

INFORMATION HANDOUT

2025 Pavement Management Project

PROJECT MAPS AND DETAILS

Road List

Vicinity Maps

Applicable Standard Plans and Details

PERMITS

CEQA Notice of Exemption (Categorical Exemption)

Caltrans Encroachment Permit for work within Caltrans ROW

2025 Pavement Management Project - Roads List					
Road Name	BegLocation	EndLocation	District	Treatment	Length (mi)
MARGARET AVE	MCGREGOR DR	MAR VISTA AV	2	3-Layer Seal w/ 5% Digouts	0.06
GERTRUDE AVE	MAR VISTA DR	MAR VISTA AV	2	3-Layer Seal w/ 5% Digouts	0.12
LAVERNE AV	MAR VISTA AV	MAR VISTA DR	2	3-Layer Seal w/ 5% Digouts	0.12
HARRIET AV	MAR VISTA AV	MAR VISTA DR	2	3-Layer Seal w/ 2% Digouts and 576 SF of SAMI w/ 1.5" OL	0.12
HARRIET AV	MAR VISTA AV	ORD ST	2	Rubber Capeseal w/ 5% Digouts	0.06
ORD ST	HARRIET AV	MAR VISTA AV	2	1.5"OL	0.12
SEACLIFF DR	MAR VISTA DR	600' W/O MAR VISTA DR	2	3-Layer Seal w/ 3% Digouts and 15,898 SF of SAMI w/ 1.5" OL	0.50
SEACLIFF DR	500' E/O CROSS WY	END	2	3-Layer Seal w/ 2% Digouts and 8,919 SF of SAMI w/ 1.5" OL	0.10
MAR VISTA AV	MARGARET AV	HARRIET AV	2	Rubber Capeseal w/ 2% Digouts and 1.5" AC Leveling	0.15
PINE ST	MAR VISTA DR	N END	2	3-Layer Seal w/ 2% Digouts and 13,299 SF of SAMI w/ 1.5" OL	0.30
POPLAR ST	MAPLE ST	MAR VISTA DR	2	3-Layer Seal w/ 5% Digouts	0.04
POPLAR CT	POPLAR ST	N END	2	3-Layer Seal w/ 5% Digouts	0.17
MAPLE ST	W SEACLIFF DR	POPLAR ST	2	3-Layer Seal w/ 2% Digouts and 15,525 SF of SAMI w/ 1.5" OL	0.30
CEDAR ST	MAR VISTA DR	W SEACLIFF DR	2	3-Layer Seal w/ 2% Digouts and 10,722 SF of SAMI w/ 1.5" OL	0.38
MIDDLEFIELD DR	SEACLIFF DR	MAR VISTA DR	2	3-Layer Seal w/ 5% Digouts	0.16
OAKDALE DR	W SEACLIFF DR	POPLAR ST	2	3-Layer Seal w/ 10% Digouts	0.04
CROSS WY	MIDDLEFIELD DR	W SEACLIFF DR	2	Slurry Seal	0.13
<i>SPRUCE ST*</i>	514 SPRUCE ST	539 SPRUCE ST	2	Slurry Seal	0.00
MCGREGOR DR	NEW BRIGHTON RD	NEW BRIGHTON RD	2	Slurry Seal	0.34
SOQUEL AVE	SOQUEL DR	GROSS RD	1	Slurry Seal	0.91
S. MAIN ST	PORTER ST	860 FT NE OF PORTER ST	1	Slurry Seal	0.12
E. WALNUT ST	178 FT E OF N MAIN ST	SOQUEL DR	1	Slurry Seal	0.11
PARK AV	SUBEC LN	HWY 1 ON-RAMP	1	Slurry Seal	0.12
PAUL MINNIE AV	SOQUEL AV	RODRIGUEZ ST	1	3 Layer Seal with 10% Digouts	0.30
RODRIGUEZ ST	17TH AV	PAUL MINNIE AV	1	3 Layer Seal with 5% Digouts	0.20
DUSTIN WY	RODRIGUEZ AV	END	1	Rubber Capeseal w/ 10% Digouts	0.14
JOSE AV	RODRIGUEZ AV	END	1	Rubber Capeseal w/ 10% Digouts & Spot Micro	0.39
ADELAIDA CT	JOSE AV	END	1	Rubber Capeseal w/ 5% Digouts	0.03
MARIANA CT	JOSE AV	END	1	Rubber Capeseal w/ 5% Digouts	0.03
SCHOONER CT	CAPITOLA RD	S END	1	Rubber Capeseal w/ 5% Digouts	0.07
FOSTER CT	CAPITOLA RD	N END	1	3 Layer Seal with 5% Digouts	0.06
LEILA CT	CAPITOLA RD	END	1	3 Layer Seal with 5% Digouts	0.09
MORAN BEACH PARKING LOT	N/A	N/A	1	3 Layer Seal with 10% Digouts	0.00
SWANTON RD	SCOTT CREEK BR	HWY 1	3	Rubber Chip SAMI w/ 2" OL, 2% DO, and Spot AC Leveling	4.54
MURPHY'S CROSSING	HWY 129	N. END OF MURPHY RD BRIDGE	4	FDR and Overlay	0.63
ROGGE LN	CO LINE/PAJARO RIVER	HWY 129	4	Rubber Chip SAMI w/ 2" OL and Digouts	0.69

Total Road Mileage: 11.63

FDR = Full Depth Recycling (pulverize and recompact existing roadway surface and cement treat)

Micro = Type 3 Microsurfacing Seal

3-Layer = 3-Layer Seal (Type 3 micro followed by rubber cape seal)

'Spot' indicates treatment type will be applied at designated areas only (not over entire roadway)

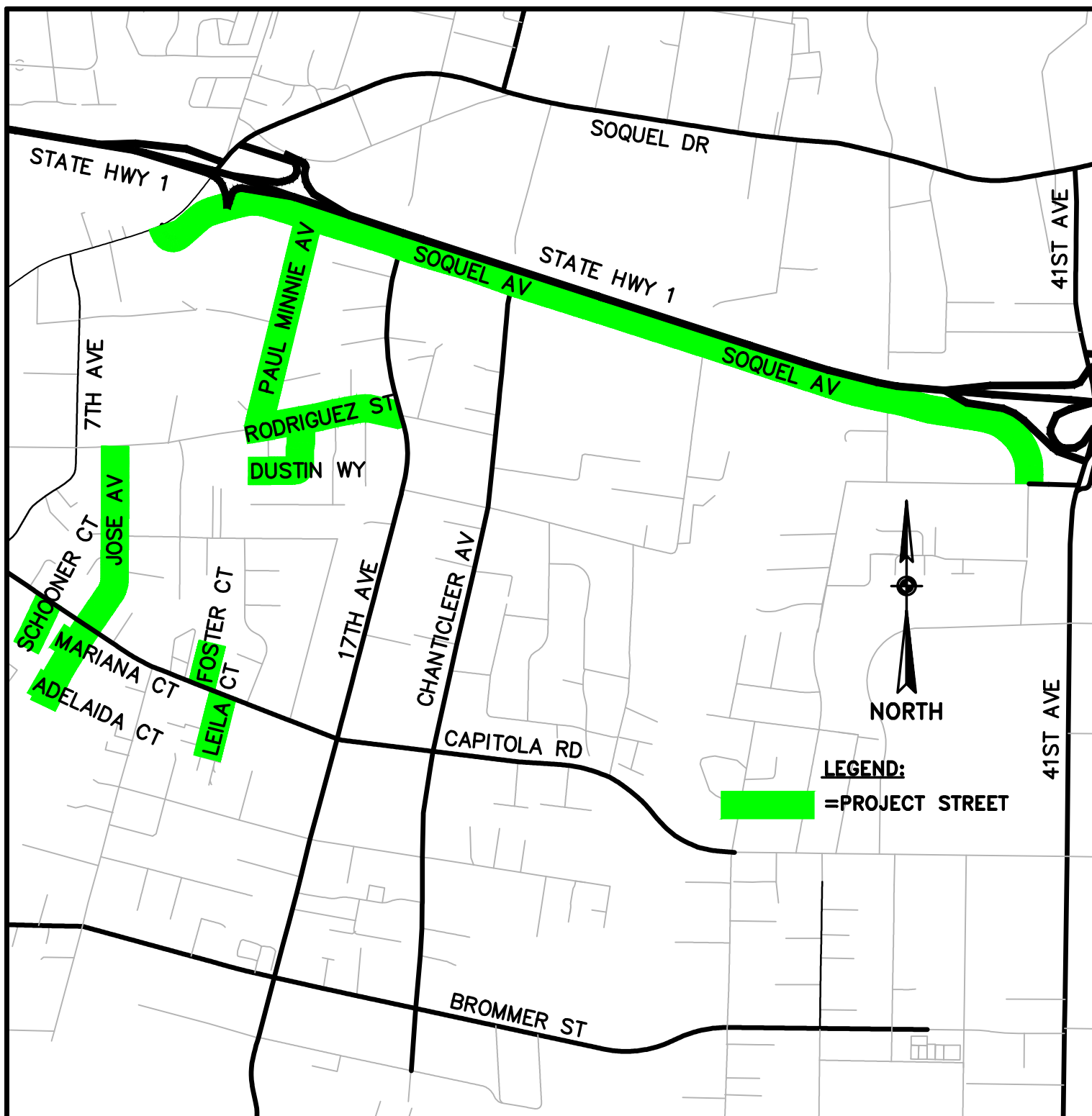
SAMI = Stress Absorbing Membrane Interlayer (rubber chip seal placed prior to AC overlay)

AC Leveling = AC Leveling Course (variable thickness AC overlay placed prior to surface treatment)

DO = Digouts

* = Spruce St is privately maintained. One time resurfacing work to be completed on behalf of Santa Cruz County Sanitation District for post sewer trench repair roadway restoration.

VICINITY MAPS



2025 PAVEMENT MANAGEMENT PROJECT

VICINITY MAP

DISTRICT 1 (LIVE OAK)

DESIGN: DAM/DMO

DRAFTING: DMO/DAM

CHECKED: CRC

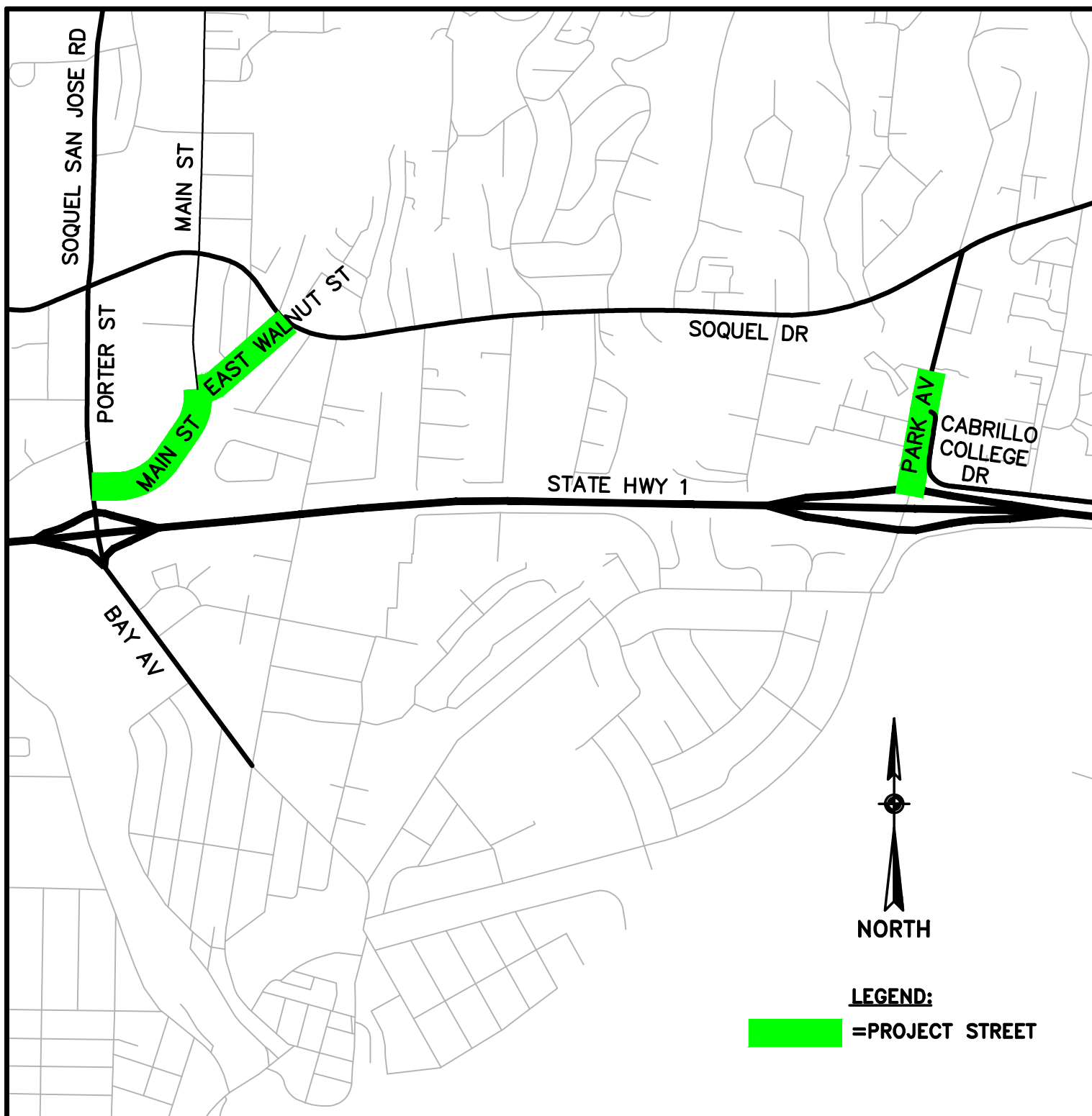
DATE: 12/12/24

SCALE: 1"=1000'

JOB NO: —

SHEET

D1.1



2025 PAVEMENT MANAGEMENT PROJECT

VICINITY MAP

DISTRICT 1 (SOQUEL)

DESIGN: DAM/DMO

DRAFTING: DMO/DAM

CHECKED: CRC

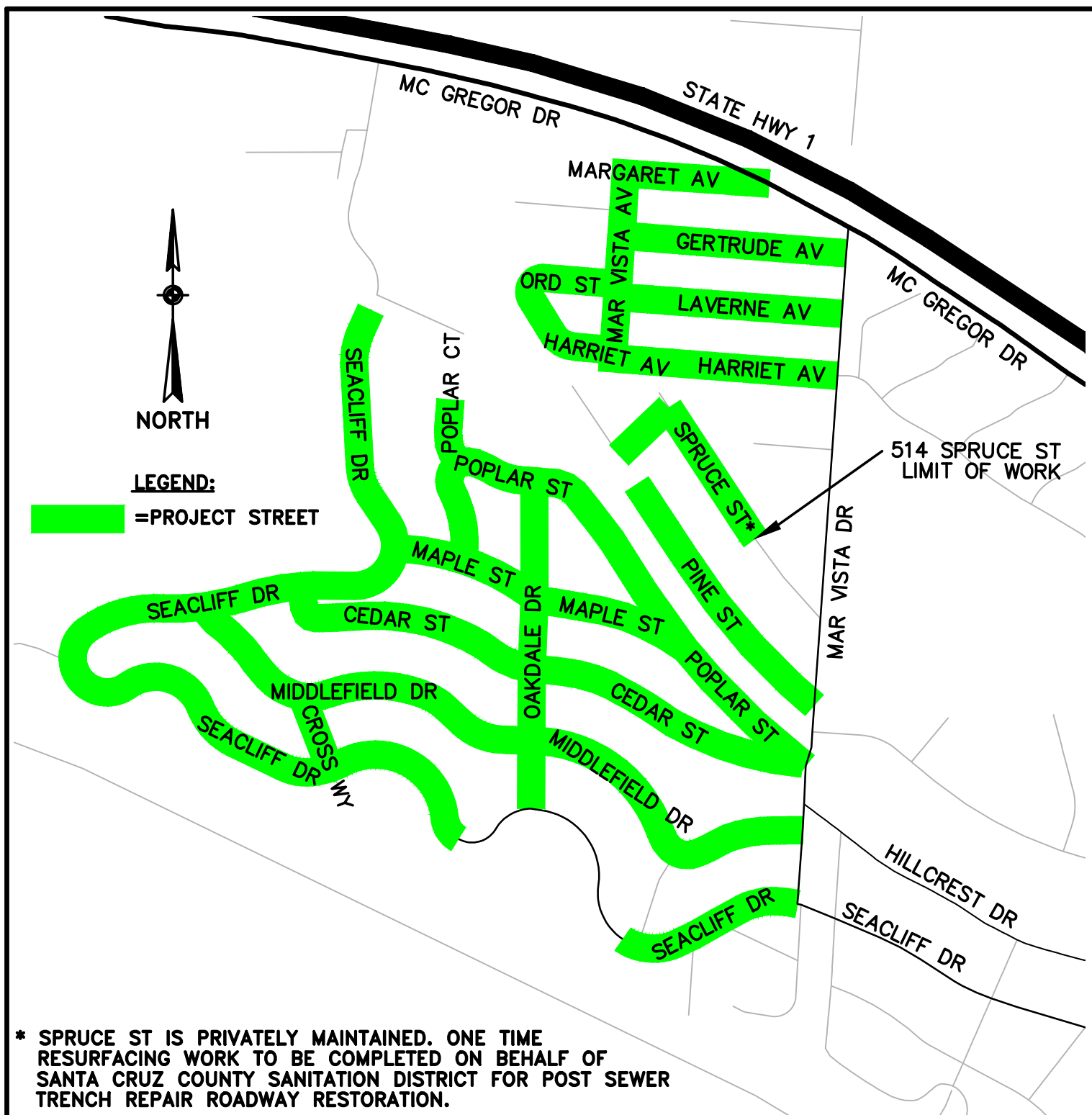
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SCALE: 1"=1000'

JOB NO: —

SHEET

D1.2



2025 PAVEMENT MANAGEMENT PROJECT

VICINITY MAP

DISTRICT 2 ROADWAYS
WEST SEACIFF

DESIGN: DO/DBM

DRAFTING: DBM

CHECKED: CRC

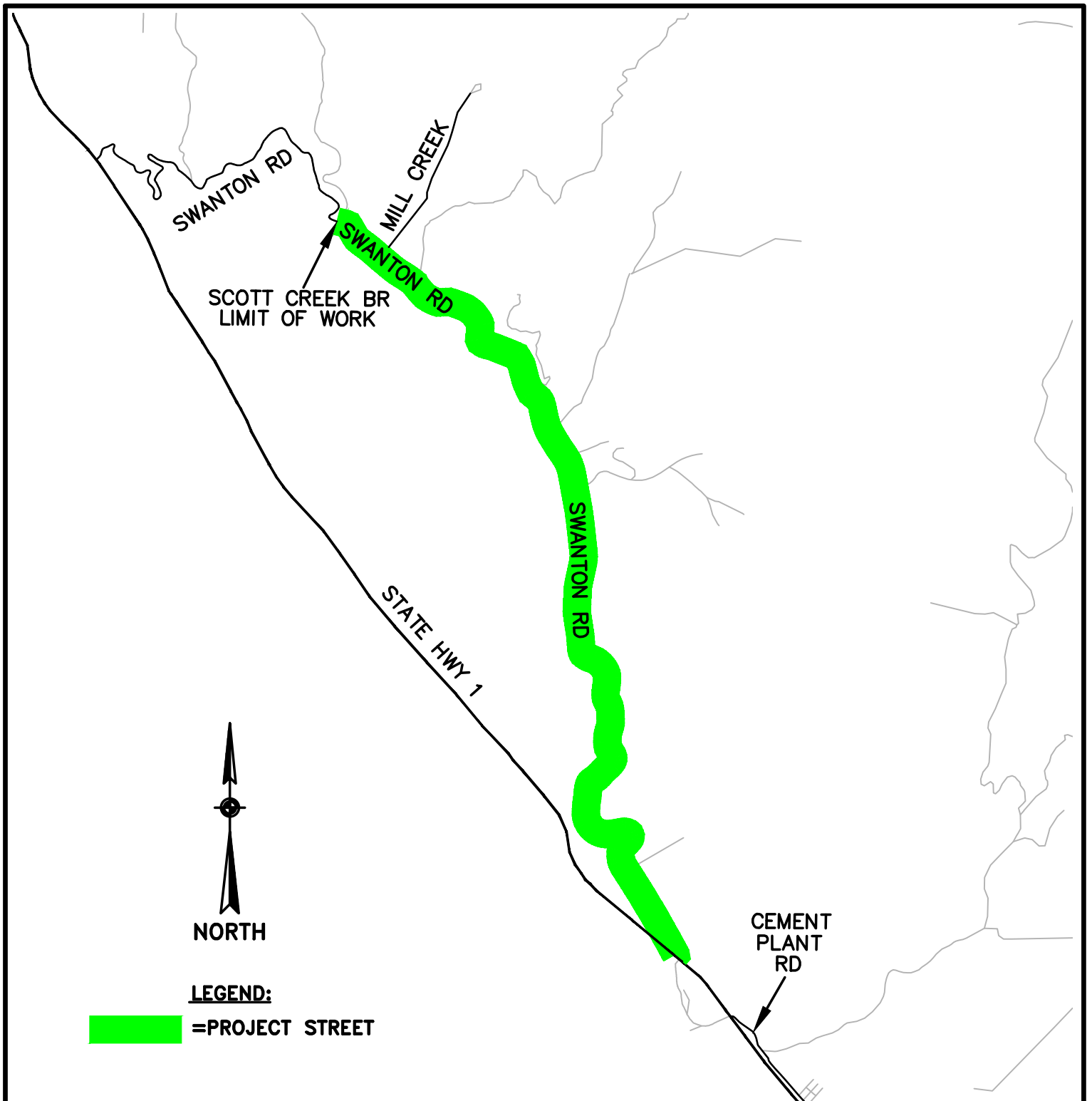
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SCALE: 1"=400'

JOB NO: —

SHEET

D2



2025 PAVEMENT MANAGEMENT PROJECT

VICINITY MAP

DISTRICT 3 ROADWAYS
SWANTON RD

DESIGN: DAM/DMO

DRAFTING: DMO/DAM

CHECKED: CRC

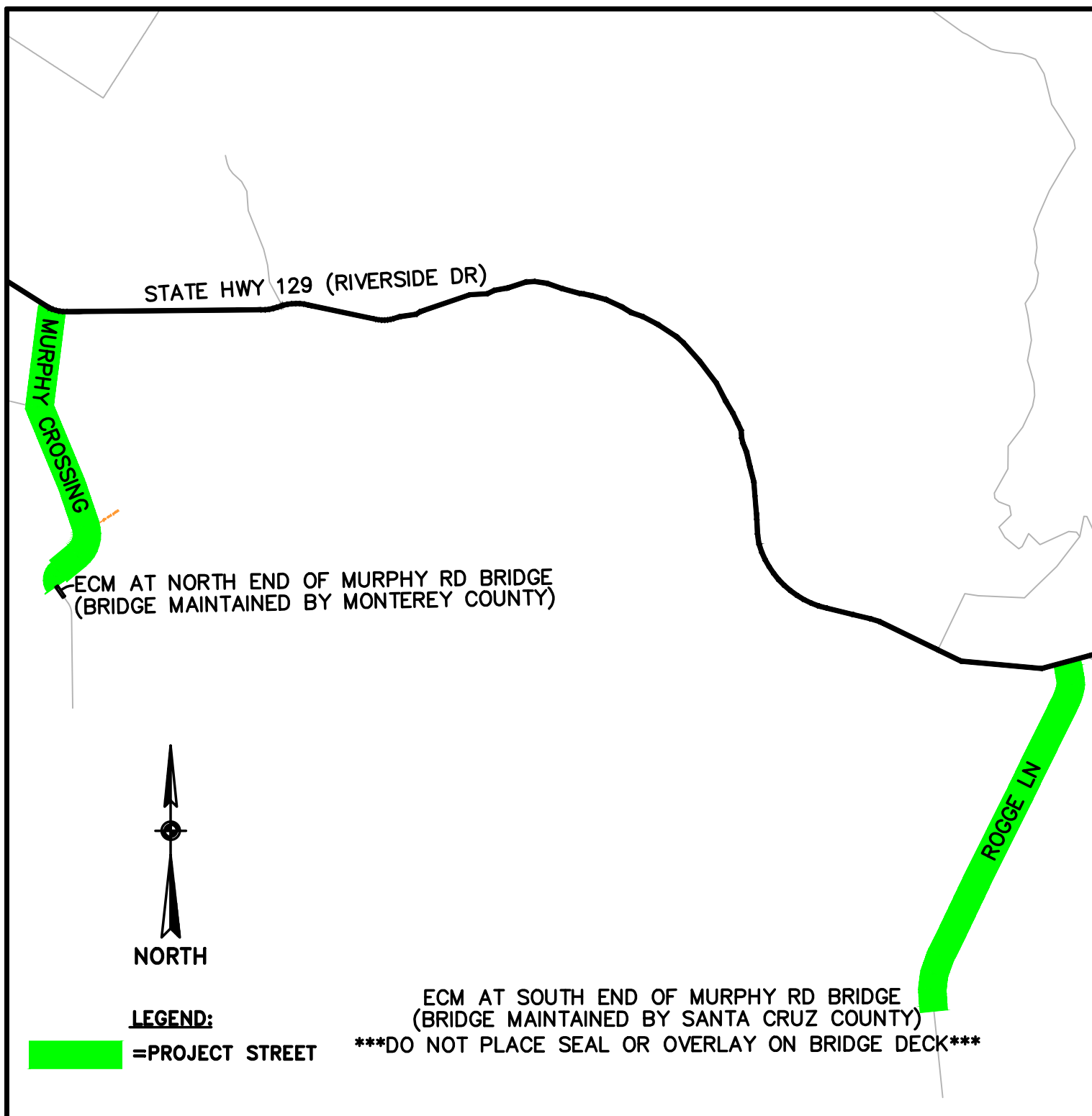
DATE: 12/12/24

SCALE: 1"=3500'

JOB NO: —

SHEET

D3



2025 PAVEMENT MANAGEMENT PROJECT

VICINITY MAP

DISTRICT 4 (AROMAS)

DESIGN: DAM/DMO

DRAFTING: DMO/DAM

CHECKED: CRC

DATE: 12/12/24

SCALE: 1"=1500'

JOB NO: —

SHEET

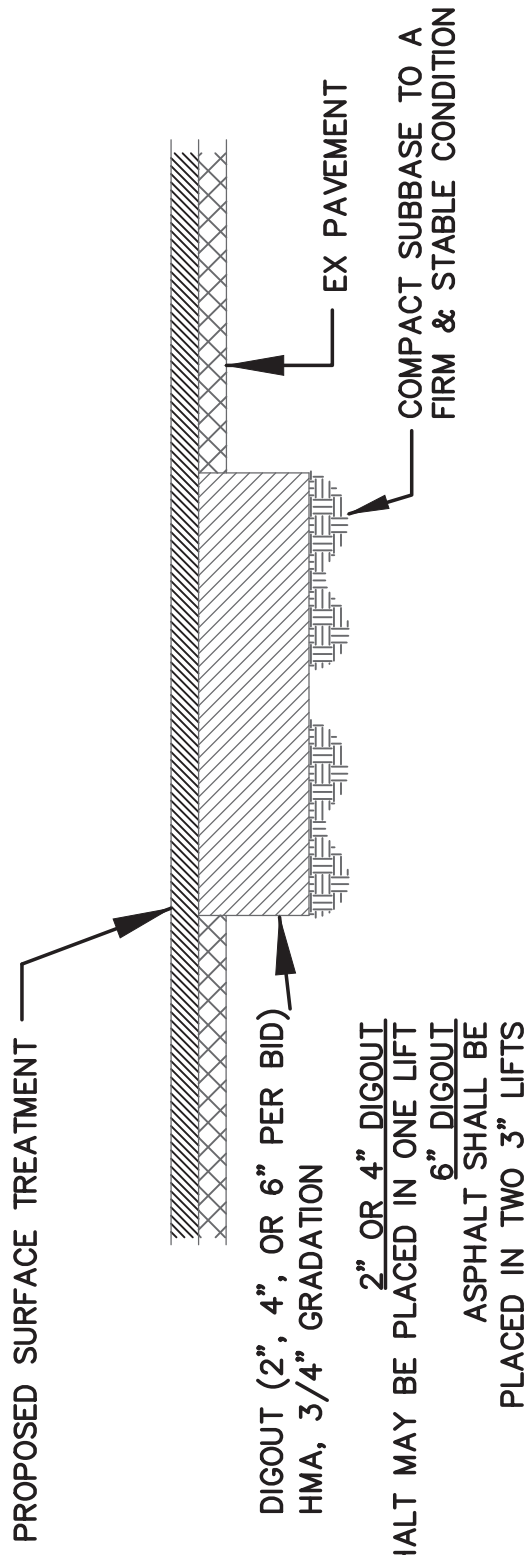
D4

APPLICABLE STANDARD PLANS AND DETAILS

STANDARD PLANS & DETAILS – TABLE OF CONTENTS

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C-24	STANDARD MONUMENT DETAIL (FIG ST-11A)
C-25	PROJECT PHASE CHECKLIST

NOTE:
CUT OR GRIND EXISTING
PAVEMENT TO PRODUCE A
STRAIGHT VERTICAL EDGE.

