	11,408	255	2.23
College Ave. Off-ramp	SB	10,327	230	2.23
College Ave. On-ramp	SB	14,150	316	2.23
2035 Build				
Segment	Direction	AADT total traffic	AADT 2-Axle	% 2-Axle
Son 101 mainline–Route 12 to 3rd	NB	75,809	1,692	2.23
Son 101 mainline–3rd-5th St. to College Ave.	NB	93,118	2,078	2.23
Son 101 mainline–College Ave. to Steele Lane	NB	94,275	2,104	2.23
Son 101 mainline–Route 12 to 3rd	SB	81,159	1,811	2.23
Son 101 mainline–3rd-5th St. to College Ave.	SB	103,013	2,299	2.23
Son 101 mainline–College Ave. to Steele Lane	SB	101,601	2,268	2.23
College Ave. Off-ramp	NB	10,368	231	2.23
College Ave. On-ramp	NB	11,757	262	2.23
College Ave. Off-ramp	SB	10,972	245	2.23
College Ave. On-ramp	SB	14,696	328	2.23

$PM_{2.5}$ Project Assessment Form for Interagency Consultation

2035 No-Build				
Segment	Direction	AADT total traffic	AADT 3-Axle & Above	% 3-Axle & Above
Son 101 mainline–Route 12 to 3rd	NB	85,331	2,533	2.97
Son 101 mainline–3rd-5th St. to College Ave.	NB	81,709	2,425	2.97
Son 101 mainline–College Ave. to Steele Lane	NB	81,256	2,412	2.97
Son 101 mainline–Route 12 to 3rd	SB	74,143	2,201	2.97
Son 101 mainline–3rd-5th St. to College Ave.	SB	91,669	2,721	2.97
Son 101 mainline–College Ave. to Steele Lane	SB	90,015	2,672	2.97
College Ave. Off-ramp	NB	11,446	340	2.97
College Ave. On-ramp	NB	11,408	339	2.97
College Ave. Off-ramp	SB	10,327	307	2.97
College Ave. On-ramp	SB	14,150	420	2.97
2035 Build				
Segment	Direction	AADT total traffic	AADT 3-Axle & Above	% 3-Axle & Above
Son 101 mainline–Route 12 to 3rd	NB	75,809	2,250	2.97
Son 101 mainline–3rd-5th St. to College Ave.	NB	93,118	2,764	2.97
Son 101 mainline–College Ave. to Steele Lane	NB	94,275	2,798	2.97
Son 101 mainline–Route 12 to 3rd	SB	81,159	2,409	2.97
Son 101 mainline–3rd-5th St. to College Ave.	SB	103,013	3,058	2.97
Son 101 mainline–College Ave. to Steele Lane	SB	101,601	3,016	2.97
College Ave. Off-ramp	NB	10,368	308	2.97
College Ave. On-ramp	NB	11,757	349	2.97
College Ave. Off-ramp	SB	10,972	326	2.97
College Ave. On-ramp	SB	14,696	436	2.97

Project Assessment Form for $PM_{2.5}$ Interagency Consultation

2035 Level of Service (LOS)					
Segment	Direction	No-Build		Build	
		AM	PM	AM	PM
Son 101 mainline–Route 12 off-ramp to 3rd-5th St. on-ramp	NB	F	F	F	C
Son 101 mainline–3rd-5th St. on-ramp to College Ave. off-ramp	NB	F	F	F	C
Son 101 mainline–College Ave. off-ramp to College Ave. on-ramp	NB	F	F	E	E
Son 101 mainline–College Ave. on-ramp to Steele Lane off-ramp	NB	E	E	D	D
Son 101 mainline–Steele Lane off-ramp to Steele Lane on-ramp	NB	C	C	D	D
Son 101 mainline–Steele Lane off-ramp to Steele Lane on-ramp	SB	F	F	F	F
Son 101 mainline–Steele Lane on-ramp to College Ave. off-ramp	SB	E	F	F	F
Son 101 mainline–College Ave. off-ramp to College Ave. on-ramp	SB	D	F	F	F
Son 101 mainline–College Ave. on-ramp to 3rd-5th St. off-ramp	SB	F	F	F	F
Son 101 mainline–3rd-5th St. off-ramp to Route 12 off-ramp	SB	F	F	F	F
Son 101 mainline–Route 12 off-ramp to WB Route 12 on-ramp	SB	F	F	F	F
Son 101 mainline–WB Route 12 on-ramp to EB Route 12 on-ramp	SB	F	F	F	F
College Ave./Route 101 Ramps	NB	F	F	B	D
College Ave./Route 101 Ramps	SB	D	F	B	C