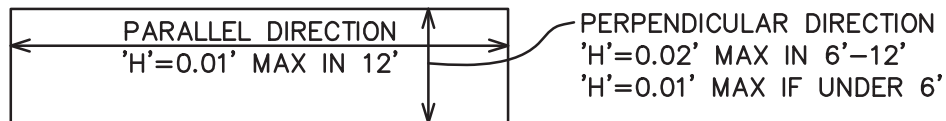


DIGOUT DETAIL

N.T.S.

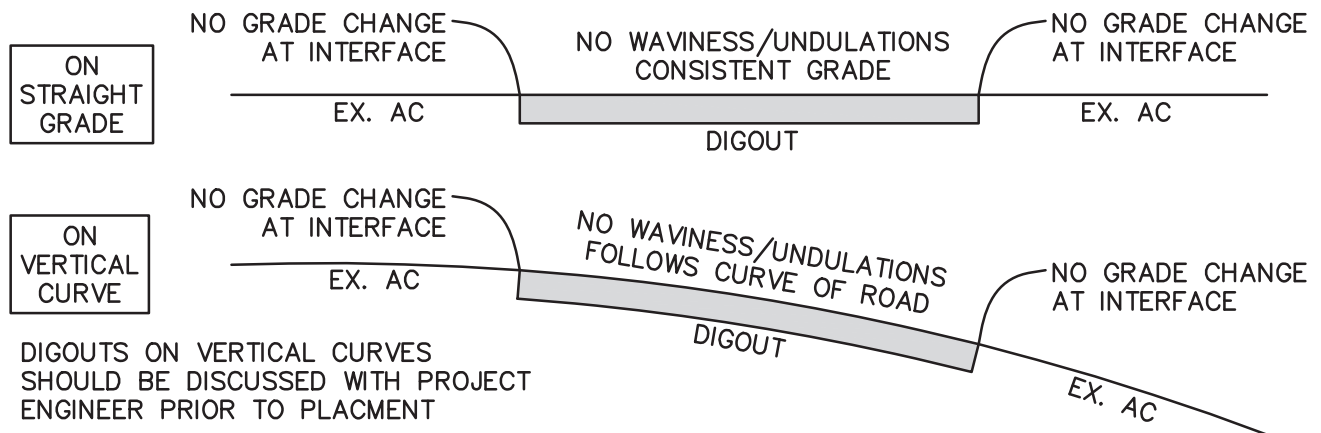
DIGOUT TOLERANCE MEASUREMENT:

1. PER CALTRANS SPECIFICATIONS, A 12' STRAIGHT EDGE IS TO BE USED FOR TOLERANCE MEASUREMENT, DIGOUT AND ALL INTERFACES WITH EXISTING AC SHALL MEET TOLERANCES.
2. FOR THE PURPOSES OF THIS EXHIBIT, 'H' INDICATES GRADE DIFFERENCE (RAISE OR DEPRESSION). PER PROJECT SPECIFICATIONS, 'H' SHALL NOT EXCEED:
 - * PARALLEL WITH ROAD: 0.01' MAX ($1/8'' \pm$) IN 12'
 - * PERPENDICULAR WITH ROAD: 0.02' MAX ($1/4'' \pm$) IN 12'
OR 0.01' ($1/8'' \pm$) FOR ANY DIMENSIONS UNDER 6'

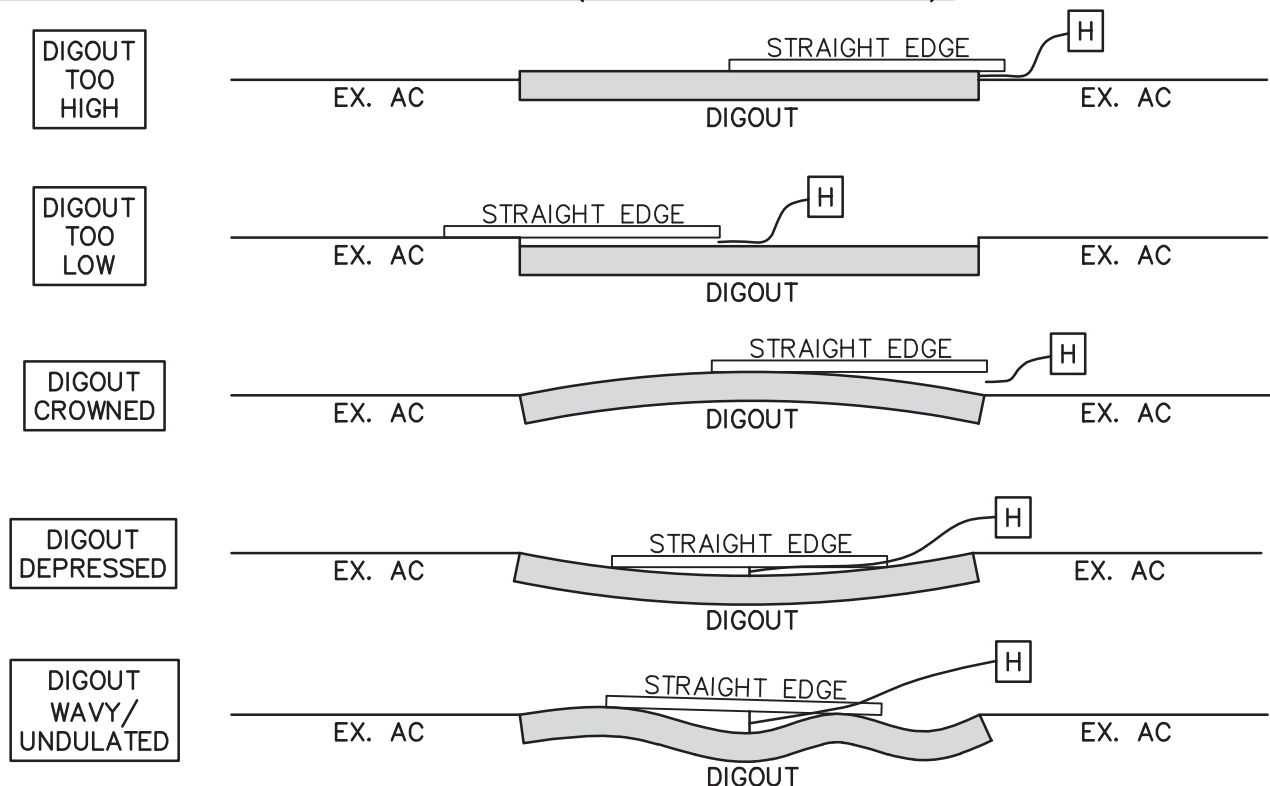


TIP: IF DIGOUT CAN BE HEARD OR FELT WHEN DRIVING OVER INTERFACE, DIGOUT IS OUT OF SPEC.

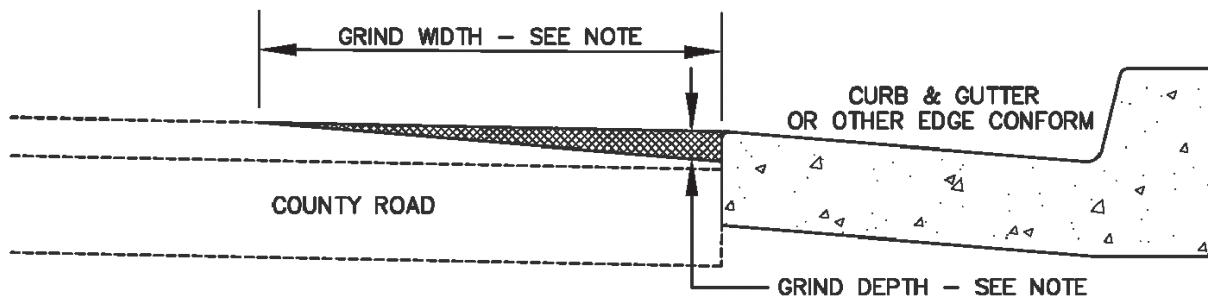
EXAMPLES OF CORRECTLY DONE DIGOUTS:



EXAMPLES OF INCORRECTLY DONE DIGOUTS ('H' EXCEEDS TOLERANCES):



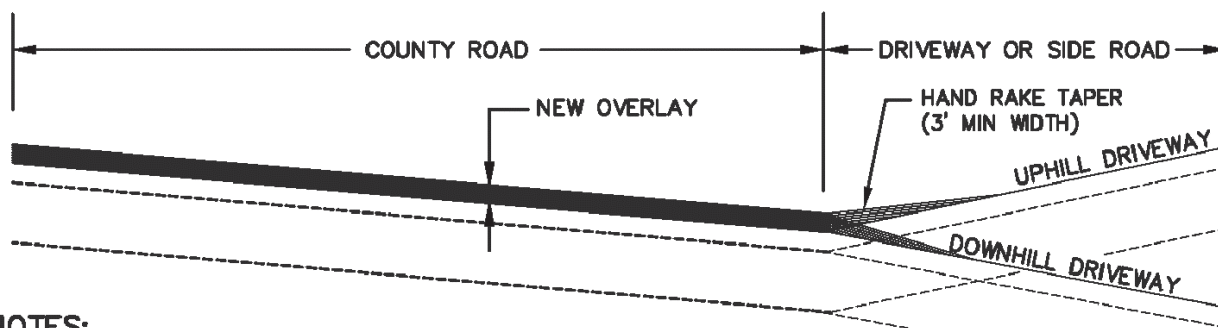
DIGOUT CHECKING PROCEDURES



NOTES:

1. GRINDING DEPTH SHALL BE SUCH THAT FINISHED SURFACE LAYER IS FLUSH WITH THE GUTTER LIP OR OTHER CONFORM. THE DEVELOPER/ PERMITTEE SHALL BE RESPONSIBLE FOR DETERMINING APPROPRIATE GRINDING DEPTH. IF FINAL SURFACE LAYER IS LOWER THAN EXISTING GRADE AT CONFORM, THE DEVELOPER/ PERMITTEE SHALL BE RESPONSIBLE FOR PLACEMENT OF ADDITIONAL SURFACING LAYERS TO MAKE NEW SURFACING FLUSH WITH EXISTING CONFORM.
2. GRINDING WIDTH FOR GUTTER CONFORM OR OTHER LONGITUDINAL CONFORM SHALL BE 6' FOR ASPHALT OVERLAYS, OR 2' FOR SEAL COATS. GRINDING WIDTH FOR INTERSECTION CONFORMS SHALL BE 20' FOR ASPHALT OVERLAYS, OR 6' FOR SEAL COATS.
3. FOR SEAL COATS, EDGE GRINDING SHALL ONLY APPLY IN SITUATIONS WHERE EXISTING ROADWAY IS BOUND BY A CONCRETE GUTTER OR SIMILAR EDGE CONSTRAINT AND EXISTING SURFACE IS HIGHER THAN ADJACENT GUTTER LIP. IF EXISTING PAVEMENT IS FLUSH WITH GUTTER LIP OR LOWER THAN GUTTER LIP, GRINDING FOR SEAL COATS SHALL NOT APPLY. FOR MULTI-LAYER SEALS ADJACENT TO GUTTERS WHERE THE EXISTING PAVEMENT IS FLUSH WITH THE GUTTER, ONLY THE TOPMOST SEAL LAYER SHALL EXTEND TO THE GUTTER LIP AND ALL LOWER SEAL LAYERS SHALL STOP SHORT OF THE GUTTER BY 1 FOOT. FOR MULTI-LAYER SEALS ADJACENT TO GUTTERS WHERE THE EXISTING PAVEMENT IS LOWER THAN THE GUTTER LIP, LOWER LAYER SEALS MAY BE EXTENDED TO THE GUTTER LIP AS NEEDED TO ACHIEVE A FLUSH CONDITION WITH THE TOPMOST SEAL.
4. TACK COAT SHALL BE APPLIED AT A MINIMUM UNDILUTED RATE OF 0.06-GALLONS PER SQUARE YARD TO ALL CONTACT SURFACES TO RECEIVE ASPHALT PAVING.
5. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS AT LEAST 48 HOURS PRIOR TO GRINDING NEAR TRAFFIC SIGNALS. UNLESS OTHERWISE INDICATED, GRINDING OPERATIONS SHOULD AVOID TRAFFIC LOOPS IF POSSIBLE. ANY TRAFFIC SIGNAL DETECTORS DAMAGED BY GRINDING SHALL BE REPLACED BY THE DEVELOPER/ PERMITTEE.

DETAIL A - EDGE GRIND CONFORM



NOTES:

1. THIS DETAIL IS MEANT FOR SITUATIONS WHERE AN ASPHALT OVERLAY IS BEING PLACED IN AREAS WITH CURB & GUTTER OR OTHER SIGNIFICANT EDGE CONSTRAINTS AND SHALL ONLY BE USED IF DIRECTED BY THE COUNTY.
2. FOR LONGITUDINAL CONFORMS SUCH AS DRIVEWAYS OR CROSS STREETS, HAND RAKE TAPER SHALL BE A MINIMUM OF 3' IN WIDTH. INTERSECTIONS OR BEGINNING/END OF OVERLAY CONFORMS SHALL BE 20' IN LENGTH AND MAY BE ACCOMPLISHED EITHER BY HAND RAKE TAPER OR BY CONFORM GRINDING.
3. TACK COAT SHALL BE APPLIED AT A MINIMUM UNDILUTED RATE OF 0.06-GALLONS PER SQUARE YARD TO ALL CONTACT SURFACES TO RECEIVE ASPHALT PAVING.

DETAIL B - TAPER CONFORM

RESURFACING CONFORMS

TOW-AWAY

NO

PARKING

TIME
8:30 AM TO 4:30 PM

DATE
XX/XX/XX THRU XX/XX/XX

C.V.C. 22651

NOTES:

1. SIGN SHALL BE 12"x18" IN SIZE WITH RED LETTERING ON WHITE BACKGROUND.
2. SIGN SHALL CONTAIN ALL INFORMATION SHOWN HERE, LAYOUT MAY VARY AS APPROVED.
3. SIGNS SHALL BE POSTED AT A VISIBLE AND STABLE LOCATION ADJACENT TO TEMPORARY NO PARKING AREA, SIGN SHALL BE POSTED ON BARRICADE OR OTHER APPROVED STRUCTURE AND SHALL BE FACED IN DIRECTION OF TRAVEL. SIGNS SHALL BE POSTED AT LEAST EVERY 50 FEET FOR ON-STREET PARALLEL PARKING, AND EVERY 25 FEET FOR ON-STREET DIAGONAL PARKING SPACES. SIGNS SHALL ALSO BE POSTED AT THE BEGINNING AND END OF A BLOCK OR PORTION OF BLOCK BEING WORKED ON.
4. SIGNS AND SHALL BE POSTED AT LEAST 2 WORKING DAYS PRIOR TO THE START DATE REFERENCED ON THE SIGN.
5. IF NECESSARY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE CALIFORNIA HIGHWAY PATROL AT (831) 662-0511 FOR CLEARING THE STREETS OF PARKED CARS.

TEMPORARY NO PARKING SIGN

STREET LIST:
(FOR WORK IN
EACH
NEIGHBORHOOD)
LETTERING 2"
BLACK CAPS
MAY BE
APPLIED AS
DECAL

ORANGE BACKGROUND

BLACK OUTLINE STRIPE

FOR UP TO DATE PROJECT INFORMATION, VISIT PROJECT WEBSITE:

SCCROADS.ORG

ROAD WORK 00/00/00 TO 00/00/00

EXPECT DELAYS, USE ALTERNATE ROUTES

MEASURE D PROJECT STREETS

STREET X	STREET X
STREET X	STREET X
STREET X	STREET X
STREET X	STREET X

REPORT ISSUES: XXXX CONSTRUCTION, JOHN SMITH: (831) 123-4567



THIS PROJECT FUNDED BY:



☐ LETTERING 2" BLACK CAPS

☐ LETTERING 5" BLACK CAPS

☐ "ROAD WORK" 3" BLACK CAPS

☐ "EXPECT DELAYS" 2" BLACK CAPS

☐ LETTERING 2" BLACK CAPS

☐ PUBLIC WORKS LOGO DECAL (12"X22")

☐ MEASURE D LOGO DECAL (12"X24")

NOTES:

1. SIGN TO CONTAIN SPECIFIC PROJECT, STREET, AND CONTRACTOR INFORMATION.
2. SIGN LAYOUT TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION.
3. SIGNS SHALL BE INSTALLED AT LOCATIONS SHOWN IN PROJECT PLANS/ SPECIFICATIONS, OR AS DIRECTED BY ENGINEER.
4. SIGN INSTALLATION SHALL BE SUCH THAT BOTTOM OF SIGN HAS A MINIMUM OF 7' CLEARANCE OFF OF GROUND LEVEL AND DOES NOT CAUSE AN OBSTRUCTION TO VEHICLES, BICYCLES, OR PEDESTRIANS.
5. MEASURE D LOGO TO MATCH COLORS & PATTERNS OF OFFICIAL MEASURE D LOGO, TO BE PROVIDED BY ENGINEER.
6. SB-1 LOGO TO MATCH COLORS & PATTERNS OF OFFICIAL SB-1 LOGO, TO BE PROVIDED BY ENGINEER.
7. SIGN SHALL BE IN PLACE PRIOR TO CONSTRUCTION, AND SHALL REMAIN IN PLACE UNTIL 1 MONTH AFTER COMPLETION OF CONSTRUCTION.

PROJECT NOTIFICATION SIGN

N.T.S.

STATE	COUNTY	ROUTE	POST MILES	SHEET TOTAL
			TOTAL PROJECT	

REGISTERED CIVIL ENGINEER

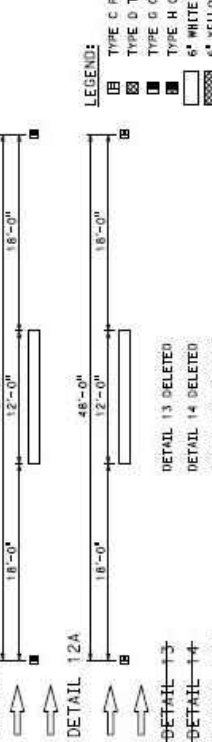
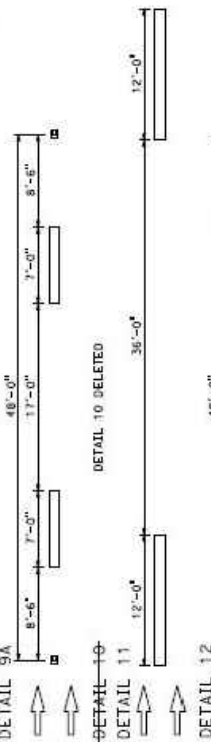
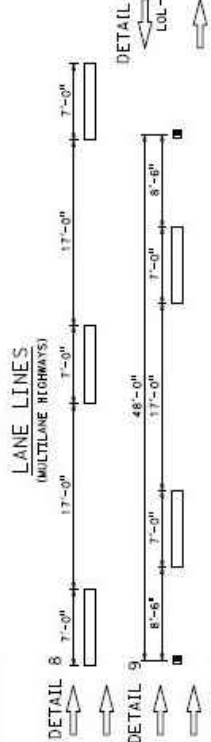
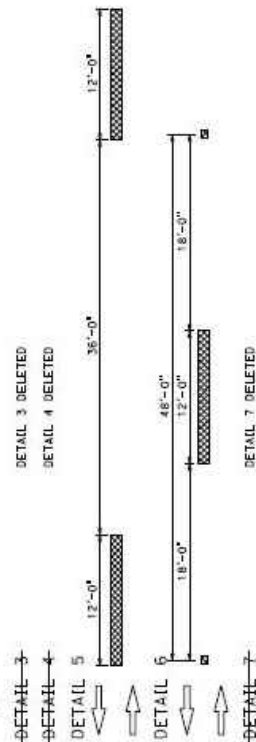
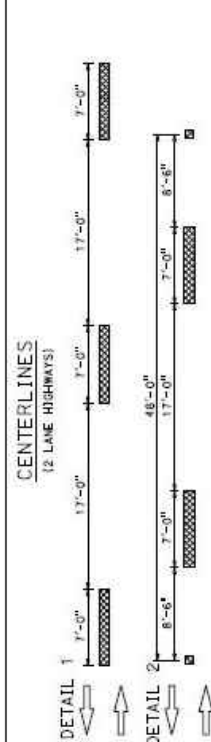
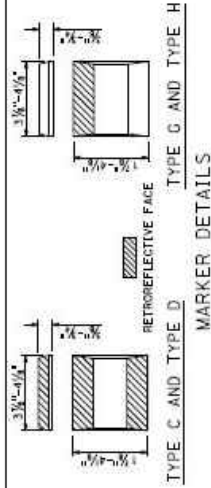
September 20, 2024

PLANS PERSONAL USE ONLY

NO REPRODUCTION OR TRANSMISSION

FOR ANY OTHER USE, A NEW CONTRACT IS REQUIRED

EXPIRATION DATE: 09/20/2028



- LEGEND:
- TYPE C RED-CLEAR RETROREFLECTIVE MARKER
 - TYPE D TWO-WAY YELLOW RETROREFLECTIVE MARKER
 - TYPE G ONE-WAY CLEAR RETROREFLECTIVE MARKER
 - TYPE H ONE-WAY YELLOW RETROREFLECTIVE MARKER
 - 6" WHITE LINE
 - 6" YELLOW LINE

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKERS AND TRAFFIC LINES

TYPICAL DETAILS

NO SCALE

A20A

CALTRANS STRIPING DETAILS (SHEET A20A)

N.T.S.

DATE	COUNTY	ROUTE	SHEET NUMBER	TOTAL SHEETS

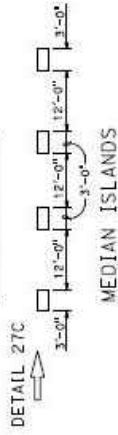
REGISTERED CIVIL ENGINEER	
APPROVAL DATE	PLANS APPROVAL DATE
September 20, 2024	September 20, 2024
THE STATE OF CALIFORNIA HAS REVIEWED THIS PLAN AND FINDS IT TO BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.	

INTERSECTION TREATMENTS

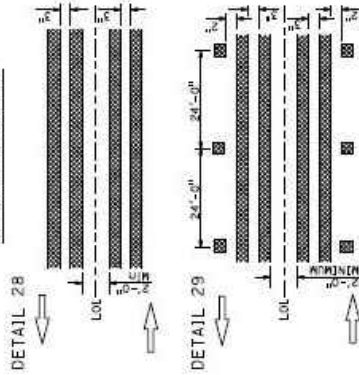
LEGEND:

- TYPE D TWO-WAY YELLOW RETROREFLECTIVE MARKER
- TYPE H ONE-WAY YELLOW RETROREFLECTIVE MARKER
- TYPE RY RED-YELLOW RETROREFLECTIVE MARKER
- 6" WHITE LINE
- 6" YELLOW LINE

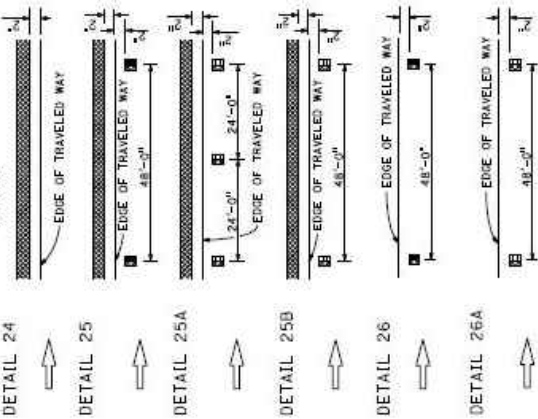
RIGHT EDGE LINE EXTENSION THROUGH INTERSECTIONS



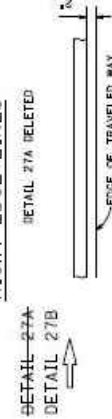
MEDIAN ISLANDS



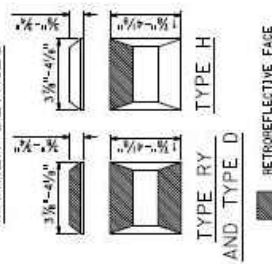
LEFT EDGE LINES (DIVIDED HIGHWAYS)



RIGHT EDGE LINES



MARKER DETAILS



PAVEMENT MARKERS AND TRAFFIC LINES TYPICAL DETAILS

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

LEFT EDGE LINES NOTE:
On freeways use traffic stripe details with Type RY markers.

NO SCALE

A20B

CALTRANS STRIPING DETAILS (SHEET A20B)

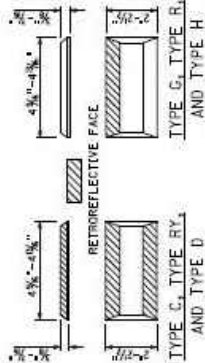
N.T.S.





RECESSED MARKER NOTES:

1. See *Practical Traffic* line 10 for details for marker patterns to be used with recessed pavement markers.
2. The retroreflective pavement markers shown for recessed installations are not to be used for non-recessed installations.
3. The top of pavement markers installed in recesses shall be at least $\frac{1}{4}$ inch below the pavement surface.
4. Use Type 1 recess for pavement markers in recesses in concrete or stone. Use Type 2 recess for pavement markers with 140-cp retroreflective face.
5. For exit ramps, use Type 1 recess for pavement markers with one-way retroreflective face. Reverse the orientation of the recess for the marker on the upstream side of the ramp.