$PM_{2.5}$ Project Assessment Form for Interagency Consultation

Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT
NA

RTP Horizon Year / Design Year: If facility is an interchange (s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT
NA

Opening Year: If facility is a bus, rail or intermodal facility/terminal/transfer point, # of bus arrivals for Build and No Build, % and # of bus arrivals will be diesel buses
NA

RTP Horizon Year / Design Year: If facility is a bus, rail or intermodal facility/terminal/transfer point, # of bus arrivals for Build and No Build, % and # of bus arrivals will be diesel buses
NA

Describe potential traffic redistribution effects of congestion relief *(impact on other facilities)*
Route 101 is the main corridor for travel between Sonoma County and the San Francisco Bay area. No other alternatives exist for shipping long distances between the counties. The lanes being added are for high occupancy vehicles. It is not expected that the project will increase diesel traffic or change the percentage of diesel vehicles. Increases in diesel traffic, and traffic in general, are due to predicted growth.

Comments/Explanation/Details *(please be brief)*
Not a Project of Air Quality Concern (40 CFR 93.123(b)(1))

(i) New or expanded highway projects with significant number/increase in diesel vehicles?
- No change in truck percentages on US 101
- Total truck volumes are far below 10,000 AADT for all segments and only increase due to an overall increase in total traffic due to growth.

(ii) Affects intersections at LOS D, E, or F with a significant number of diesel vehicles?
- Diesel vehicles represent 2.97% of intersection traffic volume
- The College Ave. ramps show improvement to LOS's for both years 2014 and 2035
- No project changes to land use that would affect diesel traffic percentages

(iii) New bus and rail terminals and transfer points?—Not Applicable

(iv) Expanded bus and rail terminals and transfer points?—Not Applicable

(v) Affects areas identified in PM_{10} or $PM_{2.5}$ implementation plan as site of violation?
- The state implementation plan for $PM_{2.5}$ has not been approved yet
- Therefore, not identified in plan as an area of potential violation