RETROREFLECTIVE PAVEMENT MARKER

FOR RECESSED INSTALLATION

See Notes 1 and 2

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

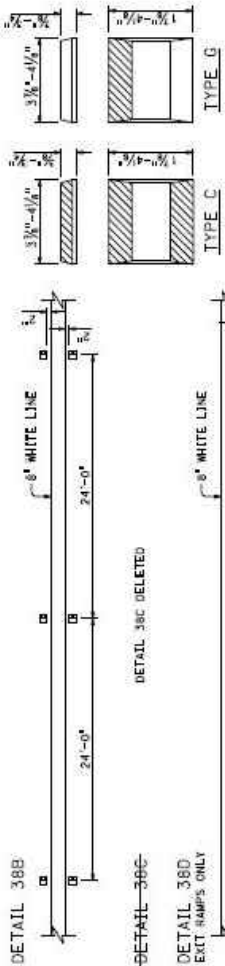
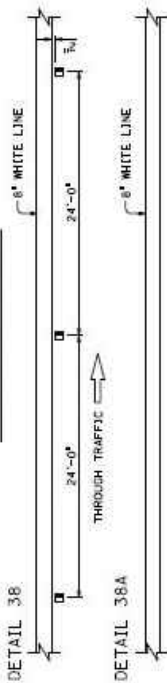
PAVEMENT MARKERS AND TRAFFIC LINES

DEPARTMENT OF TRANSPORTATION

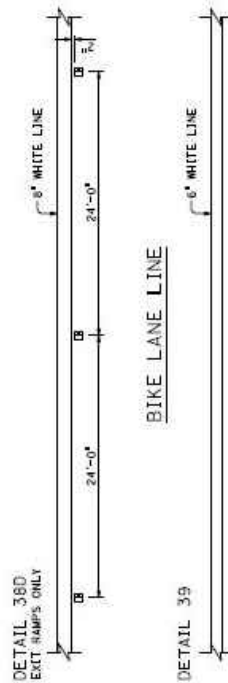
TYPICAL DETAILS

NO SCALE

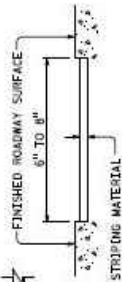
A 20D



DETAIL SAC DELETED



BIKE LANE LINE



STRIPPING MATERIAL

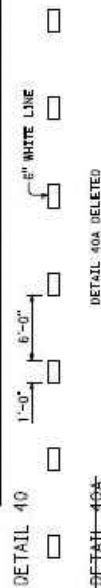
DETAIL FOR RECESSED
TRAFFIC STRIPE

See Notes A and B

RECESSED NOTES:

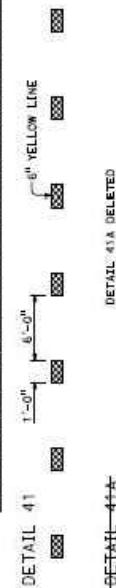
- RECEIVED NOTES:**
- A. See typical traffic line details for pavement marking patterns.
- B. See Standard Specifications for recess depth and recess striping material thickness.

LANE LINE EXTENSIONS THROUGH INTERSECTIONS



DETAIL 40A DELETED

CENTERLINE EXTENSIONS THROUGH INTERSECTIONS



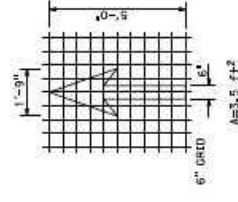
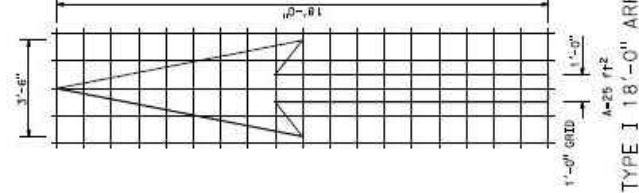
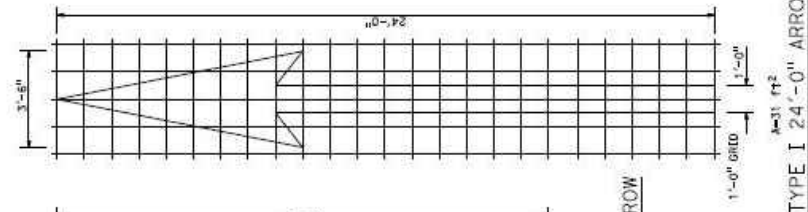
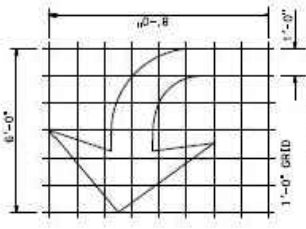
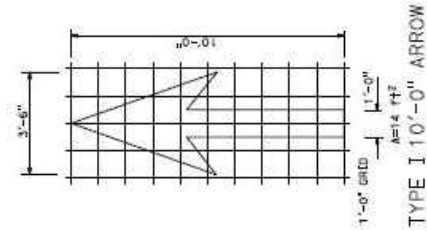
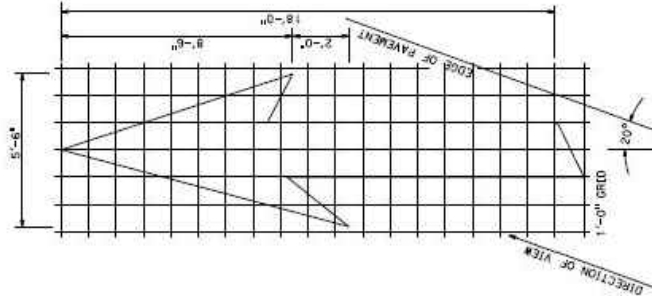
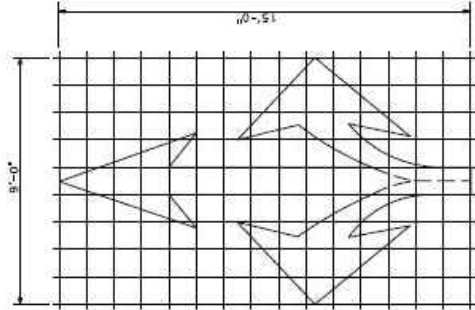
DETAIL 41A DELETED

LEGEND:

-  TYPE C RED-CLEAR RETROREFLECTIVE MARKER
 TYPE Q ONE-WAY CLEAR RETROREFLECTIVE MARKER
 6" YELLOW LINE

2024 STANDARD PLAN A24A

DATE	COUNTY	ROUTE	POST MILES	SHEET TOTAL
September 20, 2024				
REGISTERED CIVIL ENGINEER September 20, 2024 PLAN APPROVAL DATE PLAN APPROVAL OF ANYTHING NOT BE RESPONSIBLE FOR THE DESIGN OF THIS PROJECT OR THE QUALITY OF THE WORK OR THE RESULTS.				



TYPE IX ARROW
A=33 ft²

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
PAVEMENT MARKINGS
ARROWS
NO SCALE

TYPE VII (L) ARROW
A=27 ft²

For Type III (R) arrow, use mirror image.

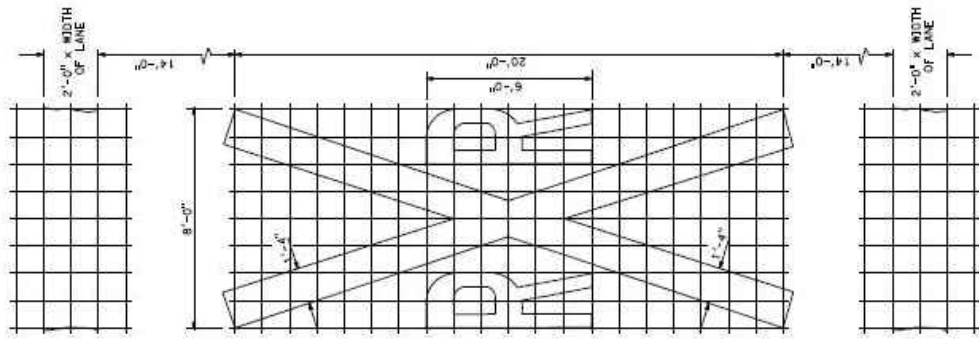
NOTE:
Minor variations in dimensions
may be accepted by the Engineer.

For Type III (R) arrow, use mirror image.

A24A

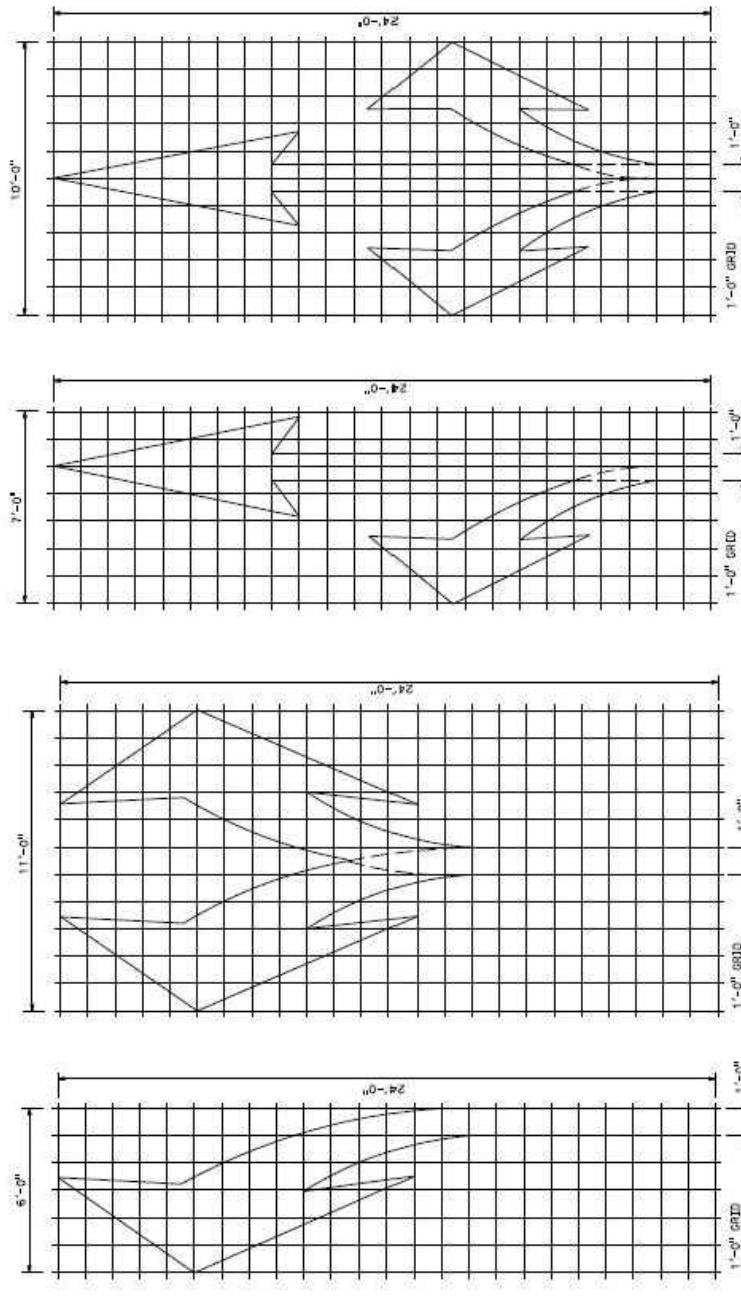
CALTRANS STRIPING DETAILS (SHEET A24A)

N.T.S.



RAILROAD CROSSING SYMBOL

* 70 ft² does not include the 2'-0" x variable width transverse lines.



NOTE:

Minor variations in dimensions may be accepted by the Engineer.

A-59 F42
TYPE II (B) ARROW

STATE OF CALIFORNIA

**PAVEMENT MARKINGS
ARROWS AND SYMBOLS**

NO SCALE

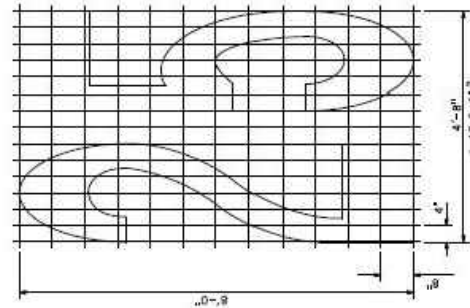
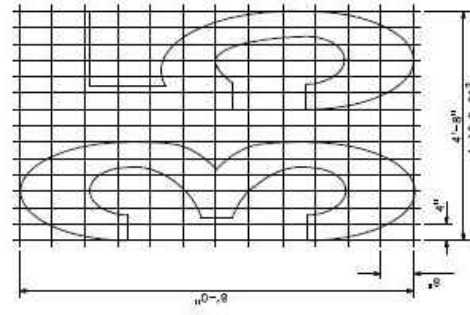
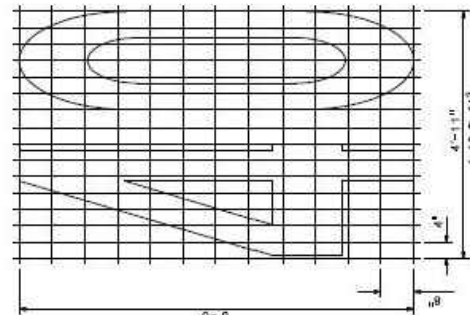
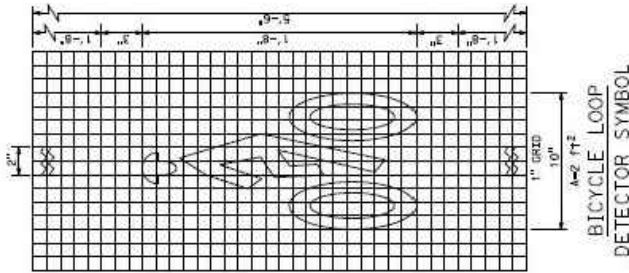
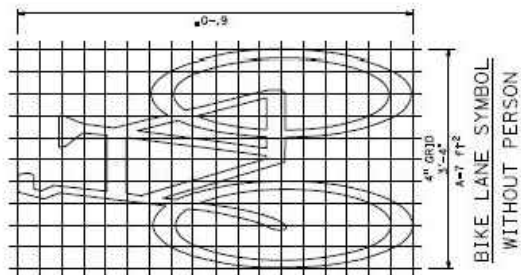
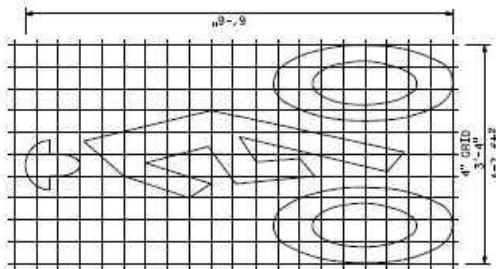
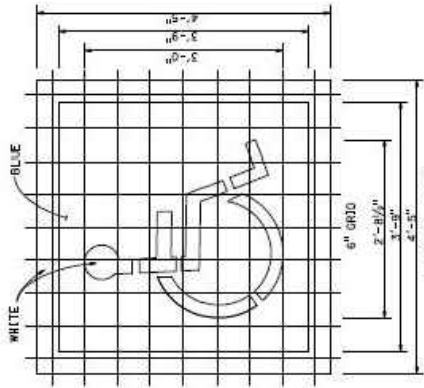
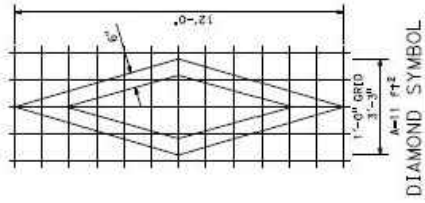
A24B

2024 STANDARD PLAN A24C

STATE	COUNTY	ROUTE	POST MILES	SHEET TOTAL
			TOTAL PROJECT	NO. SHEETS

DESIGNED BY	REGISTERED CIVIL ENGINEER
DATE	SEPTEMBER 20, 2024
PLANS APPROVAL DATE	SEPTEMBER 20, 2024
BY	REGISTERED CIVIL ENGINEER
DATE	SEPTEMBER 20, 2024
BY	REGISTERED CIVIL ENGINEER
DATE	SEPTEMBER 20, 2024

NOTE:
Minor variations in dimensions may be accepted by the Engineer.



SHARED ROADWAY BICYCLE MARKING

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**PAVEMENT MARKINGS
SYMBOLS AND NUMERALS**
NO SCALE

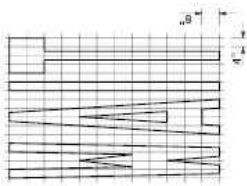
NUMERALS

A24C

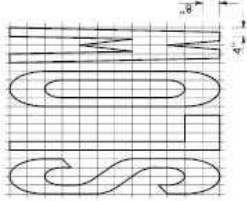
CALTRANS STRIPING DETAILS (SHEET A24C)

N.T.S.

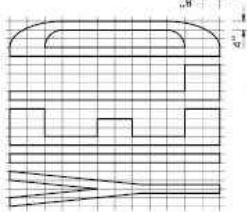
COUNTY	ROUTE	POST MILES	SHEET TOTAL
CLATSOP			
REGISTERED CIVIL ENGINEER			
September 20, 2024			
DATE			
PROJECT NO. 23-1-26			
SHEET NO. 10			
SHEET TOTAL 10			
CLATSOP COUNTY			
CLATSOP COUNTY			
CLATSOP COUNTY			



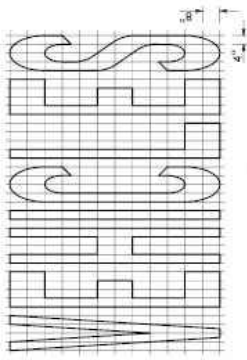
A=19 f+2



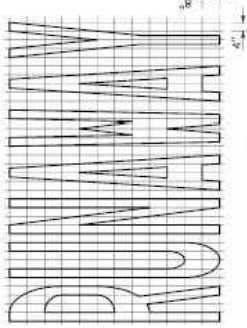
A=23 f+2



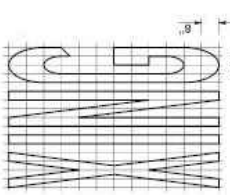
A=24 f+2



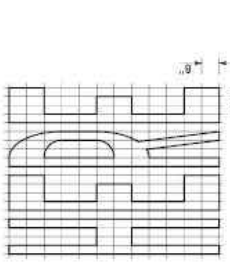
A=42 f+2



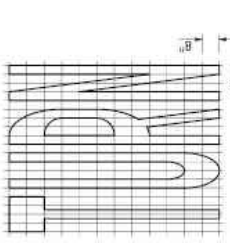
A=43 f+2



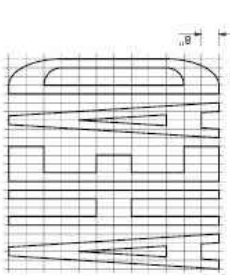
A=21 f+2



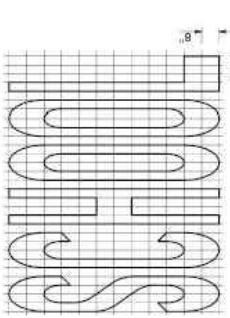
A=26 f+2



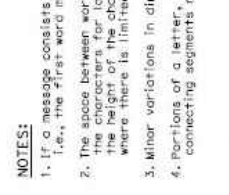
A=24 f+2



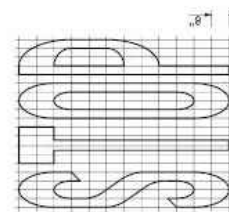
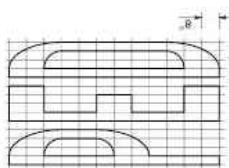
A=31 f+2



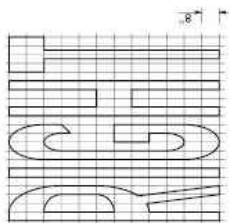
A=35 f+2



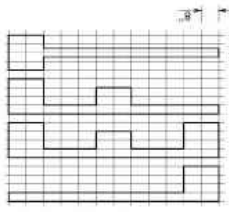
A=18 f+2



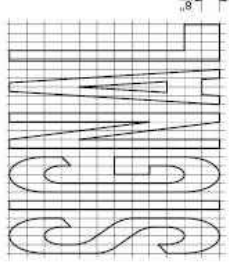
A=22 f+2



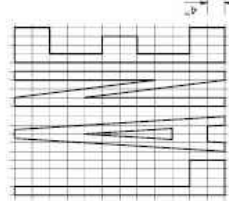
A=26 f+2



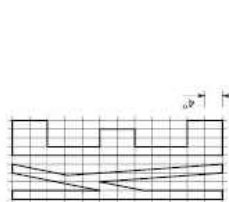
A=19 f+2



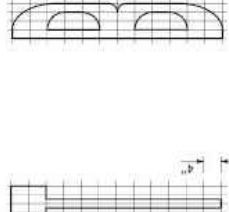
A=32 f+2



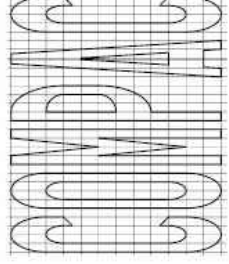
A=6 f+2



A=5 f+2



A=5 f+2



A=10 f+2

NOTES:

1. If a message consists of more than one word, it must read "Up", i.e., the first word must be repeated the driver.
2. The space between words must be at least four times the height of the characters for low speed roads, but not more than ten times the height of the characters. The space may be reduced appropriately where there is limited space because of local conditions.
3. Minor variations in dimensions may be accepted by the Engineer.
4. Portions of a letter, number or symbol may be separated by connecting segments not to exceed 2" in width.

WORD MARKINGS

ITEM	f+2	ITEM	f+2	ITEM	f+2	ITEM	f+2
XING	21	YIELD	24	BIKE	5	PED	16
AHEAD	31	SCHOOL	35	SLOW	23	COMPACT	10
WAIT	19	SIGNAL	32	STOP	22	RUNAWAY	43
LANE	6	TURN	24	LEFT	19	VEHICLES	42
RIGHT	26	HERE	26				

STATE OF CALIFORNIA

DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKINGS

WORDS

NO SCALE

A24D

CALTRANS STRIPING DETAILS (SHEET A24D)

N.T.S.

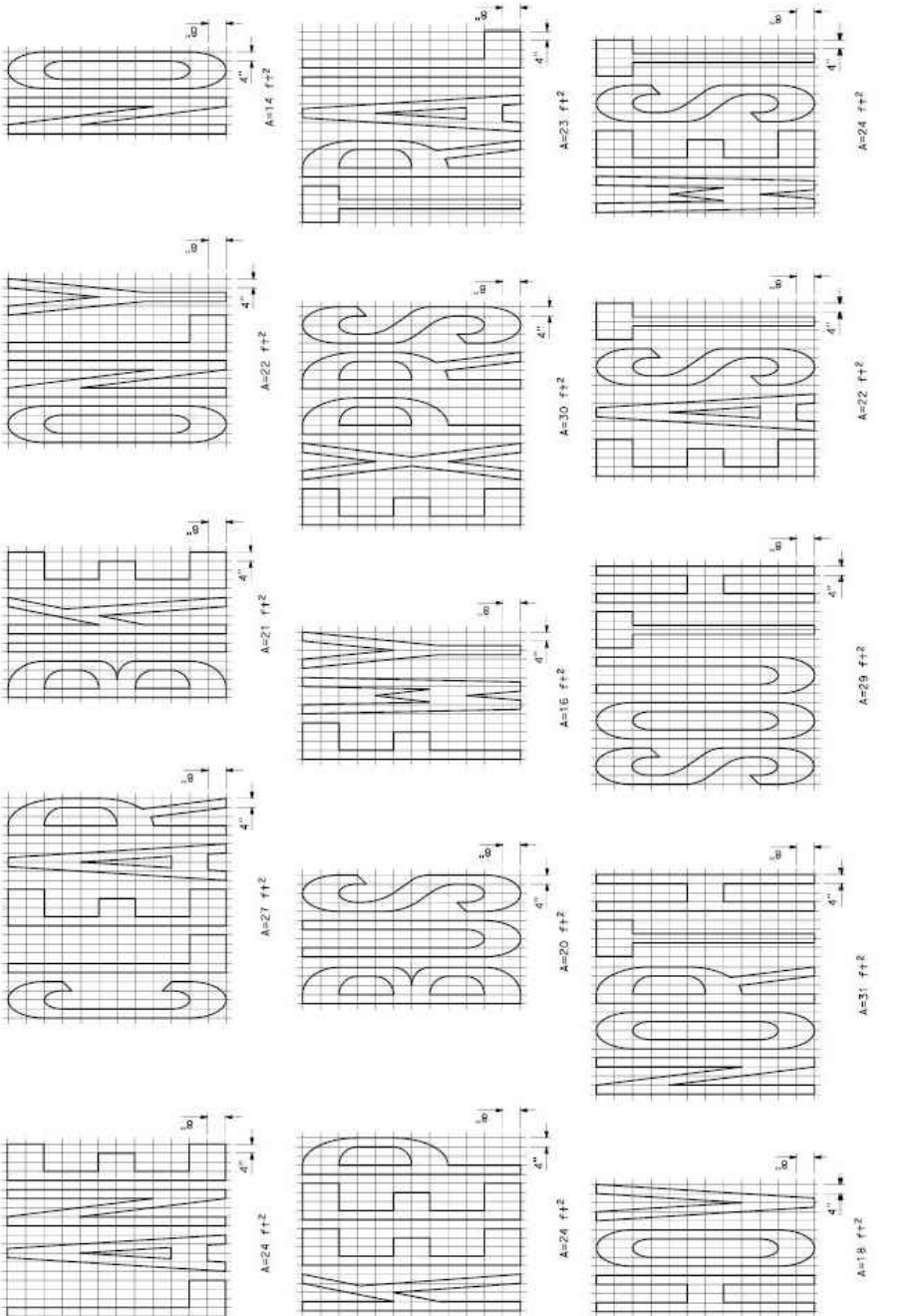
CITY	COUNTY	ROUTE	POST MILES	SHEET TOTAL
			NO. SHEETS	



 September 26, 2024
 David A. Allen
 REGISTERED CIVIL ENGINEER
 License No. 51312
 State of California
 Exp. 12/31/26

NOTES:

1. If a message consists of more than one word, it must read up, i.e., the first word must be nearest the driver.
2. The space between words must be at least four times the height of the characters for low speed roads, but not more than ten times the height of the characters. The space may be increased proportionately where there is limited space because of local conditions.
3. Minor variations in dimensions may be accepted by the Engineer.
4. Portions of a letter, number, or symbol may be separated by connecting segments not to exceed 2" in width.
5. The words "NO PARKING" pavement marking is to be painted in white on the pavement at the locations of markings, see Standard Plans A90A and A90B.
6. The words "NO PARKING" shall be painted in white on the pavement at the locations of markings, see Standard Plans A90A and A90B.



WORD MARKINGS					
ITEM	SOFT	ITEM	SOFT	ITEM	SOFT
LANE	24	EXPRS	30	FWD	16
CLEAR	27	NO	14	NORTH	31
KEEP	24	BIKE	21	SOUTH	29
NOV	18	BUS	20	EAST	22
TRAIL	23	ONLY	22	WEST	24

See Notes 5 and 6

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKINGS
WORDS

NO SCALE

A24E

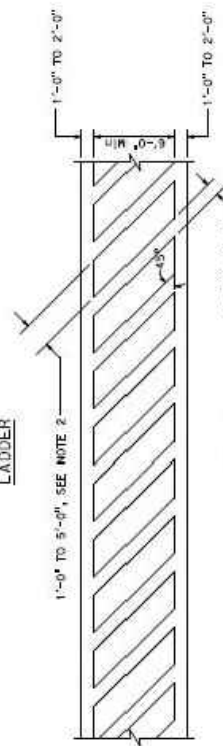
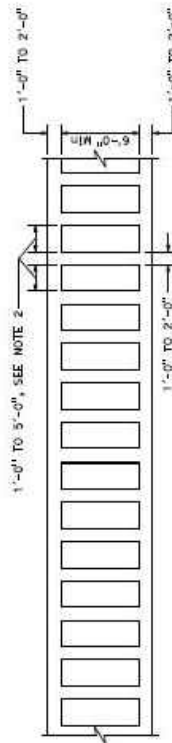
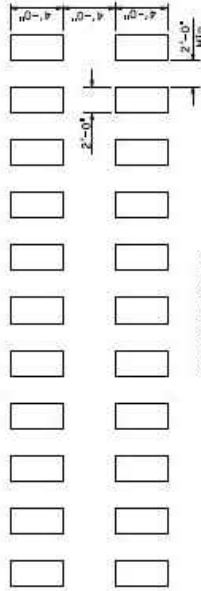
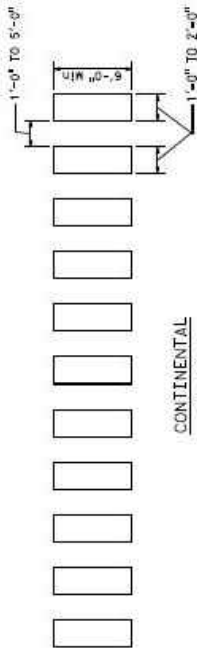
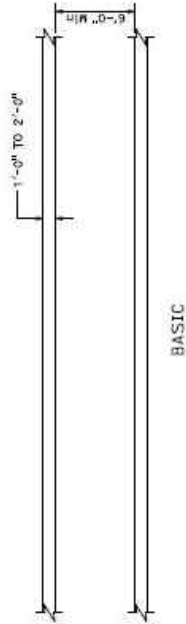
CALTRANS STRIPING DETAILS (SHEET A24E)

N.T.S.

DATE	COUNTY	ROUTE	POST MILES	SHEET TOTAL
PROJECT			SHEETS	
September 20, 2024 PLANS APPROVAL DATE FOR AGENCIES USING NEW OR REDESIGNED PAVEMENT (DESIGNS OF THIS PLAN ARE VALID)			REGISTERED CIVIL ENGINEER No. 31-100 100	

NOTES:

1. Spaces between markings must be placed in wheel tracks of each lane.
2. Spacings not to exceed 2.5 x width of longitudinal line.
3. All crosswalk markings must be white except those near schools must be yellow.



HIGHER VISIBILITY CROSSWALKS

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**PAVEMENT MARKINGS
CROSSWALKS**
NO SCALE

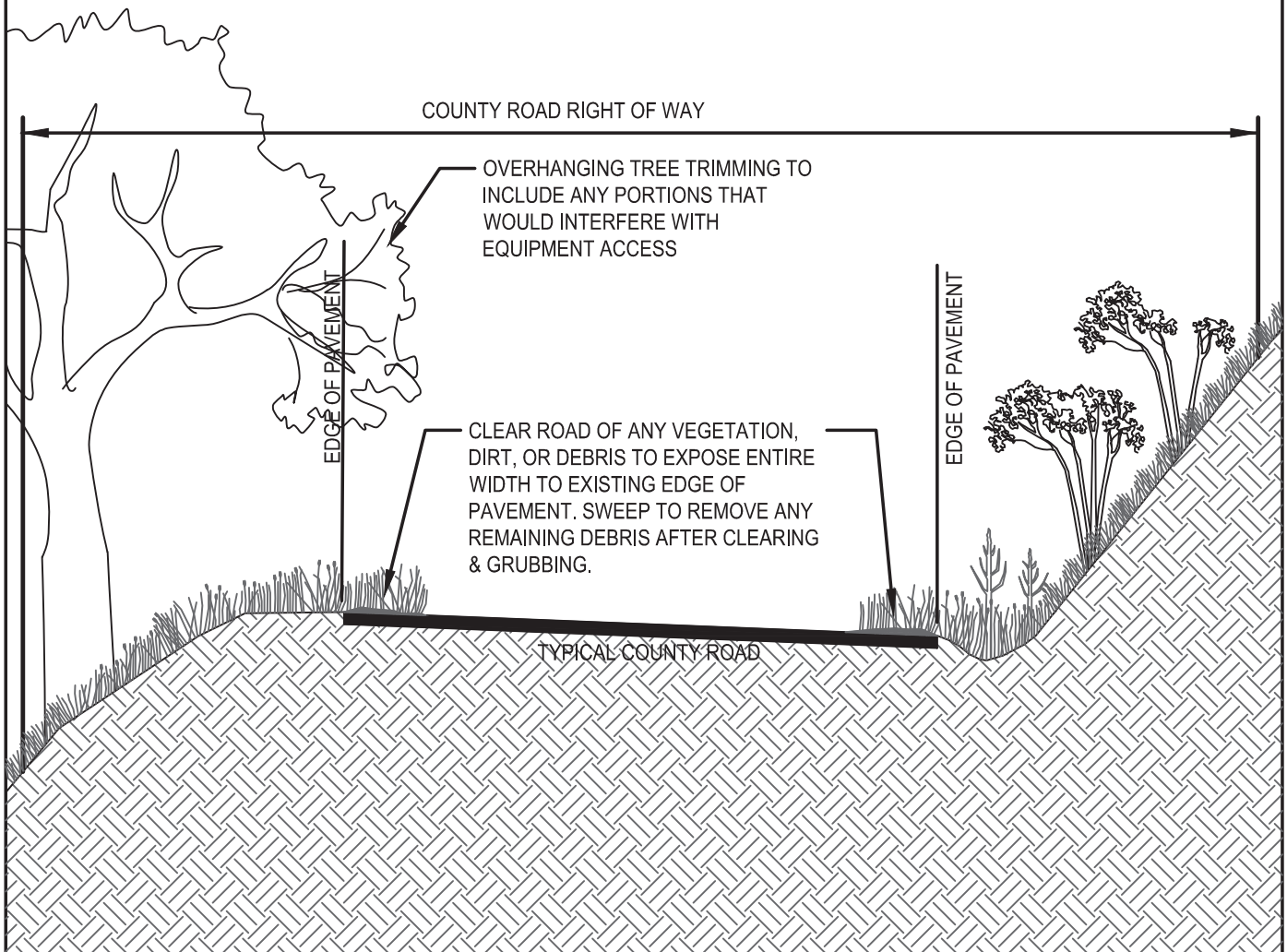
A24F

CALTRANS STRIPING DETAILS (SHEET A24F)

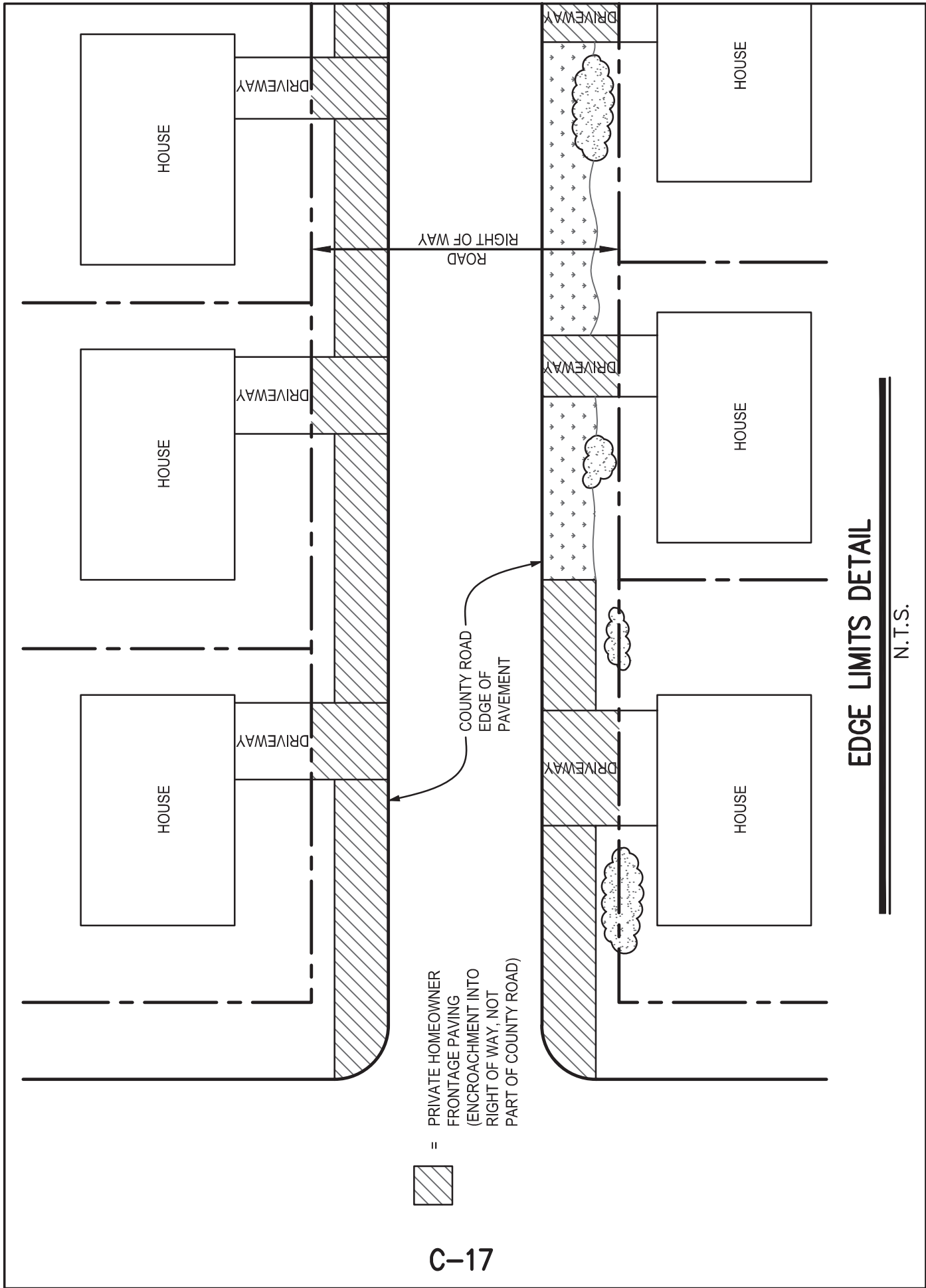
N.T.S.

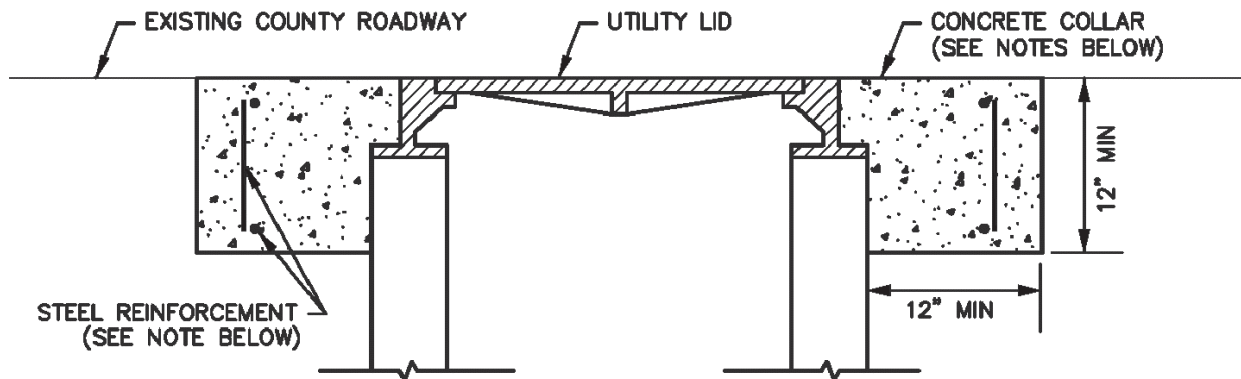
CLEARING & GRUBBING NOTES:

1. THE CONTRACTOR SHALL FOLLOW ALL OF THE REQUIREMENTS OF THE PROJECT SPECIFICATIONS, THE PROJECT ENGINEER WILL PROVIDE CLARIFIATION IF ANY PART OF THIS DETAIL CONFLICTS WITH THE PROJECT SPECIFICATIONS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL AND TEMPORARY SIGNAGE ASSOCIATED WITH PROJECT ACTIVITIES.
3. FOR AREAS WHERE DECORATIVE/ ORNAMENTAL LANDSCAPING FALLS WITHIN THE TRIM ZONE, THE CONTRACTOR SHALL NOT TRIM SUCH LANDSCAPING UNLESS IT WILL PREVENT EQUIPMENT ACCESS FOR PAVING OR SEALING THE FULL WIDTH OF THE ROADWAY. IN THIS EVENT THE CONTRACTOR SHALL NOTIFY THE ADJACENT LANDOWNER PRIOR TO CUTTING. IF THE LANDOWNER IS UNAVAILABLE BYPASS THAT PORTION OF THE WORK AND CONTACT THE PROJECT ENGINEER FOR FURTHER DIRECTION.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING PROJECT AREAS IN ADVANCE OF CREWS AND FLAGGING OBSTACLES, HAZARDS, AND OTHER IMPROVEMENTS IN THE RIGHT OF WAY AS NECESSARY FOR CREWS TO BE AWARE OF AND AVOID THESE OBSTACLES. THE CONTRACTOR SHALL BE HELD LIABLE FOR DAMAGE TO ANY PRIVATE OR COUNTY-OWNED IMPROVEMENTS OCCURING AS A RESULT OF PROJECT ACTIVITIES.
5. ALL REMOVED VEGETATION, TREES, STUMPS, AND SLASH SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED AND DISPOSED OF AT HIS EXPENSE. ALL CLEARED AREAS SHALL BE FREE OF SLASH AND DEBRIS BY THE END OF EACH WORK WEEK.



CLEARING & GRUBBING





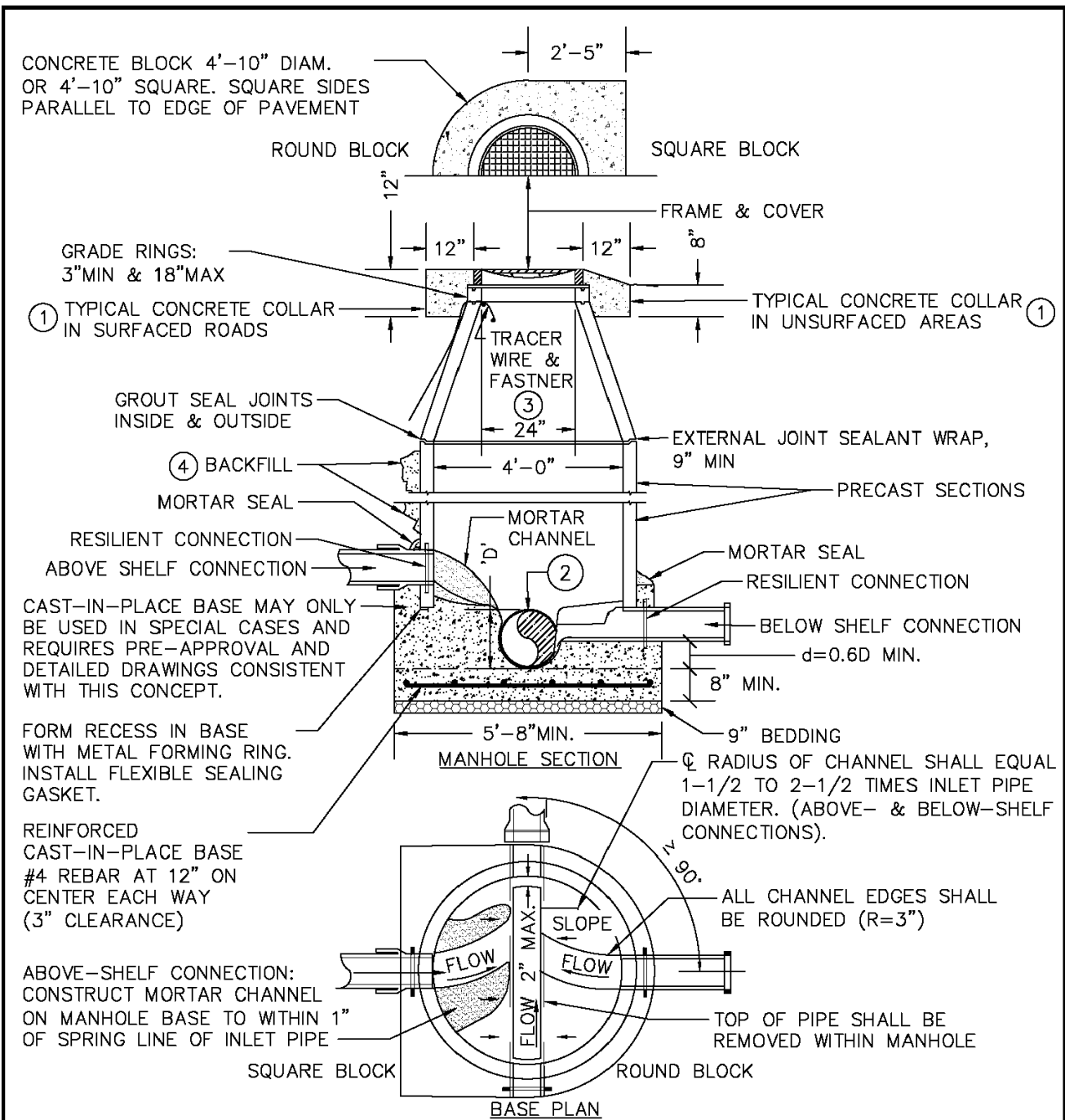
NOTES:

1. THIS DETAIL SHALL APPLY TO MANHOLES, VAULTS, VALVE BOXES, MONUMENT WELLS, OR ANY OTHER UTILITY LID STRUCTURES LOCATED WITHIN COUNTY MAINTAINED ROADWAYS. EXCEPTIONS MUST BE APPROVED BY THE COUNTY.
2. CONCRETE COLLAR SHALL BE ROUND FOR CIRCULAR UTILITY LIDS AND RECTANGULAR FOR RECTANGULAR LIDS.
3. CONCRETE COLLAR SHALL EXTEND TO BE FLUSH WITH ADJACENT ROADWAY SURFACE, NO ASPHALT SHALL BE PLACED OVER TOP.
4. CONCRETE SHALL USE TYPE III HIGH-EARLY STRENGTH CEMENT WITH A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 5000 PSI.
5. BROADCAST 1 LB OF LAMPBLACK PIGMENT ON CONCRETE SURFACE DURING CURE TO ACHIEVE DARKENED APPEARANCE.
6. CONCRETE COLLAR SHALL BE PROTECTED FROM TRAFFIC USING TRENCH PLATES OR OTHER ACCEPTABLE MEANS. CONCRETE SHALL NOT BE REOPENED TO TRAFFIC UNTIL A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI HAS BEEN ACHIEVED.
7. CONCRETE SHALL BE REINFORCED HORIZONTALLY WITH #4 REBAR HOOP AROUND GRADE RING AT TOP & BOTTOM, AND VERTICALLY WITH #4 REBAR TIES SPACED AT 12". REBAR SHALL BE KEPT A MINIMUM OF 2" CLEAR FROM ALL EDGES.

UTILITY LID PAVING

REV 5/22

FIG. EP-9

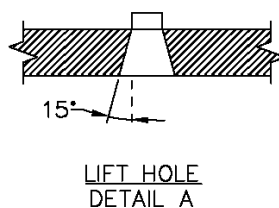
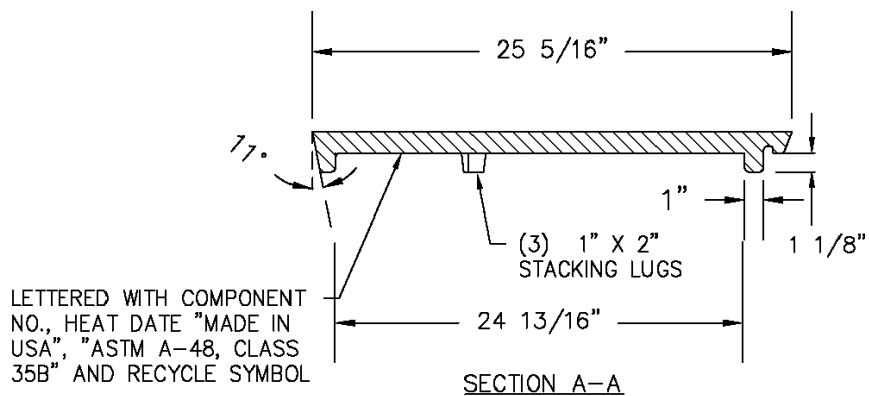
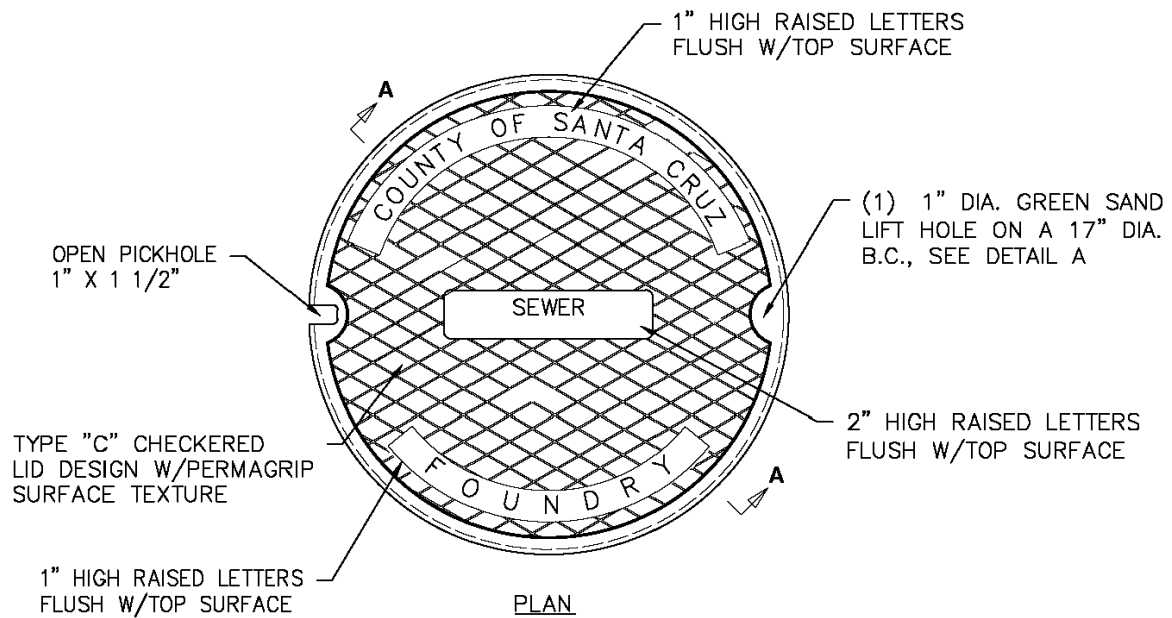


- ① POUR HIGH STRENGTH, REINFORCED, AND PIGMENTED (DRY SHAKE) CONCRETE TO TOP OF CASTING COVER SEE ALSO FIG. EP-9.
- ② LAY PIPE THROUGH MANHOLES WHEN POSSIBLE. OTHERWISE, FORM CHANNEL TO MAINTAIN PIPE SECTION FOR FULL PIPE DIAMETER
- ③ COIL AND SECURE TRACER WIRE AROUND NON-CORROSIVE FASTENER. LEAVE ENOUGH WIRE TO EXTEND 18" ABOVE MANHOLE COVER.
- ④ SEE FIG. SS-2 FOR BACKFILL REQUIREMENTS.

SEE SECTION J.3 "SEWER MANHOLES" FOR ADDITIONAL
DETAILS & REQUIREMENTS.

REV.10/23

STANDARD MAIN MANHOLE
FOR 16" OR SMALLER LINES
FIG. SS-4

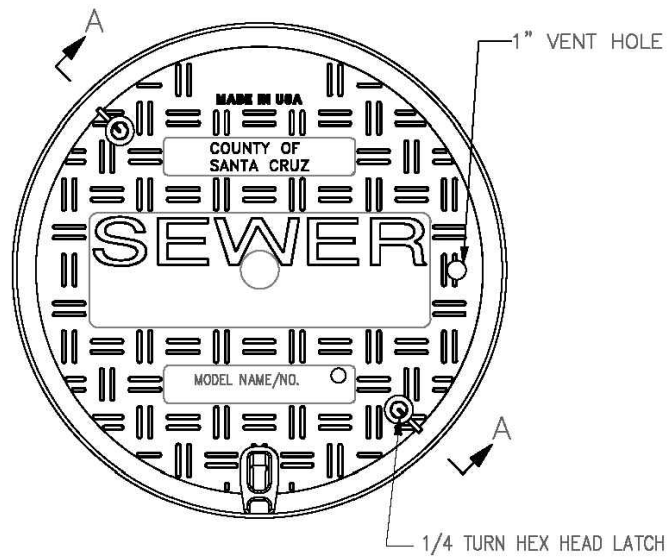


NOTES:

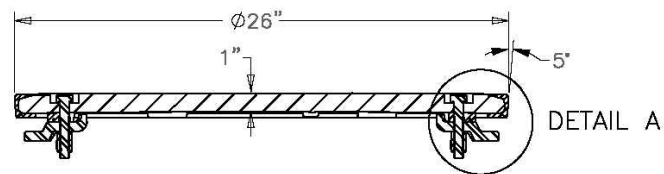
1. CAST IRON TO CONFORM TO ASTM A-48, CLASS 35B
2. CAST IRON MANHOLE COVERS ARE REQUIRED IN COUNTY ROADS

CAST IRON MANHOLE COVER
FIG. SS-23A

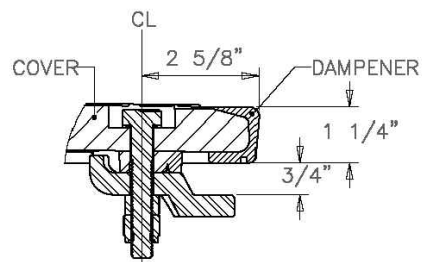
REV.10/23



PLAN



SECTION A-A



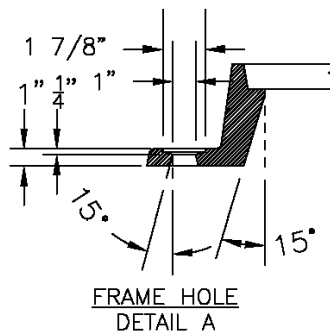
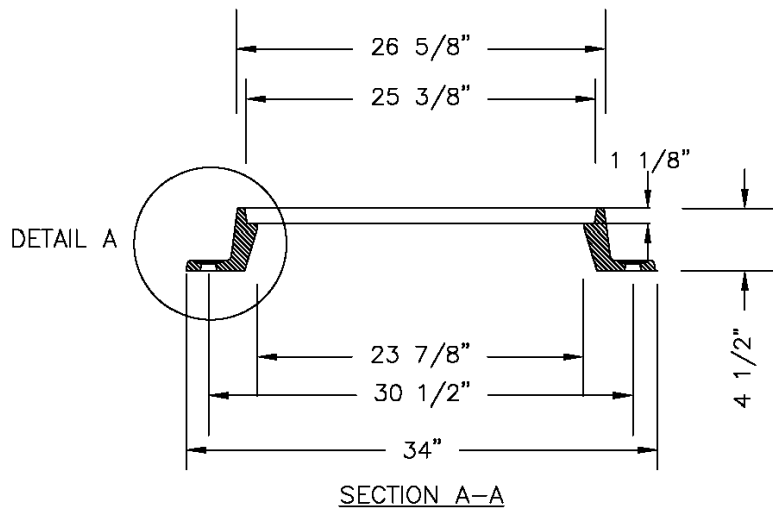
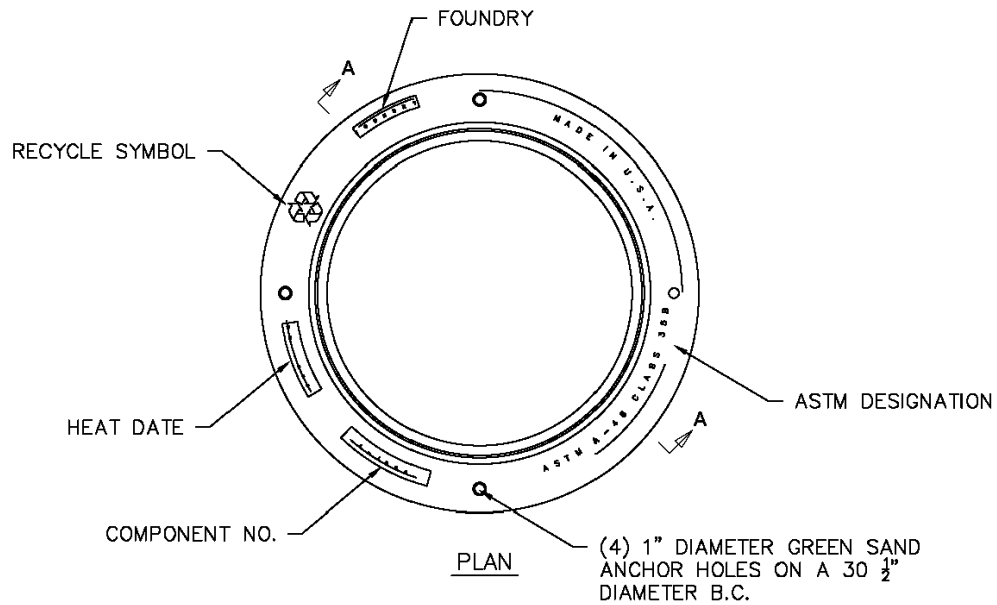
HEX LATCH
DETAIL A

NOTES:

1. EJ DUROSTREET COM260327 90R APPROVED EQUAL) LOAD RATING = H25
2. INSTALLATION OF COMPOSITE MANHOLE COVERS REQUIRES COUNTY APPROVAL.