SONOMA 101 WIDENING

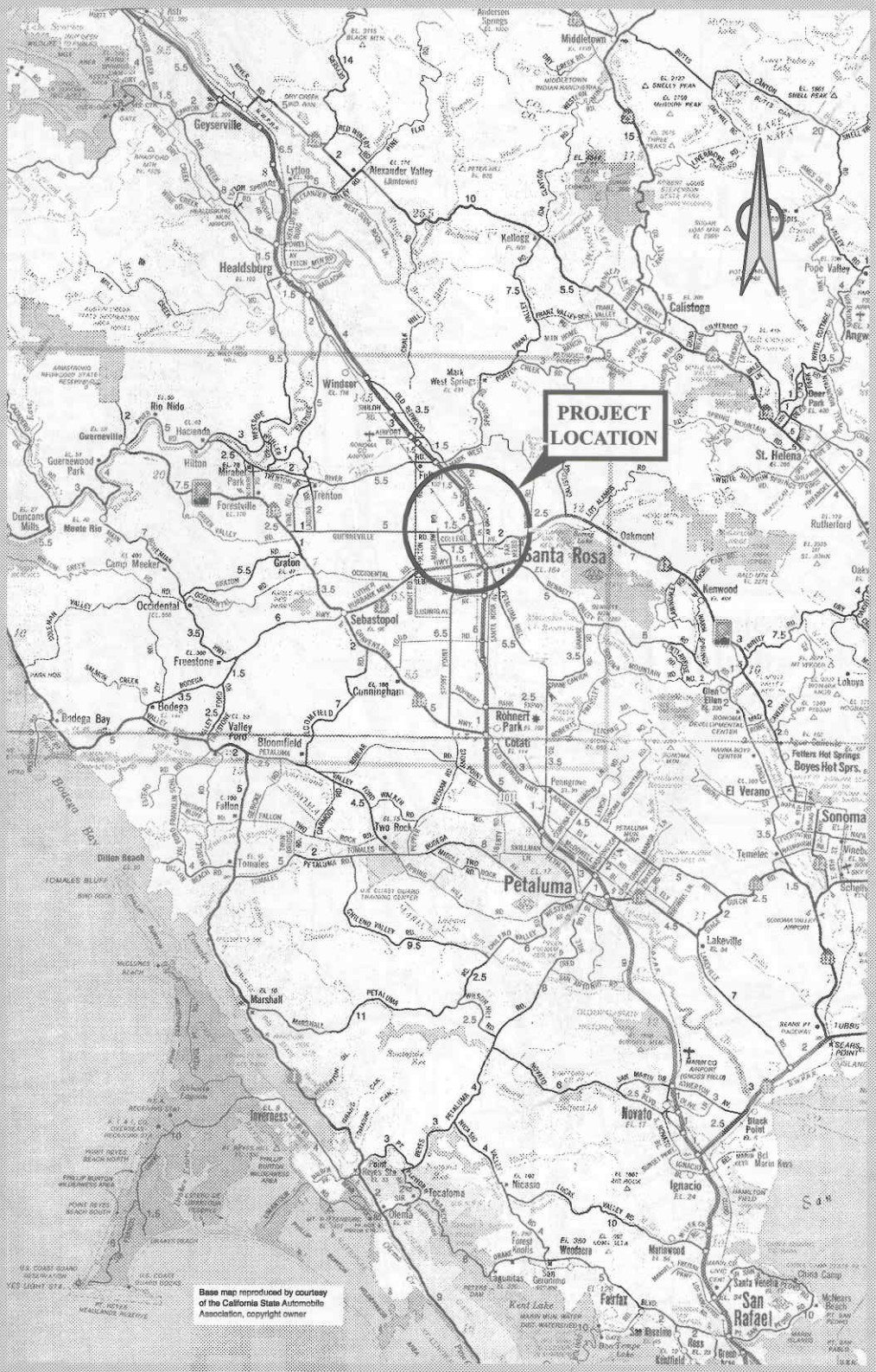


Figure 1-1: Project Vicinity

Caltrans

AudioVisual Multimedia Graphics CT1179 08/2002

SONOMA 101 WIDENING

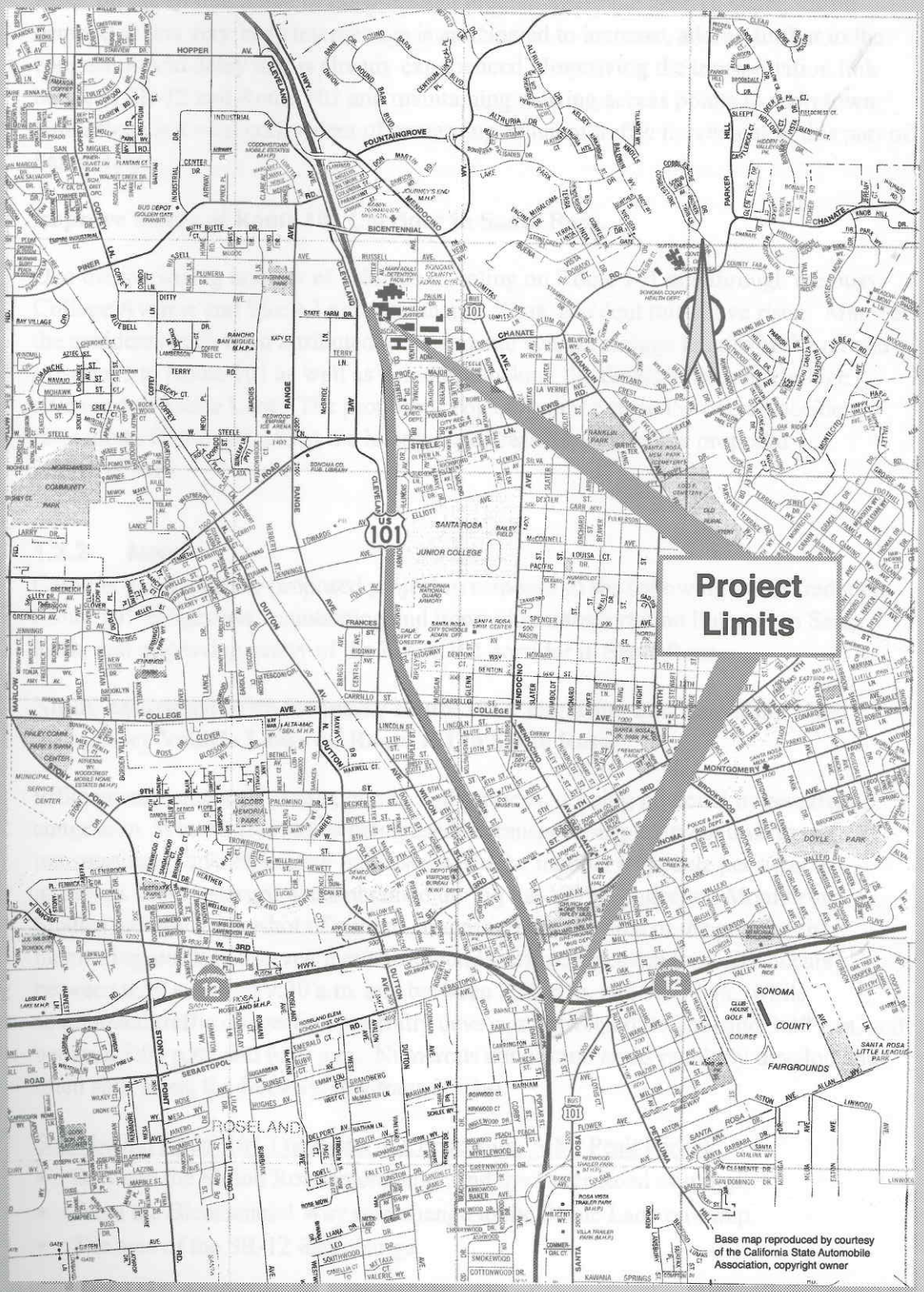


Figure 1-2: Project Location

Caltrans

AudioVisual Multimedia Graphics CT1179 08/2002

SONOMA 101 WIDENING

ROUTE 101 HOV WIDENING - ROUTE 12 TO STEELE LANE

LEGEND

- New Highway Pavement
- New Ramps
- New Shoulder (Roadway)
- New Structures (Bridges)
- New Sidewalks
- New Soundwalls

Caltrans

A/V GRAPHICS CT1179 06/2003

College Avenue Work to be Completed

All of the work has been completed on the project with the exception of widening work under the structure on College Avenue. The current configuration under the