REV.10/23

COMPOSITE MANHOLE COVER
FIG. SS-23B

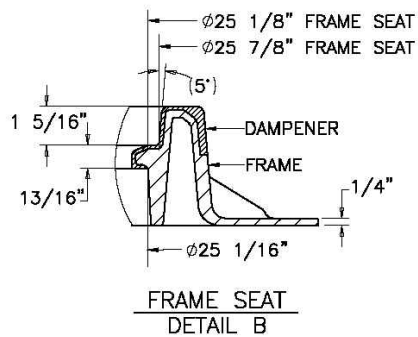
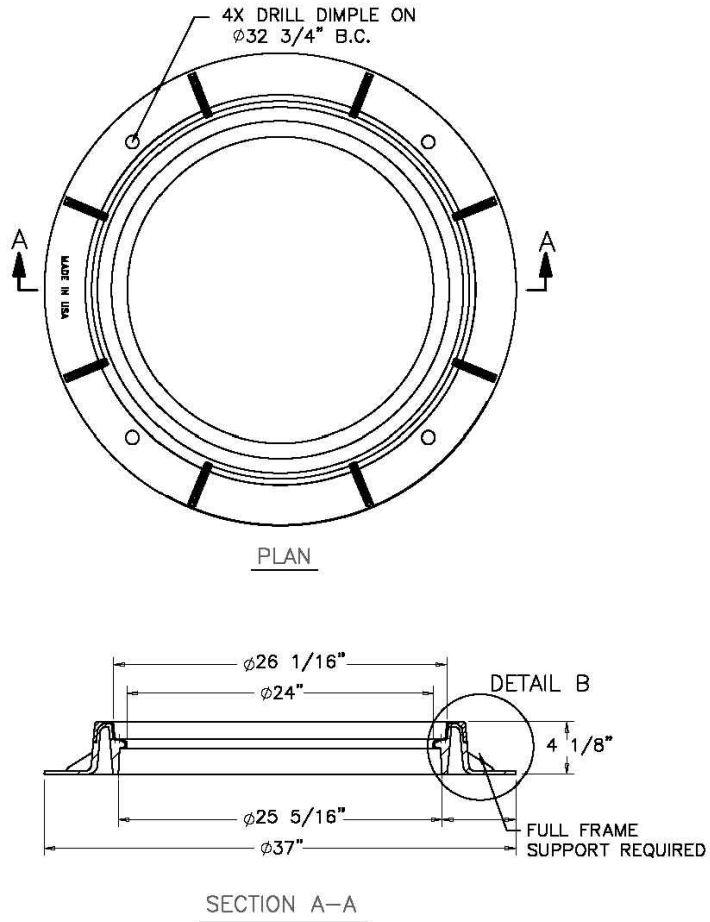


NOTES:

1. CAST IRON TO CONFORM TO ASTM A-48, CLASS 35B
2. CAST IRON MANHOLE FRAMES ARE REQUIRED IN COUNTY ROADS

CAST IRON MANHOLE FRAME
FIG. SS-24A

REV.10/23

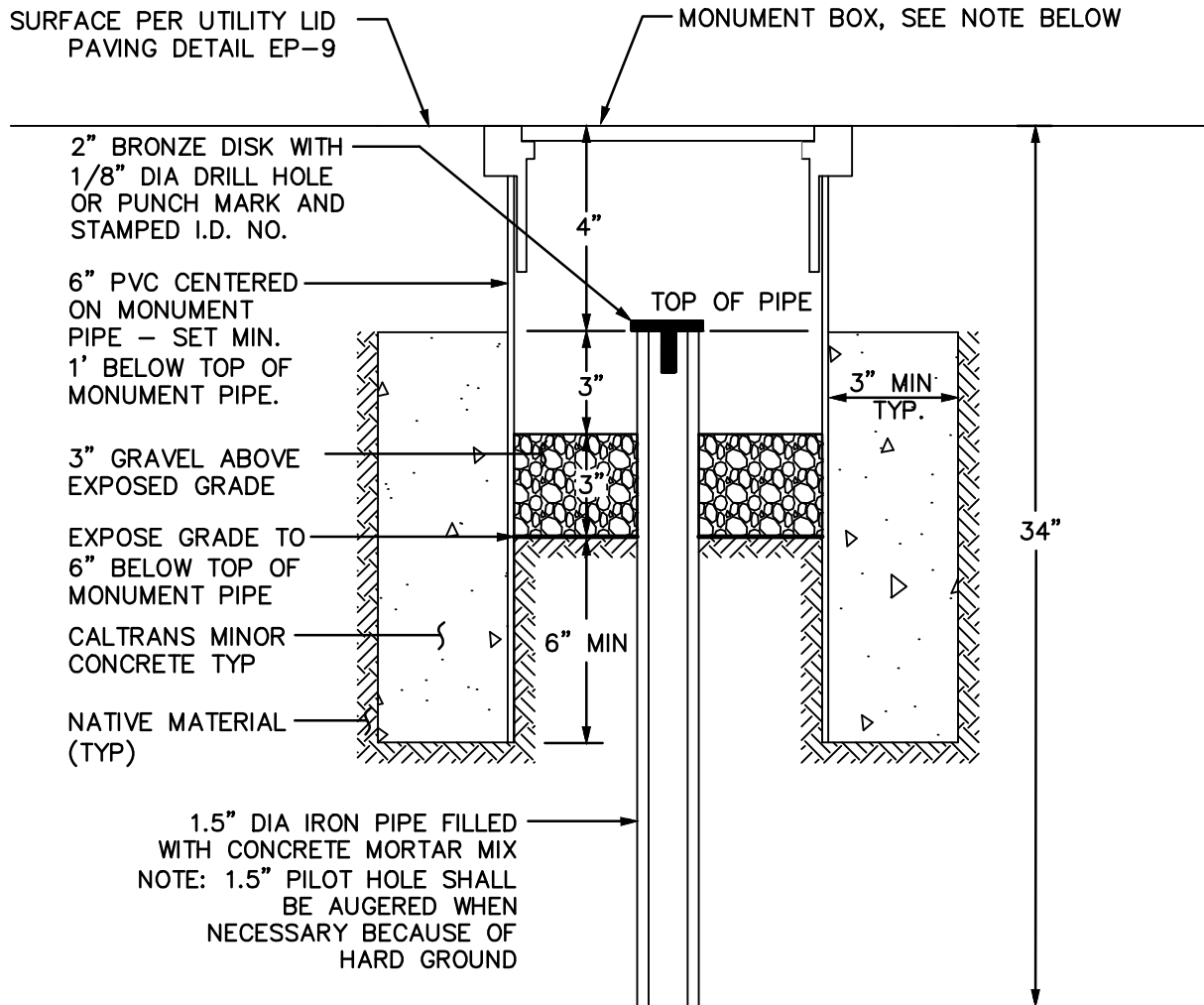


NOTES:

1. EJ DUROSTREET COM260210 90R, OR APPROVED EQUAL LOAD RATING = H25
2. INSTALLATION OF COMPOSITE MANHOLE FRAMES REQUIRES COUNTY APPROVAL.

REV.10/23

COMPOSITE MANHOLE FRAME
FIG. SS-24B



NOTE

MONUMENT BOX SHALL BE D&L No. K-6001-2 (TRAFFIC RATED AND WATER TIGHT) OR APPROVED EQUAL PRESSED INSIDE A 6" PVC PIPE. COVER SHALL HAVE THE WORD "MONUMENT" ENGRAVED ON TOP. BRONZE DISK SHALL BE PROVIDED BY THE COUNTY.

STANDARD MONUMENT DETAIL



County of Santa Cruz

DEPARTMENT OF COMMUNITY DEVELOPMENT AND INFRASTRUCTURE

701 OCEAN STREET, FOURTH FLOOR, SANTA CRUZ, CA 95060-4070
Planning (831) 454-2580 Public Works (831) 454-2160

Matt Machado, Deputy CAO, Director of Community Development and Infrastructure

NOTICE OF EXEMPTION

To: Clerk of the Board
701 Ocean Street, Room 500
Santa Cruz, CA 95060

Project Name: 2025 Measure D Resurfacing Project

Project Location: The project is located along various roadways in unincorporated Santa Cruz County as identified in Attachment A.

Assessor Parcel No.: County Road Right of Way

Project Applicant: Santa Cruz County Department of Community Development & Infrastructure- Public Works

Project Description: The proposed project involves pavement maintenance and repair activities along various roadways in unincorporated Santa Cruz County. Various repair treatments will be used depending on existing roadway conditions. The attached road list identifies the sections of roadways receiving improvements, and the treatment designated for each section. The primary treatment for most roads will involve isolated road base repairs (dugouts) of damaged areas followed by rubberized cape seal. Some roads will receive a full depth reclamation, micro-surfacing seal, asphalt pavement leveling course or overlay, rubberized chip seal followed by an asphalt overlay, or some combination of these treatments.

Agency Approving Project: County of Santa Cruz

County Contact: Dusty Osburn **Telephone No.** 831-706-1342

Date Completed: 12/19/2024

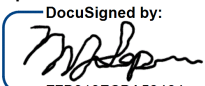
This is to advise that the County of Santa Cruz has found the project to be exempt from CEQA under the following criteria:

Exempt status: (*check one*)

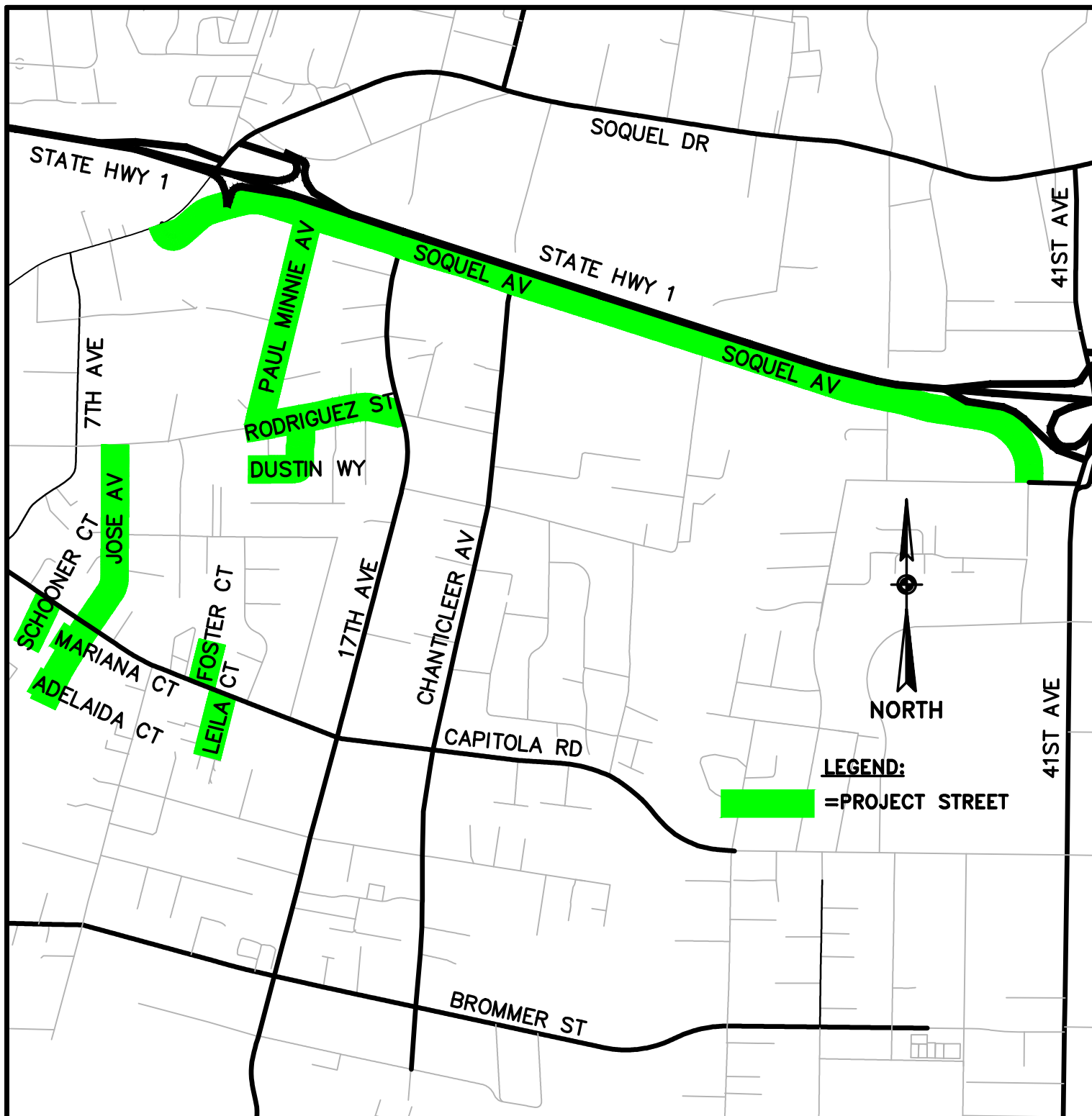
- ☐ The proposed activity is not a project under CEQA Guidelines Section 15378.
☐ The proposed activity is not subject to CEQA as specified under CEQA Guidelines Section 15060 (c).
☐ The proposed activity is exempt from CEQA as specified under CEQA Guidelines Section 15061(b)(3).
☐ **Ministerial Project** involving only the use of fixed standards or objective measurements without personal judgment.
☐ **Statutory Exemption** other than a Ministerial Project (CEQA Guidelines Section 15260 to 15285).
☒ **Categorical Exemption**
15301(c)(d) Class 1. Existing Facilities

Reasons why the project is exempt:

The project involves repair and maintenance of existing public roadways for the purpose of improving public safety and involves no expansion of the existing use.

DocuSigned by:

Signature: _____ Date: 12/19/2024 Title: Resource Planner IV
F7B940FCBA53464...

Attachment A



2025 PAVEMENT MANAGEMENT PROJECT

VICINITY MAP

DISTRICT 1 (LIVE OAK)

DESIGN: DAM/DMO

DRAFTING: DMO/DAM

CHECKED: CRC

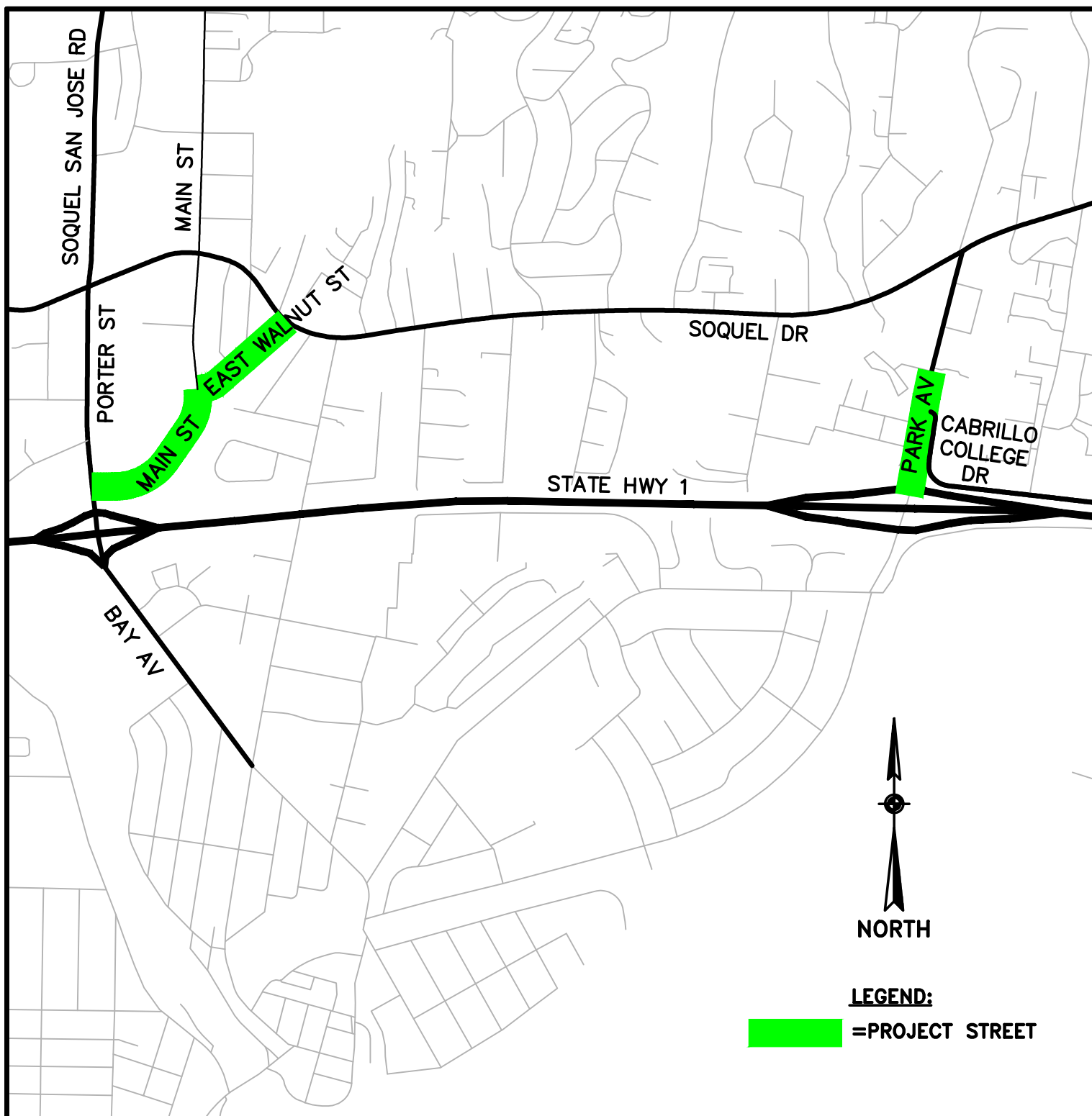
DATE: 12/12/24

SCALE: 1"=1000'

JOB NO: _

SHEET

D1.1



2025 PAVEMENT MANAGEMENT PROJECT

VICINITY MAP

DISTRICT 1 (SOQUEL)

DESIGN: DAM/DMO

DRAFTING: DMO/DAM

CHECKED: CRC

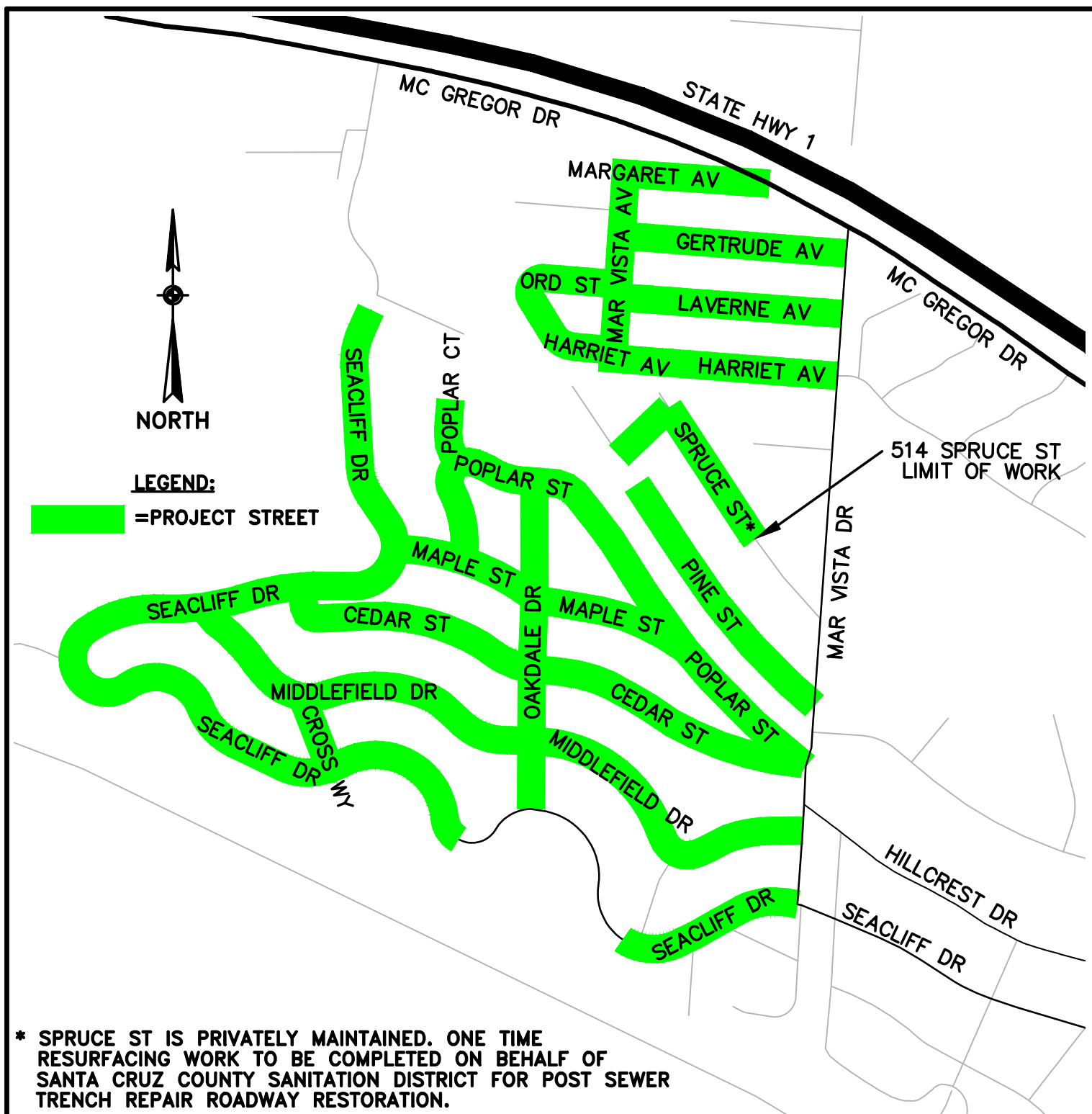
DATE: 12/12/24

SCALE: 1"=1000'

JOB NO: —

SHEET

D1.2



2025 PAVEMENT MANAGEMENT PROJECT

VICINITY MAP

DISTRICT 2 ROADWAYS
WEST SEACIFF

DESIGN: DO/DBM

DRAFTING: DBM

CHECKED: CRC

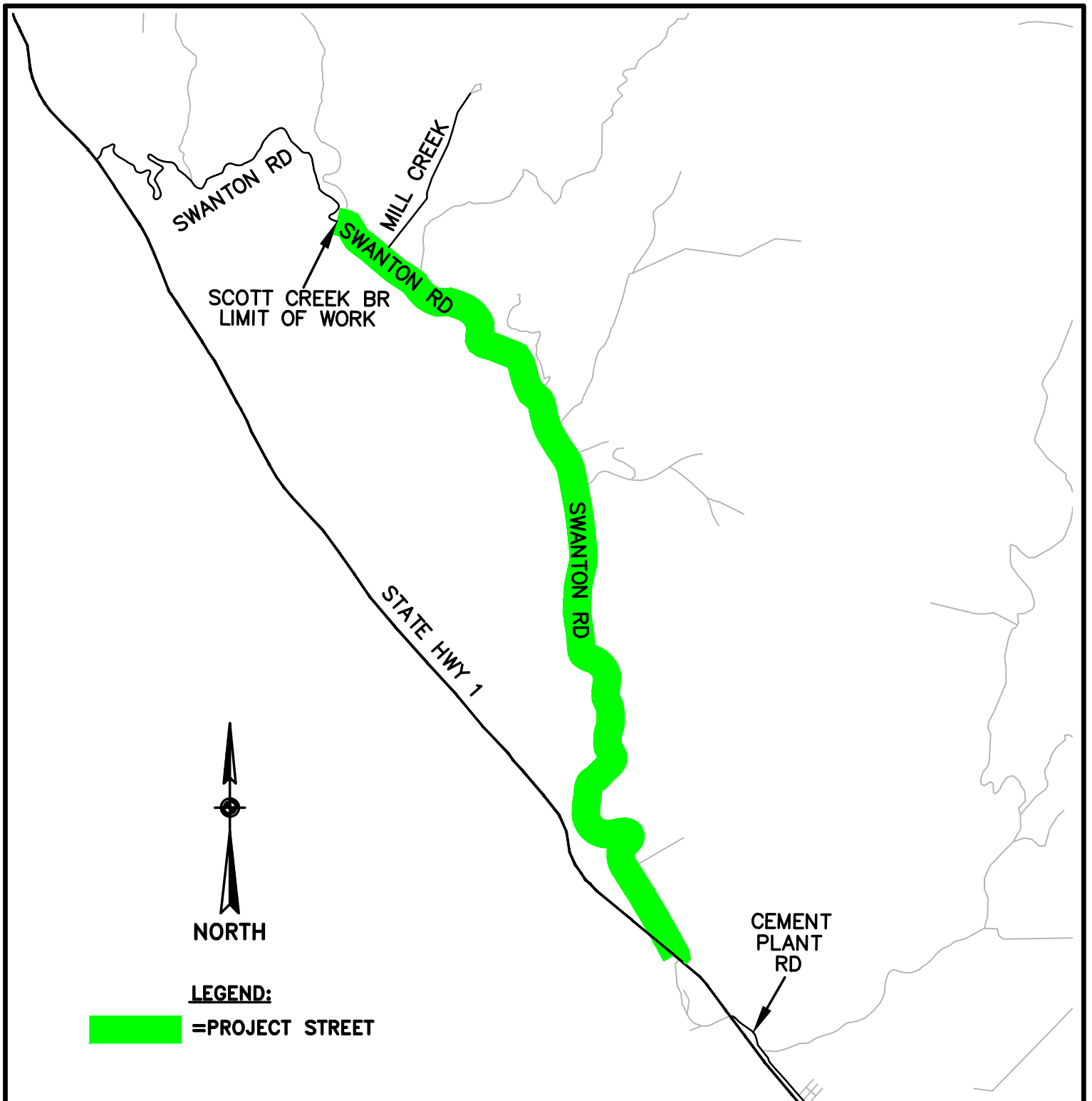
DATE: 12/12/24

SCALE: 1"=400'

JOB NO: —

SHEET

D2



2025 PAVEMENT MANAGEMENT PROJECT

VICINITY MAP

DISTRICT 3 ROADWAYS
SWANTON RD

DESIGN: DAM/DMO

DRAFTING: DMO/DAM

CHECKED: CRC

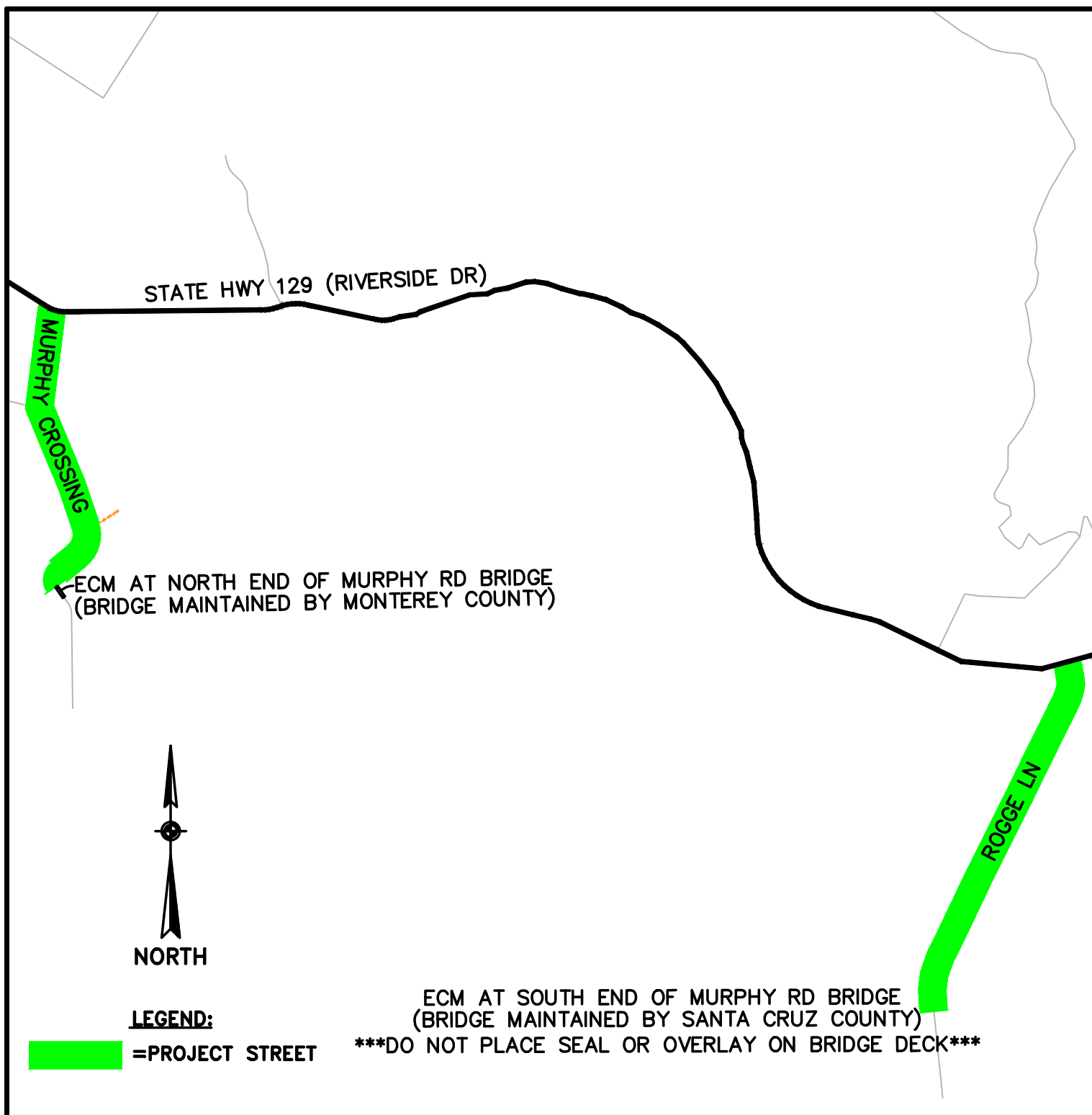
DATE: 12/12/24

SCALE: 1"=3500'

JOB NO: —

SHEET

D3



2025 PAVEMENT MANAGEMENT PROJECT

VICINITY MAP

DISTRICT 4 (AROMAS)

DESIGN: DAM/DMO

DRAFTING: DMO/DAM

CHECKED: CRC

DATE: 12/12/24

SCALE: 1"=1500'

JOB NO: —

SHEET

D4

ENCROACHMENT PERMIT

DOT TR-0120 (REV 05/2023)

Permit No.
05-24-N-UE-0743

In compliance with your application of September 17, 2024

Dist/Co/Rte/PM
05/SCR/001/PM R0-37.45-Var

Reference Documents:

- ☐ Utility Notice No. _____ of _____
- ☐ Agreement No. _____ of _____
- ☐ R/W Contract No. _____ of _____
- ☐ Project code (ID): _____ CFC #: _____
- ☐ Applicant's Reference/ Utility Work Order No. _____

Permit Approval Date
September 27, 2024

Performance Bond Amount (1)	Payment Bond Amount (2)
\$0	\$0

Bond Company
\$ N/A

Bond Number (1)	Bond Number (2)
\$ N/A	\$ N/A

TO:

County of Santa Cruz

701 Ocean Street, Room 410

Santa Cruz, CA 95060

_____, PERMITTEE

and subject to the following, PERMISSION IS HEREBY GRANTED to:
Maintenance of County facilities within State right of way including surveying, mowing and vegetation management, landscaping maintenance, irrigation maintenance, graffiti removal, pavement resurfacing, patching, roadbed maintenance, pavement markings, lighting, signage, stormwater system maintenance, underground utility maintenance, sidewalk maintenance, litter control, ditch cleaning, traffic control, placement of temporary signage, and PCMS units as allowed by the Caltrans Permit Inspector and directed by the permit provisions in conventional State right of way in the County of Santa Cruz.