structure is 2 through lanes and one left turn lane in the eastbound direction, and 2 through lanes and 2 left turn lanes in the westbound direction. The final configuration will be 2 through lanes and 2 left turn lanes in the eastbound direction, and 3 through lanes and 2 left turn lanes in the westbound direction. All of the lanes will merge back into 2 lanes in each direction at the adjacent intersection.

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Son	101	33.3		

REGISTERED CIVIL ENGINEER 2/22/13 DATE

PLANS APPROVAL DATE

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

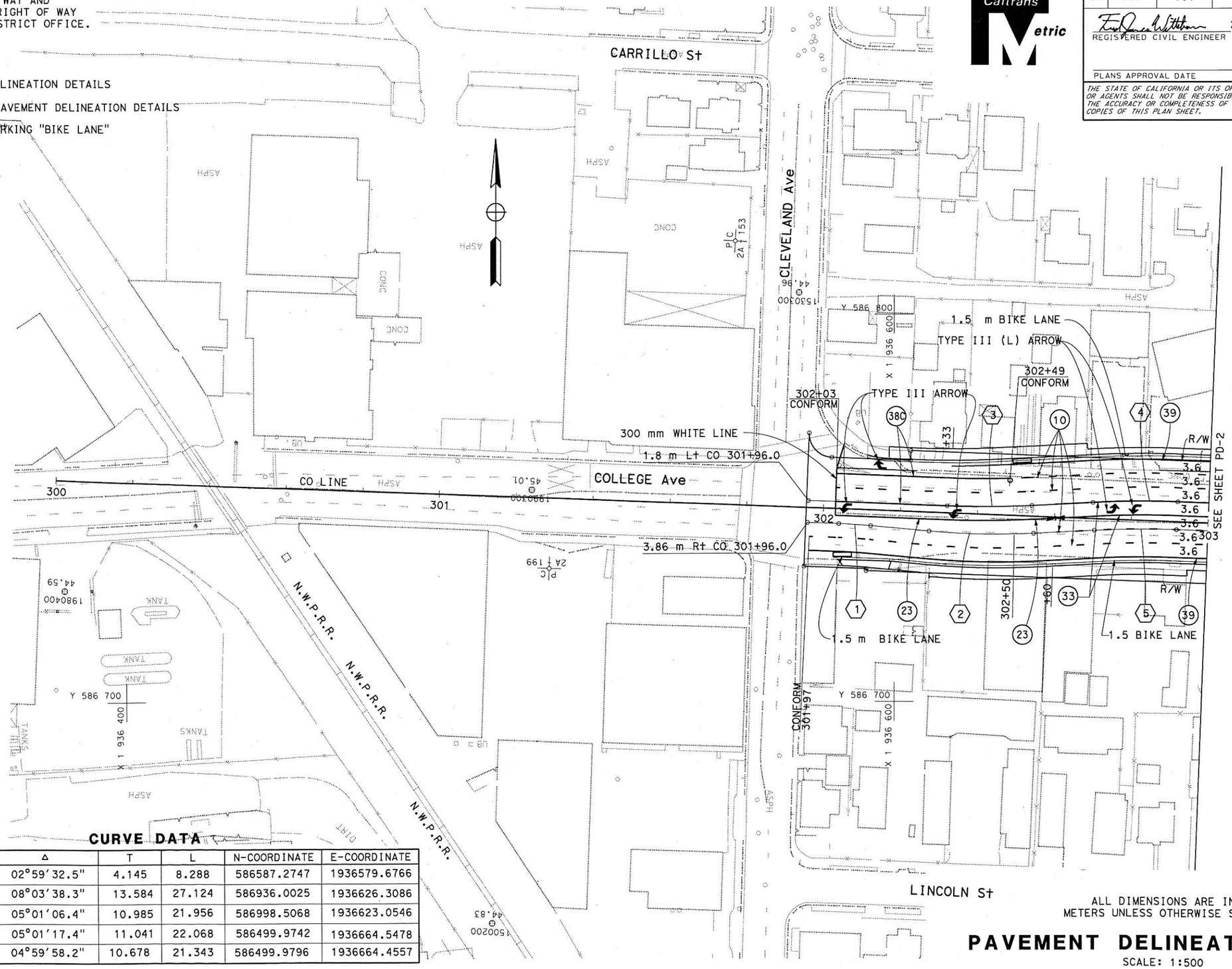
REGISTERED PROFESSIONAL ENGINEER Fred J. Witteborn No. 56272 Exp. 12-31-14 CIVIL STATE OF CALIFORNIA