THIS PERMIT IS NOT A PROPERTY RIGHT AND DOES NOT TRANSFER WITH THE PROPERTY TO A NEW OWNER.

The following attachments are also included as part of this permit (check applicable):

- ☒ YES ☐ NO General Provisions
- ☒ YES ☐ NO Utility Maintenance Provisions
- ☒ YES ☐ NO Storm Water Special Provisions
- ☒ YES ☐ NO Special Provisions
- ☐ YES ☒ NO A Cal-OSHA Permit, if required: Permit No. _____
- ☐ YES ☒ NO As-Built Plans Submittal Route Slip for Locally Advertised Projects
- ☐ YES ☒ NO Storm Water Pollution Protection Plan
- ☐ YES ☒ NO The information in the environmental documentation has been reviewed and considered prior to approval of this permit.

In addition to fee, the permittee will be billed actual costs for:

- ☐ YES ☒ NO Review
- ☐ YES ☒ NO Inspection
- ☒ YES Field Work
(if any Caltrans effort expended)

As-built Plans are Required

- ☒ YES ☐ NO

This permit is void unless the work is completed before September 30, 2025

This permit is to be strictly construed and no other work other than specifically mentioned is hereby authorized.

No project work shall be commenced until all other necessary permits and environmental clearances have been obtained.

CC:
#1:
#2:
#3:
#4:

APPROVED:

Scott Eades, District Director

BY

Rachel Naccarati

Rachel Naccarati (Sep 27, 2024 12:03 PDT)

RACHEL N NACCARATI, District Permit Engineer

California Department of Transportation

50 HIGUERA STREET | SAN LUIS OBISPO, CA 93401-5415
(805) 549-3111 | TTY 711
www.dot.ca.gov



9/27/2024

05-SCR-Var-Var
0524 NUE 0743

County of Santa Cruz
Attn: Matt Machado
701 Ocean Street
Santa Cruz, CA 95060

Dear Matt:

Attached is your approved encroachment permit. **DO NOT BEGIN WORK UNTIL YOU HAVE FIRST READ THE ENTIRE PERMIT CAREFULLY AND COMPLETELY AND CONTACTED THE STATE INSPECTOR LISTED ON YOUR PERMIT.**

This permit is a legal and binding contract once work on it has begun. You are subject to the provisions contained in the permit and in the attached Encroachment Permit General Provisions. If there is any question regarding interpretation of any detail in the permit or the General Provisions, you may contact the inspector listed on your permit or our office at (805) 549-3152. Thank you in advance for your cooperation.

Pursuant to the Executive Department, State of California, Proclamation of a State of Emergency, signed on October 27, 2019, and under the direction of the Office of Emergency Services and the State Emergency Plan, work authorized by this permit will be suspended when a planned Public Safety Power Shutoff (PSPS) notification is in effect. Unless Permittee has obtained special approval from the Director of Caltrans or his assigns to work during a PSPS event, Permittee must stop work and make all traveled ways and roadsides safe for public travel and emergency services if notified by the Director of Caltrans or his assigns.

Sincerely,

A handwritten signature in black ink that reads 'Jesse Cline'.

for
RACHEL NACCARATI, P.E.

District Permit Engineer

Work authorized under this permit:

Maintenance of County facilities within State right of way including surveying, mowing and vegetation management, landscaping maintenance, irrigation maintenance, graffiti removal, pavement resurfacing, patching, roadbed maintenance, pavement markings, lighting, signage, stormwater system maintenance, underground utility maintenance, sidewalk maintenance, litter control, ditch cleaning, traffic control, placement of temporary signage, and PCMS units as allowed by the Caltrans Permit Inspector and directed by the permit provisions in conventional State right of way in the County of Santa Cruz.

Permit Distribution List:

Permit File

David Ontiveros - Inspector

Eric DeGroodt - SCR Maint.

STATE PERMIT INSPECTOR

Unless approved otherwise by the State Permit Inspector, **Permittee must contact the State Permit Inspector listed below, at the following times, before starting work in the State right of way:**

- **A minimum of two weeks** prior to commencing work for a pre-job meeting to discuss permit provisions, notification requirements, and scheduling.
- **A minimum of two working days** prior to commencing work.

State Permit Inspector: David Ontiveros	Phone: (831) 476-1337
Email: david.ontiveros@dot.ca.gov	Fax: (831) 476-1803

Notification requirements that will impact your work schedule:

1. **Changes to horizontal or vertical clearances;** minimum of 25-day advance notification.
2. **Lane closures:** completed "Weekly Traffic Update" form must be submitted by noon the Monday prior to date of proposed lane closure.
3. **Public Affairs:** completed "Public Affairs – Permitted Activity Notification" form must be submitted as early as possible (One Week Ahead is Best) prior to beginning of permitted activity.
4. When work has been interrupted for more than five working days, the Permittee must notify the Caltrans Permit Inspector a minimum of two working days prior to **restarting work**.

Caltrans District 5 Permit Provisions
County of Santa Cruz
0524 NUE 0743
05-SCR-Var-Var
Page 2 of 30

This issued encroachment permit is void unless the permitted activity or construction is completed by the void date shown on page 1 of the encroachment permit form DOT TR-0120. The Permittee is solely responsible to keep track of the permit void date. All requests to extend this void date must be received by the District 5 Encroachment Permits Office while the encroachment permit is valid. Request for an extension received after the permit void date cannot be processed.

Pursuant to the Executive Department, State of California, Proclamation of a State of Emergency, signed on October 27, 2019, and under the direction of the Office of Emergency Services and the State Emergency Plan, work authorized by this permit will be suspended when a planned Public Safety Power Shutoff (PSPS) notification is in effect. Unless Permittee has obtained special approval from the Director of Caltrans or his assigns to work during a PSPS event, Permittee must stop work and make all traveled ways and roadsides safe for public travel and emergency services if notified by the Director of Caltrans or his assigns.

ADDITIONAL PERMIT ATTACHMENTS

- PUBLIC AFFAIRS PROJECT NOTIFICATION
- WEEKLY TRAFFIC UPDATE
- HOLIDAY AND SPECIAL DAY LANE CLOSURE RESTRICTION CALENDAR
- DISTRICT 5 NON-STANDARD SPECIAL PROVISION 12-4.02C(3)(f)
- CALTRANS STANDARD PLANS T9-T14, T30-T34
- FORM CEM-3101
- HAZARDOUS MATERIALS AND HAZARDOUS WASTE MANAGEMENT
- PEDESTRIAN SAFETY (MCP)
- SIDEWALKS (CS)
- STEEL PLATE BRIDGING UTILITY
- SURVEYS (SV)
- TRAFFIC STRIPING, MARKERS, AND SIGNS
- TREE PRUNING (TRIMMING) AND CHEMICAL APPLICATION
- UTILITY ANNUAL PROVISIONS
- UTILITY OVERHEAD PROVISIONS (OH)
- UTILITY UNDERGROUND PROVISIONS (UG)
- Other:
 - Certification of Compliance with Americans with Disabilities Act (ADA) (TR-0405)
 - Encroachment Permit Trench Detail (TR-0153)
 - Limits of Grind and Overlay for Pavement Replacement
 - Typical Temporary Sign Support Details
 - Typical Portable Changeable Message Sign Placement
 - Encroachment Permit Survey Grid (TR-0151)
 - Encroachment Permit Applicant: Contractor(s) Authorization Form (DOT TR-0429)
 - Notice of Completion TR-0128
 - Completed Standard Encroachment Permit Application (DOT TR-0100)
 - Approved Plans

PLANS AND SPECIFICATIONS

If conflicts arise between Special Provisions, Plans, Caltrans Standard Plans, Standard Specifications, or other Caltrans standards, the Caltrans Inspector shall make the final determination regarding selection or interpretation of standards and/or specifications. State Standards and Specifications must apply to all work within the

State right of way unless directed otherwise by the State Inspector. Reference to the Engineer in the State Standard Specifications must include the State Representative (Caltrans Permit Inspector or District 05 Permit Engineer).

Attention is directed to Section 5 of the current State Standard Specifications and the Encroachment Permit General Provisions (TR-0045) regarding control of work and permit work plan revisions. Additionally, the State Permit Inspector may require reasonable additions, modifications, or revisions to the scope of work at no cost to the State if the change is in the best interest of the State facility where the encroachment permit is being granted and Caltrans policy, Standard Specifications, or Permit Provisions are unclear.

WORK HOURS

Work authorized by this permit that does not restrict or close any traffic lane or shoulder may be performed on weekdays between the hours of 9:00 AM and 3:00 PM.

Traffic lane and shoulder restrictions or closures:

Hours to be determined by the Caltrans Permit Inspector based on location of work.

Work and lane closure restrictions will apply prior to and after a holiday or holiday weekend:

- 1. As shown on the attached Holiday and Special Day Lane Closure Restrictions calendar.**
- 2. Work schedules beyond the calendar dates shall comply with the attached District 5 Non-Standard Special Provision 12-4.02C(3)(f).**
3. When a designated legal holiday falls on a Sunday, the following Monday shall be a designated legal holiday.
4. When November 11th falls on a Saturday, Friday November 10th shall be a designated legal holiday.

The State Inspector must approve deviations from these hours in advance.

All work that will impact the normal operations of Caltrans traffic signal facilities must be performed under traffic control and during the hours approved by the Caltrans Inspector and Caltrans District 5 Traffic Management Center.

CONDITIONS OF APPROVAL

- 1) Work authorized by this permit may require electronic Adobe file format (.pdf) "As-Built" plans as determined by the Caltrans Permit Inspector. As-built files should be received within 30-days of the completion of the permitted work unless otherwise arranged with the Caltrans Permit Inspector. Failure to provide as-built files may result in the suspension of Permittee's encroachment permit activities within Caltrans District 5.
- 2) During the pre-job meeting, the Permittee or Permittee's contractor shall provide the Caltrans Permit Inspector with a work schedule or timeline documenting the start of work to when all repairs to the State highway will be completed.
- 3) Permittee is responsible to ensure that all contractors working for the Permittee are properly and adequately insured.
- 4) For the safety of the traveling public and to ensure the integrity of the State highway system, Caltrans District 5 has provided the following supplemental guidance for the Encroachment Permit Special Provisions - Annual Utility Provisions TR-0160. This supplemental guidance pertains to Annual Utility Provisions UE2, UE3, UE5, and UE6.
 - a) Destructive or ground disturbing maintenance activities may be the subject of a separate permit rider or encroachment permit application and may require engineering plans prepared by a Registered Civil Engineer. References: HDM Topics 81, 82, & 309; Caltrans Mission, Vision, and Goals (<https://dot.ca.gov/about-caltrans>); PE Act 6746
 - b) Emergency work may be performed after consulting with the Caltrans Permit Inspector. A permit rider may be required by the Caltrans Permit Inspector to document the emergency repair.
 - c) Work within the paved or unpaved highway shoulder is allowed, if requested in writing by the Permittee or their approved contractor.
 - d) Excavation within the traveled way shall be the subject of a work modification permit rider.
 - e) Maintenance work to be performed by Permittee's contractor that is not on the approved contractor list shall require a completed Encroachment Permit Applicant: Contractor(s) Authorization Form DOT TR-0429.

- 5) Installation of additional aerial capacity at the same location of existing facilities may be the subject of a permit rider where it is demonstrated that no additional ground disturbing pole line work will be required, and pole line stability calculations have been verified. The determination for a permit rider will be made by the District Permit Engineer or her assigns.
- 6) **This permit does not authorize work within Caltrans Freeways, Expressways, Access Controlled Highways, or the highway traveled way unless otherwise noted in this permit. Work of this nature shall be subject of a permit rider to this permit or another permit. Special provisions included in this permit do not authorize work in the traveled way but are included for emergency work and subsequent approved permit riders.**
- 7) **Failure to meet with the Caltrans Permit Inspector for a pre-job meeting prior to starting work within the State right of way may result in the immediate termination of work at the site. The State right of way shall be restored to a safe condition and all personnel and equipment must be removed from the State right of way as soon as possible as directed by the Caltrans Representative. Work may resume once the meeting with the Caltrans Permit Inspector has taken place and the Caltrans Permit Department has determined that the work is in compliance with the provisions of this permit.**
- 8) **Failure to comply with the permit provisions may result in the revocation of this permit (See Encroachment Permit General Provision number 2.) and will also result in more stringent permit requirements for future encroachment permits.**
- 9) **All work requiring site specific traffic control in lieu of Caltrans Standard traffic control plans shall be the subject of a separate encroachment permit.**
- 10) **All ground disturbing activities must be cleared by Caltrans District 5 Environmental Stewardship branch through the Caltrans Permit Inspector prior to beginning excavations.**
- 11) **Only contractors on the approved/authorized contractor list attached will be allowed to work under this maintenance permit. Permittee may modify the contractor list by completing an Encroachment Permit Applicant: Contractor(s) Authorization Form DOT TR-0429.**
- 12) **By policy the void if not constructed date of Annual Utility Maintenance permit cannot be extended.**
- 13) Maintenance of broadband facilities shall be limited to:

- 14) Maintain, inspect, remove, repair or replace (in kind and same location) all underground facilities except those requiring trenching in the traveled way or require uncovering more than 50 feet of line at any one time.
- 15) Install additional capacity in existing ducts except for facilities not in compliance with the Department's High priority utility policies or on Structures.
- 16) Repairs to sidewalks or curb ramps must comply with current Americans with Disabilities Act (ADA) requirements and may require engineered plans. The Caltrans Permit Inspector shall determine if the scope of work on ADA accessible paths may be allowed under this maintenance permit.
- 17) Paving and pavement delineation provisions within this permit are only for pavement repairs associated with underground utility maintenance activities and not for planned paving, overlays, or delineation and markings.
- 18) The Caltrans Permit Inspector shall determine in the pre-job meeting if the proposed work within the State Highway right of way may be performed under this maintenance permit.
- 19) The Caltrans Permit Inspector shall determine the method of repair of all existing State facilities.

Caltrans Lane Closure System (LCS) Compliance Contacts

- 20) Work authorized by this permit will require compliance and proper notification in LCS.
- 21) If not identified elsewhere in this permit, Permittee or Permittee's contractor must provide the contact information for two personnel, who will be ensuring LCS compliance during the pre-job meeting with the Caltrans Permit Inspector. Contact information shall include personnel's full names, phone numbers and email addresses.

PERMITEE AND PERMITEE'S PRIME CONTRACTOR(S)

Notwithstanding Encroachment Permit General Provision #4, the Permittee and Permittee's prime contractor(s) are required to complete, sign, and submit the attached **Encroachment Permit Applicant: Contractor(s) Authorization Form DOT TR-0429**, prior to the pre-construction meeting, to the Caltrans Permit Inspector.

1. The form must reference permit number **0524 NUE 0743**.

2. A California licensed contractor, individual, or company under contract directly with the Permittee is considered a prime contractor for this encroachment permit.
3. If prime contractor(s) are replaced or added after the initial submission of Form DOT TR-0429, Permittee and Permittee's new prime contractor(s) must complete, sign, and submit another form with signatures to the Caltrans District 5 Encroachment Permits Office.
4. Work within the State right of way may not begin until the receipt and approval of Form DOT TR-0429 by the Caltrans Permit Inspector and the required information listed below from the prime contractor(s) has been approved with a permit rider by the Caltrans District 5 Encroachment Permits Office.

NOTIFICATIONS

Notice of Materials Used

Permittee's attention is directed to the **Caltrans Standard Specification Section 6, Control of Materials**.

The Permittee must bear all costs for source material inspection. Please note that these materials may require source inspection and approval at the manufacturer's plant.

Permittee shall be solely responsible to furnish a list of materials to be used on the permitted project by completing the attached Form CEM-3101 "Notice of Materials Used" for traffic signal standards, lighting (electrolier) standards, metal poles, mast arms, foundation bolts, overhead sign trusses, guard rail components, column casings, epoxy coated rebar, reinforced concrete pipe, steel girders, sign panels, and other items as specified by the State representative. Form must be submitted to the Caltrans Permit Inspector and METS Material Administrator.

The METS Material administrator must determine which materials will require source inspection and which will require onsite inspection in coordination with the Caltrans Permit Inspector. Additional form submissions may be required to address additional items that require source inspection.

Please allow a minimum of six weeks for source inspection, testing, and approval of materials to be used.

Reference attached form CEM-3101 for email address, fax number, and mailing address for submission to the METS Material Administrator.

TRAFFIC CONTROL AND PUBLIC SAFETY

All traffic control must be performed under the direction of qualified and competent traffic control personnel. If it becomes apparent to the Caltrans Permit Inspector that the Permittee's contractor does not have adequately trained and competent staff to perform traffic control, the Permittee or Permittee's contractor must hire a suitable contractor to provide traffic control.

Traffic control and construction zone signing must be performed per an approved traffic control plan.

In the absence of a project specific traffic control plan:

All traffic control must be performed in compliance with the applicable Caltrans Standard Plans for traffic control, California Manual on Uniform Traffic Control Devices, or as approved by and as directed by the Caltrans Permit Inspector,

or

If requested by the Caltrans Permit Inspector, Permittee or Permittee's contractor must provide a traffic control plan prepared by a duly licensed individual for review and approval. Plans must bear the licensed individual's signature and identifying licensing information.

All traffic control personnel performing flagging operations must be trained and follow the provisions listed in Caltrans Standard Specifications 12-4.02C(9) through 12-4.02C(11). Certification of training must be provided if requested by the State Permit Inspector.

All traffic control devices must comply with the current California Manual of Uniform Traffic Control Devices.

The Permittee must provide all traffic control devices and personnel. All expenses incurred from traffic control operations must be borne by the Permittee.

Work must not interfere with traffic and no equipment must be parked on or operated from the traveled way unless approved by the Caltrans representative.

Notwithstanding lane closures noted in the traffic control plans or elsewhere in this permit, the full width of the traveled way must be open for use by public traffic on Saturdays, Sundays, designated legal holidays, the day preceding designated legal holidays, after 3:00 PM on Fridays, and when construction operations are not

actively in progress.

On multilane roadways, a minimum of one-paved traffic lane, not less than 10 feet wide, must be open for use by public traffic in each direction of travel.

On 2-lane, two-way roadways a minimum of one-paved traffic lane not less than 10 feet wide must be open for use by public traffic. When construction operations are not actively in progress, not less than 2 of these lanes must be open to public traffic.

If approved by the State Inspector, one lane may be closed during construction and public traffic stopped for periods not to exceed 5 minutes. After each closure, all accumulated traffic must be allowed to pass through the work before another closure is made. Lane closures must not exceed 0.5 mile in length.

Minor deviations from the requirements of this section concerning hours of work may be permitted upon the written request of the Permittee if, in the opinion of the Inspector, public traffic will be better served, and the work expedited. The Permittee must not adopt these deviations until the Inspector has approved them in writing.

"NO PARKING" zones must be posted a minimum of 48 hours in advance of proposed parking lane closure.

Standard Specification 12-4.02C(4) Buffer Lanes

Where two or more lanes are adjacent to a work area, including work on shoulders, you must close the lane adjacent to the work area in accordance with the lane closure requirements as follows:

1. Work is on the traveled way within 6 feet of the adjacent traffic lane.
2. Work is off the traveled way but within 6 feet of the edge of the traveled way, and the posted speed is 45 mph or greater.
3. Work is off the traveled way but within 3 feet of the edge of the traveled way, and the posted speed is less than 45 mph.

Closure of the adjacent traffic lane is not required for:

1. Workers protected by a permanent or temporary barrier
2. Installation, maintenance, or removal of traffic control devices except for temporary barrier system

For time periods at the beginning or end of work when the lane requirement charts do not allow the closure of the adjacent traffic lane, the following construction activities are allowed without a buffer lane:

1. Paving
2. Parking, positioning, loading, unloading vehicles, or storing equipment or materials necessary for the work being performed
3. Placing, removing or maintaining traffic stripes, pavement marking, or pavement markers
4. Operations not performed by workers on foot such as grinding, grooving, planing, sweeping, applying a tack coat, or operating a crane
5. Operations where workers on foot are protected, at each work location, within the same closure by an impact attenuator vehicle in the lane adjacent to live traffic

Do not perform work activities or store equipment, vehicles, or materials within the buffer lane.

Suspended Loads

Suspended loads or equipment must not be moved nor positioned over public traffic or pedestrians.

12-3.36 PORTABLE TRANSVERSE RUMBLE STRIPS-Standard Special Provisions

12-3.36A General

12-3.36A(1) Summary

Section 12-3.36 includes specifications for placing portable transverse rumble strips.

12-3.36A(2) Definitions

Not Used

12-3.36A(3) Submittals

Submit a copy of the manufacturer's instructions.

12-3.36A(4) Quality Assurance

Not Used

12-3.36B Materials

The strip must be either the RoadQuake 2 or the RoadQuake 2F Folding Temporary Portable Rumble Strip manufactured by Plastic Safety Systems, Inc. For information on obtaining the rumble strips, contact:

CUSTOMER SERVICE
PLASTIC SAFETY SYSTEMS, INC.
2444 BALDWIN RD
CLEVELAND, OH 44104

Telephone no.: (800) 662-6338 or (216) 231-8590

12-3.36C Construction

Place portable transverse rumble strips before closing the lane to traffic.

The color of the portable transverse rumble strips must be black or orange. Use 2 arrays and, each array must consist of 3 rumble strips.

Portable transverse rumble strips must not be placed:

- 1. On sharp horizontal or vertical curves*
- 2. Through pedestrian crossings*

If the portable transverse rumble strips become out of alignment or skewed by more than 6 inches, measured from one end to the other, readjust to bring the placement back to the original location.

Portable transverse rumble strips are not required if any of the following conditions is met:

- 1. Work duration occupies a location for 4 hours or less.*
- 2. Posted speed limit is below 45 mph.*
- 3. Work is of emergency nature.*
- 4. Work zone is in snow or icy weather conditions.*

For a RoadQuake 2 rumble strip, securely connect the 3 sections under the manufacturer's instructions before placing them in the traffic lane.

Remove all portable transverse rumble strips and warning signs before opening the lane to traffic.

If the Engineer determines that the portable transverse rumble strips no longer provide audible and vibratory alerts, replace them.

Portable Changeable Message Sign

Permittee must furnish portable changeable message signs (PCMS) conforming to

State Standard Specifications **Section 12-3.32, "Portable Changeable Message Signs"** and the California Manual on Uniform Traffic Control Devices.

If edge of PCMS sign panel or PCMS extends into the paved shoulder, provide a standard shoulder closure per Caltrans Revised Standard Plan RSP T10.

When PCMS message is no longer needed to inform the traveling public of construction activities, the PCMS must be removed from the State highway right of way, or the PCMS display board must be rotated away from view of the traffic lanes and shut off.

GENERAL REQUIREMENTS

Project/Work Site

All disturbed areas must be restored to original or better condition.

Any change in the existing drainage pattern, whether occasioned by increase or diversion, and the cost of damage, repair, or restoration of the State highway right of way must be the responsibility of the Permittee.

No earth or construction materials are to be dragged or scraped across the highway pavement. No excavated earth shall be placed or allowed to remain at a location where it can be tracked on the highway traveled way, public, or private approach by the Permittee's construction equipment or by traffic entering or leaving the highway traveled way. The Permittee must immediately remove excavated earth or mud so tracked onto the highway pavement or public or private approach.

No excavation, maintenance hole, pull box, or vault shall be left open overnight or unattended during work hours without written permission from the Caltrans representative and adequate protection for traffic and pedestrians is provided.

Any earthwork, excavation and embankments must conform to **Caltrans Standard Specifications Section 19, Earthwork**.

Any clearing and grubbing must conform to **Caltrans Standard Specification Section 17-2, Clearing and Grubbing**.

All newly placed concrete must be cured in accordance with **Caltrans Standard Specifications Section 90-1.03B, Curing Concrete**.