Caltrans Metric

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

LEGEND:

- (No.) PAVEMENT DELINEATION DETAILS
- CHANGE OF PAVEMENT DELINEATION DETAILS
- PAVEMENT MARKING "BIKE LANE"
- DELINEATOR
- (No.) CURVE DATA



CURVE DATA

No.	R	Δ	T	L	N-COORDINATE	E-COORDINATE
1	244.603	02°59′32.5"	4.145	8.288	586587.2747	1936579.6766
2	192.800	08°03′38.3"	13.584	27.124	586936.0025	1936626.3086
3	248.200	05°01′06.4"	10.985	21.956	586998.5068	1936623.0546
4	251.800	05°01′17.4"	11.041	22.068	586499.9742	1936664.5478
5	244.601	04°59′58.2"	10.678	21.343	586499.9796	1936664.4557

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

PAVEMENT DELINEATION PLAN

SCALE: 1:500

THIS PLAN ACCURATE FOR PAVEMENT DELINEATION WORK ONLY

PD-1

CALCULATED-DESIGNED BY	FRED J. WITTEBORN
CHECKED BY	JONATHAN LEE
REVISED BY	FJW
DATE REVISED	2/13/13
FUNCTIONAL SUPERVISOR	JONATHAN LEE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans DESIGN