Personnel Protective/Safety Equipment

All personnel working within the State right of way must wear the appropriate

personnel safety/protective equipment as specified by the personnel's employer's "Injury and Illness Prevention Program" required by the California Code of Regulations 3203. If requested by the Caltrans Permit Inspector, personnel's employer must provide a copy of said "Injury and Illness Prevention Program" and identify the locations within the document that addresses, but not limited to, personal protective equipment, head protection, and warning garments.

In the absence of an "Injury and Illness Prevention Program," all other personnel within the project work zone must conform to the personnel protective/safety equipment requirements in the latest edition of the Caltrans Safety Manual.

Aerially Deposited Lead (ADL) for Minimal Disturbance

Permittee must reuse the soil within the work limits in the immediate area from which it was excavated. If any excess soil is generated, it becomes the property of the Permittee. Permittee must transport all excess soil outside of Caltrans' right-of-way and dispose of it in accordance with all applicable environmental laws and regulations.

Construction Debris and Waste Materials

The Permittee solely owns all construction debris and waste materials, including hazardous waste, generated by this permitted project. Said materials must be removed from the State right of way, stored, and disposed of in accordance with applicable local, regional, State, and Federal specifications or regulations. Construction debris and waste materials must be disposed of:

at designated off-site commercial facilities approved to accept said materials,

at non-commercial permitted sites approved to accept said materials (Permittee must provide copies of all necessary local and State agency permits prior to disposal.),

or at sites outside of the State of California approved to accept said materials (Permittee to provide copies of permits issued by the local and State agency with jurisdiction over the site prior to disposal.).

If requested by the State Permit inspector, Permittee must provide a copy of documentation as proof of the proper disposal of said materials.

Survey Monumentation

Permittee's attention is directed to **Caltrans Standard Specifications Section 5-1.36, Property and Facility Preservation** and "Professional Land Surveyors' Act," Section 8771 of the State of California Business and Professions Code. Permittee must

physically inspect the work site and locate survey monuments prior to work commencement. Monuments that might be disturbed must be referenced or reset in accordance with the standards mentioned above.

If feasible, monuments should not be set within the traveled way. All monuments that must be set or perpetuated in paved surfaces must be constructed in accordance with **Caltrans Standard Specifications Section 78-2, Survey Monuments**, and Caltrans Standard Plan A74, Type D, or equal with prior approval of the District Surveys Engineer.

Copies of Corner Record files or Record of Surveys recorded in compliance with the Business and Professions Code must be forwarded to the Caltrans District 5 Surveys Engineer at the following address:

Caltrans District 5
Survey Section
Attn: Jeremy Villegas
50 Higuera Street
San Luis Obispo, CA 93401

Phone: (805) 550-0861
Email: jeremy.villegas@dot.ca.gov

Open Trench Pavement (requires DPE approval)

The clearance and offset requirements for new utility installations within existing or ultimate State Highway rights of way must meet the following minimum clearances along the alignment of the facility:

1. 42 inches below the finished grade or 18 inches below the grading plane of a currently planned project, whichever distance is greater
2. 12 inches below existing or future drainage structures, but not less than the requirements identified in item 1 above
3. 30 inches below the flow line of unlined ditches
4. 24 inches horizontally from the face of piles
5. 24 inches horizontally from the side of the planned excavation
6. 36 inches below concrete sidewalks, where future widening of the street in the sidewalk area is not anticipated.

Trench back fill and paving must comply with the attached "Encroachment Permit Trench Detail (TR-0153)" or as directed by the Caltrans Permit Inspector to meet field conditions.

All existing AC must be saw cut to a minimum width of 3 feet, over the trench, to

allow for a roller compactor to properly compact the AC.

Pavement grinding must be performed to accommodate a uniform overlay for the final trench paving. See attached diagram "Limits of Grind and Overlay for Pavement Replacement."

A minimum grind depth of 2.0 inches is required when using Type A HMA, ½ inch aggregate gradation, or a minimum grind of 2.5 inches is required when using Type A HMA, ¾ inch aggregate gradation.

All trench paving must be constructed per Caltrans Standard Specifications.

Standard Specification 86-1.02B(1); Conduit for fiber optic cable systems, when not using trenchless technologies, must be schedule 40 high density polyethylene, complying with NEMA TC-7

Tracer wire must be a minimum no. 12 copper conductor with orange insulation Type TW, THW, RHW, or USE. For direct burial, the tracer wire insulation must be Type UF.

During trenching operations, tree roots must be avoided whenever possible.

If excavation operations damage roots larger than 2 inches in diameter, roots must be cut cleanly with a saw.

If trenching operations damage more than 20% of a tree's roots, a certified Arborist must be consulted and must submit a mitigation recommendation.

If tree roots are damaged on the highway shoulder, regional Caltrans Tree Maintenance Supervisor must be notified immediately.

If trees are damaged and must be removed for safety reasons, a mitigation plan must be submitted to the State Inspector for approval.

Backfill in trenches outside of the traveled way and shoulder area in the root zones must consist of native soil and must be compacted, using water, to a minimum 90% relative compaction or as directed by the State Inspector.

Erosion control must be applied whenever trenching occurs in unpaved areas.

A Caltrans micro-surfacing Type III may be required over the entire roadway within the project limits as directed by the Caltrans Permits Office or Caltrans Permit Inspector to provide a smooth and uniform color pavement surface prior to installing

final pavement delineation and markings.

Saw Cutting Existing Pavement

Where proposed pavement matches existing roadway pavement, saw cutting of existing pavement must produce a clean, competent pavement edge to join proposed and existing pavement. Pavement edge at the saw cut line must be free of defects including cracks, separated aggregate, or failed structural roadway sections.

Saw cut locations may need to be extended further into the limits of the existing pavement as necessary to obtain a competent pavement edge. The resulting, conform joint must not occur within a wheel track and may require a pavement grind and overlay to conceal the joint.

The Caltrans Permit Inspector must be consulted to determine if a saw cut location is acceptable.

All conform locations in open cuts or where proposed paving meets existing paving must be saw cut to a neat line the full depth of the pavement with a power-driven saw or rock cutting excavator before removing any surfacing. The surfacing to remain in place must not be disturbed or displaced by cutting or removal methods employed.

Trenchless Construction

Installations with the bore diameter less than thirty (30) inches shall comply with Encroachment Permit Special Provisions, Utility Underground Provisions (UG) TR-0163.

Installations with the bore diameter equal to or greater than thirty (30) inches must comply with Non-Standard Special Provisions (NSSP) 19-15, Trenchless Construction.

In the pre-construction meeting, the applicant or its contractor must present and discuss:

1. Trenchless construction shop drawings if applicable (see Section 603.6A5B)
2. Mitigation plans for both during and after construction
3. Timeline and critical path activities
4. Safety requirements, including Cal/OSHA and Tunnel Safety Orders
5. All applicable permits from other agencies and associated requirements from those permits for construction

Standard Specification 86-1.02B(1); Conduit for fiber optic systems, when used for horizontal directional drilling, must be high density polyethylene Type IPS, SDR 9 and comply with ASTM F2160.

Tracer wire must be a minimum no. 12 copper conductor with orange insulation Type TW, THW, RHW, or USE. For direct burial, the tracer wire insulation must be Type UF.

Material Testing

Material testing and quality control must conform to the State Construction Manual and to the State Material Testing Manual. Testing must be performed by a certified material-testing consultant acceptable to the State and paid for by the Permittee. Material testing and quality control tests must be performed as required by the State's Inspector and the results thereof must be made immediately available.

All required construction compliance tests must be performed with the California Test Methods and must be in accordance with the latest edition of Caltrans Independent Assurance Program Manual. A Caltrans certified laboratory must also perform all tests and all laboratory reports must be furnished to the Department's representative at no cost to the State.

Backfill Requirements

All backfilling and compaction must conform to the applicable sections of the **Caltrans Standard Specifications Section 19-5, Compaction.**

Backfilling using ponding or jetting methods are prohibited.

Caltrans Standard Specification 2-sack slurry cement should be used for backfilling under all paved surfaces to expedite roadway repairs.

All backfill material must comply with and must be constructed per Caltrans Standard Specifications.

Backfill material must be approved by the Caltrans Permit Inspector prior to beginning excavation.

Culverts with less than 2 feet of cover must be backfilled as directed by the State Inspector with minor concrete conforming to **Caltrans Standard Specifications Section 90-2.**

Relative Compaction (90 Percent)

Embankment compaction beyond the roadbed or outside of structure backfill must

not be less than 90 percent relative compaction unless stated otherwise in the Caltrans Standard Specifications or Caltrans Highway Design Manual.

Relative Compaction (95 Percent)

Relative compaction of not less than 95 percent must be obtained for a minimum depth of 0.5-foot below the grading plane for the width between the outer shoulders, whether in excavation or embankment.

In addition, relative compaction of not less than 95 percent must be obtained for a minimum depth of 2.5 feet below the finished grade for the width of the traveled way plus 3 feet on each side thereof, whether in excavation or embankment.

For limits of 95 percent compaction of embankment adjacent to abutments and for retaining walls without pile foundations reference **Caltrans Standard Specifications Section 19-5.03B**.

Paving - Type A Hot Mix Asphalt (Type A HMA)

The structural section of the new pavement should have been determined in accordance with pre-project R-value tests of the soil and the Traffic Index value for that portion of roadway as shown on the approved plans and must be no less than the adjacent pavement. If any question should arise concerning the R-values and Traffic Index values, the Caltrans Permit Inspector shall make the final determination regarding which values will be used.

If basement soils differ from the anticipated site conditions, the Caltrans Permit Inspector may request R-value verification tests at spot locations at no cost to the State.

Once excavation has been initiated to place a structural section for pavement replacement, complete excavation, placement of structural base courses, and paving must be performed in succession and continuously, without delay, until completed.

Newly placed asphalt concrete roadway pavement or shoulder paving must have a minimum width of 3 feet or as directed by the State's inspector to allow a roller compactor to compact the roadway section without contact over existing surfaces. Pavement or shoulder sawcutting to acquire the 3 feet minimum width must be done radial to or perpendicular to the lip of curb, curb face, edge of pavement, centerline or as directed by the State Inspector.

Asphalt concrete must be Type A HMA, $\frac{1}{2}$, $\frac{3}{4}$, or 1-inch aggregate gradation, and must conform to the specifications in **Section 39, "Asphalt Concrete"**, of the Caltrans Standard Specifications.

The placement and use of asphalt concrete products, which includes but not limited to, asphalt, aggregate, pavement reinforcing fabric, storage, drying, proportioning, mixing, subgrade preparation, prime coat, paint binder (tack coat), spreading and compacting must comply with Caltrans Standard Specifications – **Section 39, "Asphalt Concrete"**.

The area to which paint binder has been applied must be closed to public traffic. Care must be taken to avoid tracking binder material onto existing pavement surfaces beyond the limits of construction.

A drop-off of more than 0.15 feet will not be allowed at any time between adjacent lanes open to public traffic.

At the end of each working day if a difference exists between the elevation of the existing pavement and the elevation of any excavation within 15 feet of the traveled way, material must be bladed up and compacted against the vertical cuts adjacent to the traveled way. During excavation operations, native material may be used for this purpose; however, once the placing of the structural section commences, structural material must be used. The material must be placed to the level of the top of existing pavement and tapered at a slope of 4:1 (horizontal: vertical) or flatter to the bottom of the excavation.

Pavement Delineation and Markings

Traffic stripes and pavement markings to be removed must be removed at the locations shown on the plans and at the locations designated by the Engineer.

Traffic stripes and pavement markings must be removed by any method that does not materially damage the existing pavement. Pavement marking images must be removed in such a manner that the old message cannot be identified. Where grinding is used, the pavement marking image must be removed by grinding a rectangular area. The minimum dimensions of the rectangle must be the height and width of the pavement marking. A minimum of a Caltrans Micro-surfacing may be required to correct any imperfections to the pavement as directed by the Caltrans Inspector.

Residue resulting from removal operations must be removed from pavement surfaces by sweeping or vacuuming before the residue is blown by the action of traffic or wind, migrates across lanes or shoulders, or enters drainage facilities.

The removal of yellow pavement delineation may contain lead. Permittee shall be responsible to have the waste material tested for the concentration of lead. The Permittee, for work performed under an encroachment permit project, shall be the

generator of the hazardous material and is solely responsible to properly process and dispose of the lead laden waste material at no cost to the State.

All striping and pavement markings, unless otherwise noted on the approved plans or permit, must be applied in thermoplastic material in conformance with **Caltrans Standard Specifications Section 84, MARKINGS**.

Permittee or Permittee's contractor must coordinate with the Caltrans Permit Inspector to document all existing pavement delineation and markings that may be obscured or removed during the pavement rehabilitation process. All existing pavement delineation and markings must be replaced in kind and at the same location.

Curbs, Gutters, Sidewalk, and Asphalt Concrete Dike

Sidewalk/accessible path construction with grades or dimensions that exceed the maximum allowed values per the Americans with Disabilities Act (ADA), State Standards Plans and Specifications, and Caltrans requirements is not acceptable and will require reconstruction to bring the facility into compliance.

Curb, gutter, and sidewalk construction must comply with Caltrans Standard Specification **Section 73, Concrete Curbs and Sidewalks**.

New sidewalk, curb and gutter concrete must be doweled as follows or as directed by the State Inspector. New concrete must be doweled into existing adjacent concrete with minimum of 12 inches #4 smooth bars equally embedded, at 24-inch centers and 6 inches from the concrete edge, or as directed by the State Inspector. A minimum of one longitudinal bar must be doweled into each, the curb and in the gutter. One end of each bar must be greased or sleeved. Concrete sidewalk must not be doweled into the curb and gutter.

New curb and gutter installations must be State standard type A2-6, unless necessary to conform to existing adjacent curb and gutter installations or noted elsewhere on the approved plans.

New curb and gutter must be constructed to drain properly without ponding.

Where curbs exist, the driveway structural section must be a minimum of 6 inches of Portland Cement Concrete (PCC) over 6 inches of Class 2 aggregate base.

Removal of PCC Sidewalks or Curbs: sidewalks or curbs must be saw cut to the nearest score marks and replaced equal in dimension to that removed with score marks matching existing adjacent sidewalk or curb.

Existing curb and gutter may be sawcut at lip of gutter if the curb and gutter can be removed without disturbing the existing pavement structural section. New curb and gutter concrete must be poured neat to the existing pavement and must match the elevation of the existing pavement.

Effort must be made to retain the existing pavement adjacent to new concrete work. If the Caltrans Permit Inspector determines that the existing pavement was damaged, or if the pavement was removed to facilitate the curb, gutter or driveway improvements, then the existing pavement must be repaired or replaced in kind directed by the Caltrans Permit Inspector. Limits of roadway pavement repair or replacement shall be determined by the Caltrans Permit Inspector to meet field conditions and must be a minimum of 3 feet from the flowline of the curb or lip of gutter.

All newly placed concrete must be cured in accordance with the provisions of **Section 90-1.03B, "Curing Concrete,"** of Caltrans Standard Specifications.

AC dikes must be removed by saw cutting to a neat line and replaced in kind per State Standard Plans A87B or as directed by the State Inspector. Asphaltic binder and aggregate size for AC dikes must conform with Caltrans Standard **Specification 39-2.01B (11), Miscellaneous Areas and Dikes.**

Curb Ramps

Curb ramp construction must comply with Caltrans Standard Specification **Section 73, Concrete Curbs and Sidewalks.**

Curb ramp construction with grades or dimensions that exceed the maximum allowed values per the Americans with Disabilities Act (ADA), State Standards Plans and Specifications, and Caltrans requirements is not acceptable and will require reconstruction to bring the curb ramp into compliance.

Curb ramp detectable warning surface must consist of raised truncated domes constructed or installed on curb ramps in conformance with the details shown on the plans and these special provisions. At the option of the Contractor, the detectable warning surface must be prefabricated, cast-in-place, or stamped into the surface of the curb ramp. The color of the detectable warning surface must match yellow color no. 33538 of AMS-STD-595.

Prefabricated detectable warning surface must be in conformance with the requirements established by the Department of General Services, Division of State Architect and be attached in conformance with the manufacturer's recommendations.

The finished surfaces of the detectable warning surface must be free from blemishes.

The manufacturer must provide a written 5-year warranty for prefabricated detectable warning surfaces, guaranteeing replacement when there is defect in the dome shape, color fastness, sound-on-cane acoustic quality, resilience, or attachment. The warranty period shall begin upon acceptance of the contract.

Install a prefabricated detectable warning surface under the manufacturer's instructions.

Access Holes, Pull Boxes and Valve Boxes

Access holes must conform to State Standards unless local standards exceed that of the State.

Access holes, valve boxes and pull boxes must be located as far as practical from the roadway as to minimize impact to traffic when accessed.

Access holes, valve boxes and pull boxes should not be placed in the traveled way or paved shoulders.

Access holes placed in graded dirt shoulders must be set flush with finished grade, and a minimum 1-foot-wide minor concrete collar must be constructed around the manhole as directed by the State Inspector.

Access holes, valve boxes and pull boxes must not be located where there is a break in grade between the pavement, gutter, curb ramps or in major traffic lanes of a cross street.

All access holes, valve boxes and pull boxes must have traffic-rated covers and must be constructed flush with the adjacent surface.

All access hole, valve box and pull box covers must fit into their frames without rocking.

Surveys

This permit does not authorize work on freeways, expressways, or access-controlled highway rights of way. Work on these types of highway facilities must be the subject of a permit rider or a separate permit for each request or site location.

Traffic control and traffic control signage for each survey site must be determined by and approved by the State Inspector prior to starting work.

All survey operations must be conducted off the traveled way except where necessary to cross pavements and medians.

When survey operations are being conducted, the permittee must furnish, place, and maintain signs and safety equipment in accordance with the latest edition of the Caltrans Survey Manual, Caltrans Manual of Traffic Controls for Construction and Maintenance Work Zones, and California Manual on Uniform Traffic Control Devices.

All personnel must wear hard hats and warning garments in the appropriate color (fluorescent/reflective versions). Work must be done during daylight hours only.

Unless specifically authorized in this permit, markings within the right-of-way must be temporary. Any painted markings must be made with water-soluble paint, and other markings must be removed upon completion of the survey.

Electromagnetic and radioactive equipment must be operated by certified personnel and must not interfere with radio communications or be directed toward the traveling public.

Permission is also granted to park survey vehicles temporarily within the right of way, outside the shoulders, while survey work is in progress. Auxiliary support and employee vehicles must remain outside of the right of way.

Survey information and assistance may be obtained upon request to:

Department of Transportation
Survey Section
Attn: Jeremy Villegas
50 Higuera Street
San Luis Obispo, CA 93401

Phone: (805)549-3066
Email: jeremy.villegas@dot.ca.gov

If feasible, monuments should not be set within the traveled way. All monuments that must be set or perpetuated in paved surfaces must be constructed in accordance with Caltrans Standard Specifications, **Section 78-2, "Survey Monuments,"** and Standard Plan A74, Type D, or equal with prior approval of the District Surveys Engineer.

Any survey data requested by or furnished to Caltrans must be provided without charge.

Copies of Corner Records or Records of Surveys, recorded in compliance with the Business and Professions Code, must be forwarded to the District Surveys Engineer.

Measurements across traffic lanes must be made with electronic distance measuring devices utilizing non-visible light or other optical means.

Permittee must provide for the safe passage of pedestrians and bicyclists.

This permit does not authorize removal, cutting, trimming or damage to any tree, shrub, or plant within the highway right of way.

Unless specifically authorized elsewhere in this permit, excavation of holes in paved surfaces is prohibited.

Any permitted excavations must be backfilled in accordance with State standards and as directed by the State's representative.

When on the State Highway system, use W21-6 "Survey Crew" sign prior to survey area per the Caltrans Standard Plan T9 advance warning sign spacing or under the guidance of the Caltrans Permit Inspector.

Unmanned Aircraft Systems (UAS)

Unless specifically authorized in this permit, UAS operations within the State right of way requires prior written approval from the District Encroachment Permits Office.

UAS operations must comply with Caltrans UAS Operations Handbook.

Soil Bore/Sampling

The pavement must be cored or saw cut to produce a neat hole at least two inches larger than the soil bore diameter. The surfacing to remain in place must not be distributed or displaced by drilling, cutting or removing methods employed.

Placement of borings must be determined to offer the least possible immediate and future conflict with pedestrian and vehicle traffic. Work to be done beyond the permit work completion date must be covered by a permit rider to this permit.

Permittee must supply a complimentary copy of all boring logs and data reports from tests on any sample taken on the State right of way. This includes a map accurately locating the borings with reference to a permanent landmark. The permit # ****-***-**** must be printed on the cover of any documents for identification and sent to:

Geotechnical Branch
50 Higuera Street
San Luis Obispo, CA 93401

If the method of backfill is not specified, the entire bore must be backfilled with a minimum of 564 lbs. (6-sack) Portland cement and 6 gallons of water per sack of cement, per 1 yard of commercial-quality concrete sand, using the tremie method. Bores located on the roadway or shoulder paving shall be backfilled to within 1 inch below the existing AC paving. The remaining backfill must be with hot mix asphalt paving or with 590 lbs of Portland cement to 1 yard of aggregate concrete colored to match the adjacent surfaces. Bores located on the graded shoulder must be backfilled to within 18 inches below existing grade. The remaining backfill in the graded shoulder must be approved native material or as directed by the State Inspector per Caltrans Standard Specification for backfill requirements.

Asphalt concrete must be Type A HMA, $\frac{1}{2}$ or $\frac{3}{4}$ inch aggregate gradation, and must conform to the provisions in **Section 39, "Asphalt Concrete,"** of the Caltrans Standard Specifications.

Asphalt concrete pavement must be replaced in kind to a depth of 1 inch below the existing AC pavement depth or to a minimum thickness of 6 inches whichever is greater. Asphalt concrete with asphalt binder, must be placed and compacted with a minimum layer thickness of 0.10 foot when using Type A HMA, $\frac{1}{2}$ inch aggregate gradation, or a minimum layer thickness of 0.20-foot inches is using Type A HMA, $\frac{3}{4}$ inch aggregate gradation, or as directed by the State Inspector.

Tree Removal / Trimming

This permit does not authorize the removal of any trees.

This permit does not allow for topping of conifer trees.

Any tree trimming must be performed in accordance with good horticultural practices and the International Society of Arboriculture.

Tree trimming must be coordinated with the Caltrans Permit Inspector and the local Caltrans Tree Maintenance Supervisor.

Tree removal work must only be performed between September 1st and February 15th to avoid impacts to nesting migratory birds. Tree removals outside of this period requires approval and a nesting bird survey by a qualified biologist for migratory birds within 100 foot radius of the tree(s) to be removed and for raptors within 300 foot radius of the tree(s) to be removed.

When permit is issued for removal of a tree as an independent operation or as a part of other work, the entire stump must be taken out for a depth of at least 1 foot below the ground surface. All debris must be removed from the right of way. The hole left by stump must be backfilled, thoroughly tamped, compacted and the site left in a presentable condition.

The Permittee or Permittee's contractor must remove all debris from the State right of way, to the satisfaction of the State Inspector.

No tree limbs or trunks shall be allowed to fall onto the paved roadway. Cuttings may be safely lowered to the planned work zone encompassing portions of the roadway pavement. Permittee shall be responsible to repair damage caused by debris impacting the roadway pavement as directed by the State Permit Inspector.

Permittee must be aware of, and sensitive to, the concerns that local community groups might have regarding the tree to be removed.

Existing Trees and Vegetation

Unless stated elsewhere in this permit or shown on the approved permit plans, this permit does not authorize the removal, severing of roots or trimming of vegetation. If work of this nature is required, a written request and approval, by the Caltrans Permit Inspector, is required in advance of performing the work. Replacement planting may be required as a mitigation measure. Excavations should be done outside of drip line to reduce tree damage and integrity of trees. If excavations must be made within the drip line of trees (or extending tree roots) along the right of way, the trenches must be hand dug and the utility routed beneath or around root structure. Major tree roots must not be cut or damaged. Additionally, the exposed roots must be wrapped and kept moist until the excavation is back filled with the native material. Requests for exceptions must be accompanied by an Arborist's recommendation.

Archaeological/Cultural Requirements

If archaeological resources or human remains are accidentally discovered during construction, work must be halted within 150 feet of the find until a qualified professional archaeologist can evaluate it. Permittee must notify Caltrans District Archaeologist Kristin Hadick, (805) 458-1238, about the discovery immediately. If the find is determined to be significant, appropriate mitigation measures must be formulated and implemented.

Signs

Installation of roadside signs must comply with all applicable portions of the current **Caltrans Standard Specifications Section 56-3**, Caltrans Standard Plans, California Manual on Uniform Traffic Control Devices, and Caltrans policies.

If exact locations of roadside and construction area signs are not shown on the project plans, post holes must be dug by hand, except where potential conflicts can be eliminated. Potential conflicts are considered eliminated when an appropriate regional notification center has performed field mark-out and no subsurface utilities are within 4 feet of the proposed post hole, or the post hole can be moved 4 feet away from subsurface utilities as located by the utility owner.

Temporary and permanent signs placed within the State right of way must comply with minimum retro-reflectivity requirements of the most current of the following: Federal Highway Administration Manual on Uniform Traffic Control Devices - Section 2A.08, **Caltrans Standard Specifications Section 82-2.02C, Retroreflective Sheeting.**

Roadside signs mounted on post(s) must be placed at locations shown on the permit plans and must be installed in compliance with the latest edition of Caltrans Standard Plan RS1 through RS4.

Temporary signs mounted on barricades and barricade/sign combinations must be crashworthy.

The bottom of a temporary sign mounted on a barricade, or other portable support, must be at least 1 foot above the traveled way or the existing surface at the location of placement.

Proposed sign placement must not interfere with the visibility of any existing warning, regulatory, information or guide signs along the State Highway.

Signs to be owned and maintained by the Permittee shall be appropriately marked on the back of the sign.

A safe pedestrian passageway width of 4 feet must be maintained at any sign installation in areas normally traversed by pedestrians. The minimum passageway adjacent to a drop off, such as a curb face or gutter must be at least 5 feet.

EXISTING FACILITIES

Existing improvements must be protected or relocated as required by the work authorized by this permit. If existing improvements including pavement markings and delineation are damaged or their operation impaired by this work, they must be replaced or restored to the satisfaction of the Caltrans representative. Such work must be done immediately if requested by the Caltrans representative.

IT SHALL BE THE PERMITTEE'S RESPONSIBILITY TO FULLY INVESTIGATE THE PROPOSED

WORK AREA FOR POSSIBLE CONFLICTS WITH EXISTING UTILITIES AND FACILITIES, INCLUDING BUT NOT LIMITED TO SEWERS, ELECTRICAL CONDUCTORS, GAS LINES, WATER PIPES AND TRAFFIC SIGNAL FACILITIES. THE PERMITTEE AGREES TO ACCEPT ALL LIABILITY FOR DAMAGES DONE TO EXISTING FACILITIES CAUSED BY THE WORK AUTHORIZED UNDER THIS PERMIT.

Caltrans Traffic Signals, Lighting, and Electrical Facilities

Only authorized Caltrans Electrical Staff must be allowed to access and operate the Caltrans owned traffic signal cabinet and controller. Permittee must coordinate with the Caltrans Permit Inspector to arrange for a Caltrans Electrical staff to be present to access the traffic signal controller or to modify the operation of the controller.

Caltrans does not subscribe to underground utility locating services. It is the Permittee's sole responsibility to investigate, locate, and mark existing Caltrans traffic signal equipment, loops, conduits, and street lighting facilities prior to work in or between signalized intersections and street lighting facilities.

If it is apparent that impacting traffic signal conduits during construction will be unavoidable Permittee must install temporary overhead wiring for the signal at Permittee's own expense. Permittee must always have on hand all necessary equipment and personnel needed to provide traffic control at an intersection should the traffic signal malfunction.

If a signal detector loop, including the portion leading to the adjacent pull box is damaged by Permittee's operations the entire detector loop must be replaced, in kind, within 24 hours of the occurrence. If an adjacent loop is damaged during the replacement, that loop must also be replaced. The Caltrans Inspector must be notified immediately when damage occurs. Arrangements for Caltrans Electrical operations staff must be made to have the traffic signal controller reprogrammed.