LAST REVISION 02-14-13 | DATE PLOTTED => 27-FEB-2013 | TIME PLOTTED => 13:59:24

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Son	101	33.3		

REGISTERED CIVIL ENGINEER 2/22/13 DATE

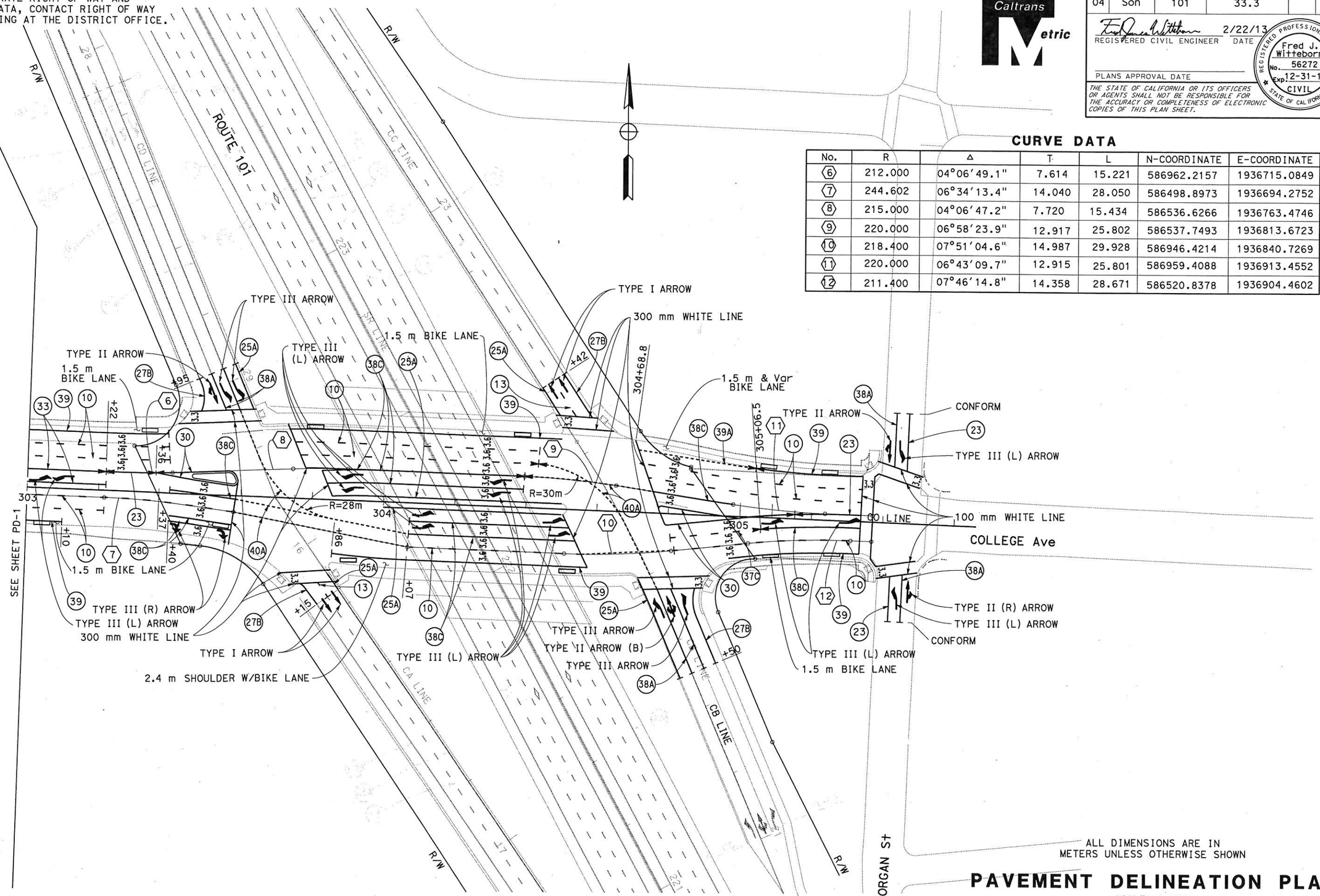
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER Fred J. Witteborn No. 56272 Exp. 12-31-14 CIVIL STATE OF CALIFORNIA

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

Caltrans Metric

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



CURVE DATA

No.	R	Δ	T	L	N-COORDINATE	E-COORDINATE
6	212.000	04°06'49.1"	7.614	15.221	586962.2157	1936715.0849
7	244.602	06°34'13.4"	14.040	28.050	586498.8973	1936694.2752
8	215.000	04°06'47.2"	7.720	15.434	586536.6266	1936763.4746
9	220.000	06°58'23.9"	12.917	25.802	586537.7493	1936813.6723
10	218.400	07°51'04.6"	14.987	29.928	586946.4214	1936840.7269
11	220.000	06°43'09.7"	12.915	25.801	586959.4088	1936913.4552
12	211.400	07°46'14.8"	14.358	28.671	586520.8378	1936904.4602

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

PAVEMENT DELINEATION PLAN

SCALE: 1:500

THIS PLAN ACCURATE FOR PAVEMENT DELINEATION WORK ONLY

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

PD-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans DESIGN

FUNCTIONAL SUPERVISOR: JONATHAN LEE

CALCULATED-DESIGNED BY: FRED J. WITTEBORN

CHECKED BY: JONATHAN LEE

REVISED BY: FJW

DATE REVISED: 2/13/13

LAST REVISION 02-14-13 DATE PLOTTED => 27-FEB-2013 TIME PLOTTED => 13:54

LAST REVISION 02-13-13 DATE PLOTTED => 27-FEB-2013 TIME PLOTTED => 13:54