WATER POLLUTION CONTROL

Discharge of Storm Water and Non-Storm Water

Work within State highway right-of-way must be conducted in compliance with all applicable requirements of the National Pollutant Discharge Elimination System (NPDES) permit issued to the Department of Transportation (Department), to govern the discharge of storm water and non-storm water from its properties. Work must also be in compliance with all other applicable Federal, State and Local laws and regulations, and with the Department's Encroachment Permits Manual and encroachment permit. The Department's NPDES Permit requires the Permittee to comply and maintain, if applicable, the approved Storm Water Special Provisions for Minimal or No Impact (TR-0400), Water Pollution Control Program, or Storm Water Pollution Prevention Plan.

The Contractor (permittee) must be responsible for fines assessed or levied against the Contractor or the Department as a result of the Contractor's (permittee) failure to comply with these provisions. Fines shall include civil liability fines, criminal penalties and/or damages, assessed, or levied against the Department or the Contractor, Contractor liability for failure to comply with these provisions shall also include reimbursement for payments made or costs incurred by the Department in settlement for alleged violations of the Permits, the Manuals, or applicable laws, regulations, or requirements. Costs incurred could include sums spent in lieu of fines or penalties, in mitigation or to remediate or correct violations.

If an unforeseen illicit discharge is generated during construction activities and the Caltrans Permit Inspector cannot be contacted, the Permittee or Permittee's contractor must contact the Encroachment Permit Storm Water Coordinator, Jesse Cline (805) 534-3359 immediately. The Permittee or Permittee's contractor is responsible to contain and remediate the illicit discharge as directed by the Caltrans Permit Inspector or Encroachment Permit Storm Water Coordinator at no cost to the State.

Unless stated otherwise in this permit, approved plan, or approved specifications, seeds sown for erosion control must achieve 70% germination over the disturbed soil area as determined by the Caltrans Permit Inspector.

The Caltrans Permit Inspector must approve the seed mix prior to its application.

PROJECT COMPLETION

Once work authorized by this permit has started, cancelling the permit or failure to contact the Caltrans Permit Inspector may result in the forfeiture of any remaining fee deposits.

As-Built Requirement

Civil Engineer in charge must also complete, stamp, and sign the attached Certification of Compliance with Americas with Disabilities Act (ADA) form TR-0405. Form must be submitted with As-Built plans or with the Notice of Completion.

Upon completion of the project, the Permittee must submit "As-Built" plans to the State Inspector showing the actual location of the newly constructed facility to the nearest 0.1-foot horizontally and vertically. Plans must be stamped "As-Built", signed and dated by, and contain the printed name of the Permittee's representative who was responsible for overseeing the work. Work shall be considered incomplete until the receipt of the "As-Built" plans.

Permittee shall provide an electronic Adobe file format (.pdf) "As-Built" plans. If this electronic file format is not available, a hard copy of the "As-built" plans shall be provided to the Caltrans Inspector or to the Caltrans District 5 Encroachment Permits Office.

Requested georeferenced electronic 3D-vector file As-Built plans:

Permittee is requested to provide the following electronic as-built files georeferenced to the current local State plane coordinate system used by Caltrans based on a minimum of two Caltrans survey monuments on the same horizontal datum noted below and a minimum of two Caltrans survey monuments with **NADV88** vertical datum. See attached Caltrans Survey Control and Centerline Reference Monuments Report and Survey Monumentation provisions of this permit for contact information to obtain Caltrans survey control monument data. GPS surveys must comply with the calibration requirements in Chapter 6 of the Caltrans Surveys Manual.

Electronic as built files must include the following:

1. 3D vector file electronic as-builts formats
 - a. MicroStation version 8i SS4 or CONNECT file (minimum submission)
 - b. Autodesk Civil 3D file (if available and identify version)
2. CSV (comma-separated value) file of reference monuments and utility point data

Horizontal control = TBD

Vertical control = NAVD88

Immediately following completion of the work permitted herein, the Permittee must fill out and send by email the Notice of Completion attached to this permit.

THANK YOU!

DISTRICT 5 NOTIFICATION REQUIREMENTS

The following provisions shall apply to all permit work requiring temporary lane closures or traffic detours:

Temporary Lane Closures

Notification of temporary lane closures or traffic detours shall be given to the State Inspector for his approval using copies of the attached form entitled, **WEEKLY TRAFFIC UPDATE**.

Notification shall be submitted to the State Inspector by 12:00 PM (noon) Monday, prior to the week of the proposed closure or detour. Notifications submitted after the deadline cannot be approved for the upcoming week. **All traffic control requiring the temporary closure of lanes or detour of traffic shall be approved in advance by the State Inspector.**

Ramp Closures

14 to 7 calendar days prior to an approved ramp closure, notice shall be posted at the ramp entrance using the appropriate SC6 sign. In addition, an SC8 or portable changeable message sign shall be posted for the preceding ramp the day of the closure unless otherwise approved by the Caltrans Permit Inspector.

Caltrans Lane Closure System (LCS) Compliance

Work authorized by this permit may require compliance and proper notification in LCS.

If not identified elsewhere in this permit, you or your contractor must provide the contact information for two personnel, who will be ensuring LCS compliance during the pre-job meeting with the Caltrans Permit Inspector. Contact information shall include personnel's full names, phone numbers and email addresses.

You or your Contractor's LCS contact will be required to properly notify the District Traffic Management Center (TMC) as described below.

When a lane closure or lane shift has been identified by the Inspector with a Lane Closure ID # and Log #, you will be required to provide the TMC notification status when you are placing the lane closure, when you remove the lane closure, or when you cancel the lane closure.

When providing the status of the lane closure to the TMC you will need to follow these steps,

1. **Obtain the Lane Closure ID and Log # assigned for the approved scheduled lane closure event from the Caltrans Permit Inspector** a minimum of one weekday prior to the closure day or duration.
2. **Call the TMC/Lane Closure Phone Number (805) 549-3837 to provide the Lane Closure ID Status**

For a stationary closure on a traffic lane, use code:

1. 10-97 immediately before you place the 1st cone on the traffic lane
2. 10-98 immediately after you remove all of the cones from the traffic lane

For a stationary closure on the shoulder, use code:

1. 10-97 immediately before you place the 1st cone after the last advance warning sign
2. 10-98 immediately after you remove the last cone before the advance warning signs

For a moving closure, use code:

1. 10-97 immediately before the actual start time of the closure
2. 10-98 immediately after the actual end time of the closure

For closures not needed on the authorized date, use code 10-22 within 2 hours after the authorized start time.

When calling the TMC to provide the status on your lane closure you will say something to the effect of (substituting your lane closure ID number and Log number for example ID "P101CA" and Log number "1" below),

- **"1097"**- *"This is (your name, phone number) calling to provide a 1097 status to lane closure ID P101CA and log number 1. That is a 1097 for Papa 101 Charlie Alpha log number 1."*
- **"1098"**- *"This is (your name, phone number) calling to provide a 1098 status to lane closure ID P101CA, log number 1. That is a 1098 for Papa 101 Charlie Alpha log number 1."*
- **"1022"**- *"This is (your name, phone number) calling to provide a 1022 status to lane closure ID P101CA, log number 1. That is a 1022 for Papa 101 Charlie Alpha log number 1."*

Failure to properly status the lane closures will result in a written warning by the Caltrans Permit Inspector on the first violation. If there is a 2nd violation, your permit may be suspended until a Contractor or new Contractor (C-31 or General Engineering A License preferred) who is experienced in traffic control and LCS notification is hired. Additional violations will result in the revocation of the permit and may impact the processing of future encroachment permit application packages.

You can check your lane closure status at the following website:

<https://lcswebreports.dot.ca.gov/>

Special Notifications

If permitted activities such as road closures or traffic detours may result in significant traffic congestion, Permittee shall be responsible for coordinating advance notification to local newspapers, television and radio stations, and emergency response providers with both the State Inspector and the Caltrans Public Information Officer, telephone (805) 549-3237. Public notice may include press releases and/or traffic signing.

Permittee shall complete and submit the attached form entitled **PUBLIC AFFAIRS – PERMITTED ACTIVITY NOTIFICATION** to the Caltrans Public Affairs Office as early as possible (One Week Ahead is Best) prior to beginning of permitted activity. Additional information or clarification may be required in the form of a written description of the activities in a format that is suitable for a press release. The form may be delivered by fax to (805) 549-3638 or emailed

to the PIO contact on the form.

Horizontal and Vertical Requirements for Extra-Legal Load Vehicles

Permittee shall provide written notification to the Caltrans Permit Inspector or Caltrans Representative, of proposed horizontal or vertical lane restrictions which will affect extra-legal loads up to 16' wide and 18' high, or ramp closures/re-openings that may affect extra-legal loads traveling through the project area. Said notification shall be delivered to the Inspector no fewer than 25 days prior to proposed change. Permittee shall immediately notify the Caltrans Permit Inspector or Caltrans Representative as soon as the restriction is no longer present.



WEEKLY TRAFFIC UPDATE

PERMITS

For the Week of: _____

Please provide this form to your designated **PERMIT INSPECTOR** each week if you will be performing work that will impact traffic (lane closures, ramp closures, shoulder closures, traffic control, etc.)

Weekly Traffic Updates must be received by Monday 12:00 PM (noon) the week prior to the requested date(s) of the planned traffic control. Failure to meet the deadline may result in the denial of the requested traffic control. The State Permit Inspector may also require changes to the requested traffic control prior to its approval.

We appreciate your cooperation. These updates need to be done in a timely manner to provide information to the traveling public we serve. THANKS!!!

DATE	TIME (begin / end)	Location – Cross Streets, County Route, and Post Mile (from / to)	Impact on Traffic (Description)	Reason

Send, fax, or email to: **Your PERMIT INSPECTOR - David Ontiveros, Fax #: (831) 476-1803, Email: david.ontiveros@dot.ca.gov**

Your Name: _____ Phone: _____ FAX: _____

Company/Dept.: _____ Email: _____

PERMIT #: **0524 NUE 0743**

2024 Holiday and Special Day Lane Closure Restrictions

For maintenance, permits, and projects using blanket chart hours

January						
Su	Mo	Tu	We	Th	Fr	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

February						
Su	Mo	Tu	We	Th	Fr	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29		

March						
Su	Mo	Tu	We	Th	Fr	Sa
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

April						
Su	Mo	Tu	We	Th	Fr	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

May						
Su	Mo	Tu	We	Th	Fr	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

June						
Su	Mo	Tu	We	Th	Fr	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

July						
Su	Mo	Tu	We	Th	Fr	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

August						
Su	Mo	Tu	We	Th	Fr	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

September						
Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

October						
Su	Mo	Tu	We	Th	Fr	Sa
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

November						
Su	Mo	Tu	We	Th	Fr	Sa
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

December						
Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

<u>Designated Holidays</u>	<u>Date observed</u>
New Year's Day	January 1st
Presidents' Day	3rd Monday in February
Memorial Day	Last Monday in May
Independence Day	July 4th
Labor Day	1st Monday in September
Veterans Day	November 11th
Thanksgiving Day	4th Thurs and Fri in November
Christmas Day	December 25th
<u>Caltrans Holiday/Special Day</u>	<u>Date observed</u>
Martin Luther King Jr. Day	3rd Monday in January
Cesar Chaves Day	March 31st

	No closures after 12:00 Noon
	No closures allowed
	Designated Holiday - No closures allowed
	Caltrans Holiday/Special Day - No closures allowed
	No closures until 08:00
	No closures until 20:00

Replace Reserved in section 12-4.02C(3)(f) with:

Closure restrictions for designated holidays and special days are shown in the following table:

Lane Closure Restrictions For Designated Holidays And Special Days											
Thu	Fri	Sat	Sun	Mon	Tues	Wed	Thu	Fri	Sat	Sun	Mon
x	H xx	xx	xx	xxx							
	SD xx										
x	xx	H xx	xx	xxx							
		SD xx									
	xx	xx	H xx	xx	xxx						
			SD xx								
x	xx	xx	xx	H xx	xxx						
				SD xx	xxx						
				H xx	xx	xxx					
				SD xx							
					H xx	xx	xxx				
					SD xx						
						H xx	xx	xxx			
						SD xx					
						x	H xx	xxx			
					x	xx	H* xx	xx	xx	xx	xxx
							SD xx				

Legend:

	Refer to lane requirement charts.
x	The full width of the traveled way must be open for use by traffic after 1200.
xx	The full width of the traveled way must be open for use by traffic.
xxx	The full width of the traveled way must be open for use by traffic until 0800.
H	Designated holiday
H*	Thanksgiving Holiday-The full width of the traveled way must be open for use by traffic between Tuesday at 1200 until the following Monday at 0800.
SD	Special day

PUBLIC AFFAIRS - PERMITTED ACTIVITY NOTIFICATION

This Project Notification must be emailed to Public Affairs Team as early as possible (One Week Ahead is Best) prior to the start of any permitted activity. Please fill out this form as thoroughly as possible and use additional paper if needed. **Include all information that the traveling public needs to know.** Project photos encouraged.

TO: PUBLIC AFFAIRS

Genelle Padilla (San Luis Obispo & Santa Barbara County)	genelle.padilla@dot.ca.gov
Kevin Drabinski (Monterey and Santa Cruz County)	kevin.drabinski@dot.ca.gov
Heidi Crawford (San Benito County)	heidi.crawford@dot.ca.gov
Jillian Davis (Student Assistant)	jillian.davis@dot.ca.gov
Jim Shivers (PIO Chief)	jim.shivers@dot.ca.gov

General Public Information Office (PIO) Email: info-d5@dot.ca.gov
General PIO Phone: (805) 549-3318

E.A. or PERMIT NUMBER: **0524 NUE 0743**

COUNTY, ROUTE & POSTMILE: **05-SCR-Var-Var**

PERMITTED ACTIVITY LIMITS (location in miles, distance from nearest landmarks or cities, etc.):

PROJECT DESCRIPTION AND PURPOSE FOR PROJECT:

Maintenance of County facilities within State right of way including surveying, mowing and vegetation management, landscaping maintenance, irrigation maintenance, graffiti removal, pavement resurfacing, patching, roadbed maintenance, pavement markings, lighting, signage, stormwater system maintenance, underground utility maintenance, sidewalk maintenance, litter control, ditch cleaning, traffic control, placement of temporary signage, and PCMS units as allowed by the Caltrans Permit Inspector and directed by the permit provisions in conventional State right of way in the County of Santa Cruz.

PERMIT INSPECTOR: **David Ontiveros** PHONE: **(831) 476-1337** FAX: **(831) 476-1803**

CONTRACTOR: FROM (CITY)

PERMIT ESTIMATE AMOUNT:

ANTICIPATED DATE TO *BEGIN CONSTRUCTION:

ALLOTTED WORKING DAYS:

ANTICIPATED *COMPLETION DATE:

ANTICIPATED TRAFFIC CONTROL & HOURS OF CLOSURE:

ANTICIPATED TRAFFIC DELAYS:

ANY IMPACTS TO BICYCLE RIDERS/PEDESTRIANS:

COMMENTS: (What else does the public need to know? Diagrams, maps also helpful.)

*Please let Public Affairs know of any changes in Startup or Completion dates.

NOTICE OF MATERIALS TO BE USEDCEM-3101 (REV 09/2015) CT#7541-3511-1

**NOTICE OF MATERIALS TO BE USED
INSTRUCTIONS TO PERMITTEE/CONTRACTOR**

Section 6 of the *State Standard Specifications* states that, "Before the preconstruction conference, submit material source information on a Notice of Materials to Be Used form".

To avoid delay in approval of materials, the Department of Transportation must receive, in a timely manner, Form CEM-3101, "Notice of Materials to Be Used." When filing this form, please comply with the following instructions:

1. The Contract Number/Permit Number and job limits should be the same as they appear on the special provisions/encroachment permit.
2. The column headed "Contract Bid Item Number" refers to the sequential item number of the contract, *if applicable*.
3. The column headed "Item Code" refers to the number for which the material is to be used, *if applicable*. It is a six-digit number.
4. The column headed "Contract Item Description" refers to an item description of the material as described in the special provisions or an item description to be used on the permitted project.
5. The columns headed "Item Component" refer to the specific description of material to be used, not necessarily the name of the contract item.

For Example:

Contract Bid Item Number	Item Code	Contract Item Description	Item Component	Item Sub-Component
1	520101	Bar Reinforcing steel	Coupler (service splice)	Service Splice, CJP welded

6. The column headed "Manufacturer/Provider" refers to the manufacturer/fabricator of the item. List the name, address, and email of the Manufacturer/Fabricator. Also, list the name and address of the location where inspection will occur, if different from the Manufacturer/Fabricator.
7. Form CEM-3101, "Notice of Materials to Be Used," must be submitted to the resident engineer (RE). The RE will email Form CEM-3101 to the materials administrator to:

MaterialsAdministratorMETS@dot.ca.gov or fax to (916) 227-7084, Attn: Materials Administrator or postal mail to: Materials Engineering and Testing Services, 5900 Folsom Blvd., Sacramento, CA 95819, MS-5.

If the sources of materials are not known at the beginning of a contract, submit a Form CEM-3101, "Notice of Materials to Be Used," for a given bid item as soon as a provider is known. Multiple submissions may be necessary. Submit a Form CEM-3101, "Notice of Materials to Be Used," for all changes or revisions.

When placing orders for materials that require inspection prior to shipment, be sure to indicate on your request form that state inspection is required before shipment.

STATE OF CALIFORNIA • DEPARTMENT OF TRA
NOTICE OF MATERIALS TO BE USED
CEM-3101 (REV 09/2015)

ADA Notice

Resident Engineer:

Date:

Encroachment Permit Number - 0524 NUE 0743

Post Mile: **Var**

will be obtained from the following sources:

[illegible]

It is requested that you arrange for sampling, testing and inspection of materials prior to delivery in accordance with Section 6 of the *Standard Specifications*. It is understood that source inspection does not relieve the prime contractor of the full responsibility for incorporating into the work, materials that comply in all respects with the contract plans and specifications, nor does it preclude the subsequent rejection of materials found to be unsuitable.

(7) Copies: Materials Administrator, Mail Station #5
Materials Engineering & Testing Services
5900 Folsom Blvd. Sacramento, CA 95819
MaterialsAdministrator@ETS.dot.ca.gov
Fax: (916) 227-7084

Contractor		
Address		
Business Phone	Business Fax	E-Mail Address

At the completion of the permitted work, please complete the form below and submit an electronic copy of this page sent by email to jesse.cline@dot.ca.gov.

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

NOTICE OF COMPLETION

TR-0128 (REV. 6/2001) CT #7541-5529-1

PERMIT # 0524 NUE 0743

Permit Inspector: David Ontiveros

Dear Sir or Madam:

All work authorized by the above numbered permit was completed on:

DATE: _____

SIGNATURE OF PERMITTEE: _____

County of Santa Cruz

FM 92 1546 M

ADA Notice

For individuals with sensory disabilities, this document is available in alternate formats. For alternate format information, contact the Forms Management Unit at (916) 445-1233, TTY 711, or write to Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

ENCROACHMENT PERMIT APPLICANT: CONTRACTOR(S) AUTHORIZATION FORM

DOT TR-0429 (NEW 12/2022)

The Permittee warrants and represents the Permittee has hired the following prime contractor(s) to perform the approved encroachment activities under Encroachment Permit # _____ on the Permittee's behalf as agents in accordance with Encroachment Permit General Provision #4 or Adopt-A-Highway Special Provision #3, whichever is part of the Encroachment Permit. The Permittee warrants and represents the Permittee has provided a copy of the Encroachment Permit to the prime contractor(s) listed below, and further warrants and represents that the activities related to the Encroachment Permit, whether performed by the Permittee or by the prime contractor(s) below or by any person or entity acting for or on behalf of the Permittee, will be performed in compliance with all terms, conditions, specifications, standards, provisions, and other requirements of the subject Encroachment Permit. The person signing below warrants and represents such person has authority on behalf of the Permittee to make the warranties and representations contained herein, and to agree to and so bind the Permittee to this page.

List of authorized prime contractors for the encroachment permit:

Contractor Name	Scope of Work (Traffic Control/Civil Work, etc.)	Contact Person	Contact Person's Information (Phone # and Email)

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Name of Permittee	Name and Title of Person Signing for Permittee (Print)	Signature	Date
-------------------	--	-----------	------

ENCROACHMENT PERMIT APPLICANT: CONTRACTOR(S) AUTHORIZATION FORM

DOT TR-0429 (NEW 12/2022)

By signing below, each prime contractor acknowledges that such prime contractor has received a copy of Encroachment Permit # _____ and agrees such prime contractor, and such prime contractor's employees, managers, directors, agents, subcontractors, and suppliers, will comply with, and will perform all activities in accordance with, all terms, conditions, specifications, standards, provisions, and other requirements of the Encroachment Permit, including but not limited to notifying the permit inspector as required in the Encroachment Permit and reporting the lane closure notifications per the Encroachment Permit General Provisions (TR-0045). Each person signing on behalf of each prime contractor warrants and represents such person has the authority to make the acknowledgments, warranties, and representations contained herein on behalf of the named prime contractor, and has the authority to agree to and so bind the named prime contractor to this page.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Name of Prime Contractor	Name and Title of Person Signing for Contractor (Print)	Signature	Date
Name of Prime Contractor	Name and Title of Person Signing for Contractor (Print)	Signature	Date
Name of Prime Contractor	Name and Title of Person Signing for Contractor (Print)	Signature	Date
Name of Prime Contractor	Name and Title of Person Signing for Contractor (Print)	Signature	Date

CERTIFICATION OF COMPLIANCE WITH AMERICANS WITH DISABILITIES ACT (ADA)

TR-0405 (REV 03/2015)

Permit No.

Dist/Co/Rte/PM

Encroachment permit projects that create, alter, or affect pedestrian facilities are required to be designed and constructed in accordance with the policies and standards in the current Design Information Bulletin 82 (DIB 82). Certification of compliance must be submitted by the permittee or permittee's authorized representative prior to the issuance of an encroachment permit or rider AND after construction is completed. DIB 82 can be found at:

<http://www.dot.ca.gov/hq/oppd/dib/dibprg.htm>

A separate TR-0405 form must be used for the Design and Post Construction Certifications. A California Licensed Professional Engineer, Licensed Architect or Licensed Landscape Architect's Stamp* is required except when (1) an authorized utility company representative or (2) an authorized Caltrans representative signs the form (at the discretion of the District Permit Engineer).

Design Certification (prior to issuance of encroachment permit)

- ☐ I _____ a California Licensed Professional Engineer, Licensed Architect or Licensed Landscape Architect, do hereby certify that:
- ☐ I _____ an authorized Caltrans representative, do hereby certify that:
- ☐ I _____ an authorized representative of _____ (utility company only) do certify that:

- ☐ This project has been designed in accordance with DIB 82.
- ☐ An approved Exception to Accessibility Design Standards is attached.

SIGNATURE

TITLE

DATE

Post Construction Certification

- ☐ I _____ a California Licensed Professional Engineer, Licensed Architect or Licensed Landscape Architect, do hereby certify that:
- ☐ I _____ an authorized Caltrans representative, do hereby certify that:
- ☐ I _____ an authorized representative of _____ (utility company only) do certify that:

- ☐ This project has been constructed in accordance with DIB 82.
- ☐ An approved Exception to Accessibility Design Standards is attached.

SIGNATURE

TITLE

DATE

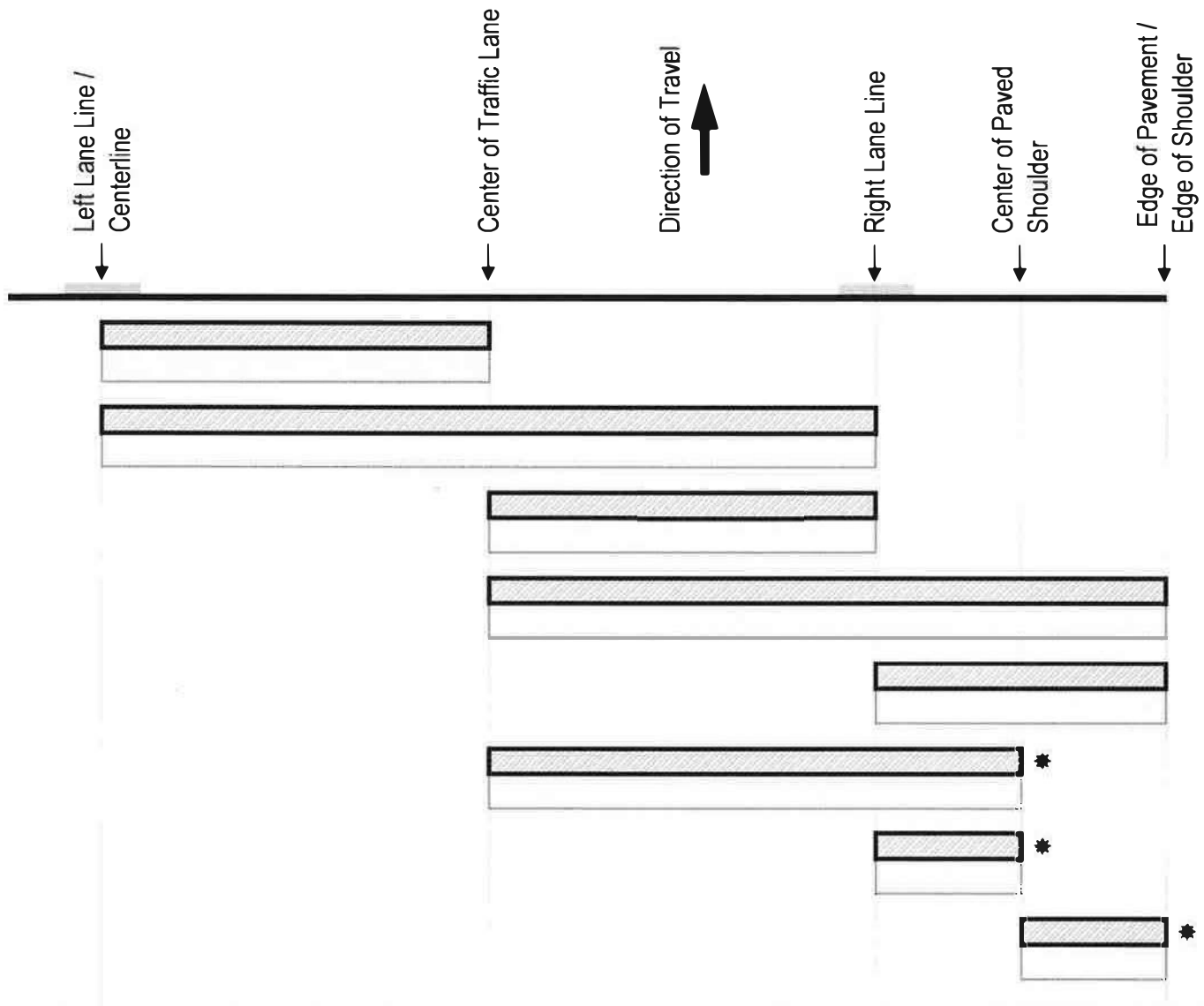
CA. LICENSED PROFESSIONAL ENGINEER, LICENSED ARCHITECT OR LICENSED LANDSCAPE ARCHITECT'S STAMP

*A Licensed Architect or Licensed Landscape Architect may prepare this document and sign and seal it in lieu of a Registered Civil Engineer, provided the same Licensed Architect or Licensed Landscape Architect designed the on-site improvements. Use the seal of the appropriate licensed person in responsible charge.

I attest to the technical information contained herein and have judged the qualifications of all technical specialists providing engineering data upon which recommendations, conclusions, and decisions were based.

Limits of Grind and Overlay for Pavement Replacement

To determine the required grind and overlay width to cap your trench, find the location that best fits your trench and includes the limits of your trench repair. Please consult with the Caltrans Permit Inspector for additional guidance.



Example 1: A trench with limits shown hatched above, would require a grind and overlay of the entire traffic lane width.

Example 2: A trench with limits shown hatched above, would require a grind and overlay from the center of traffic lane to the right edge of traveled way.



Required Width for Grind and Overlay

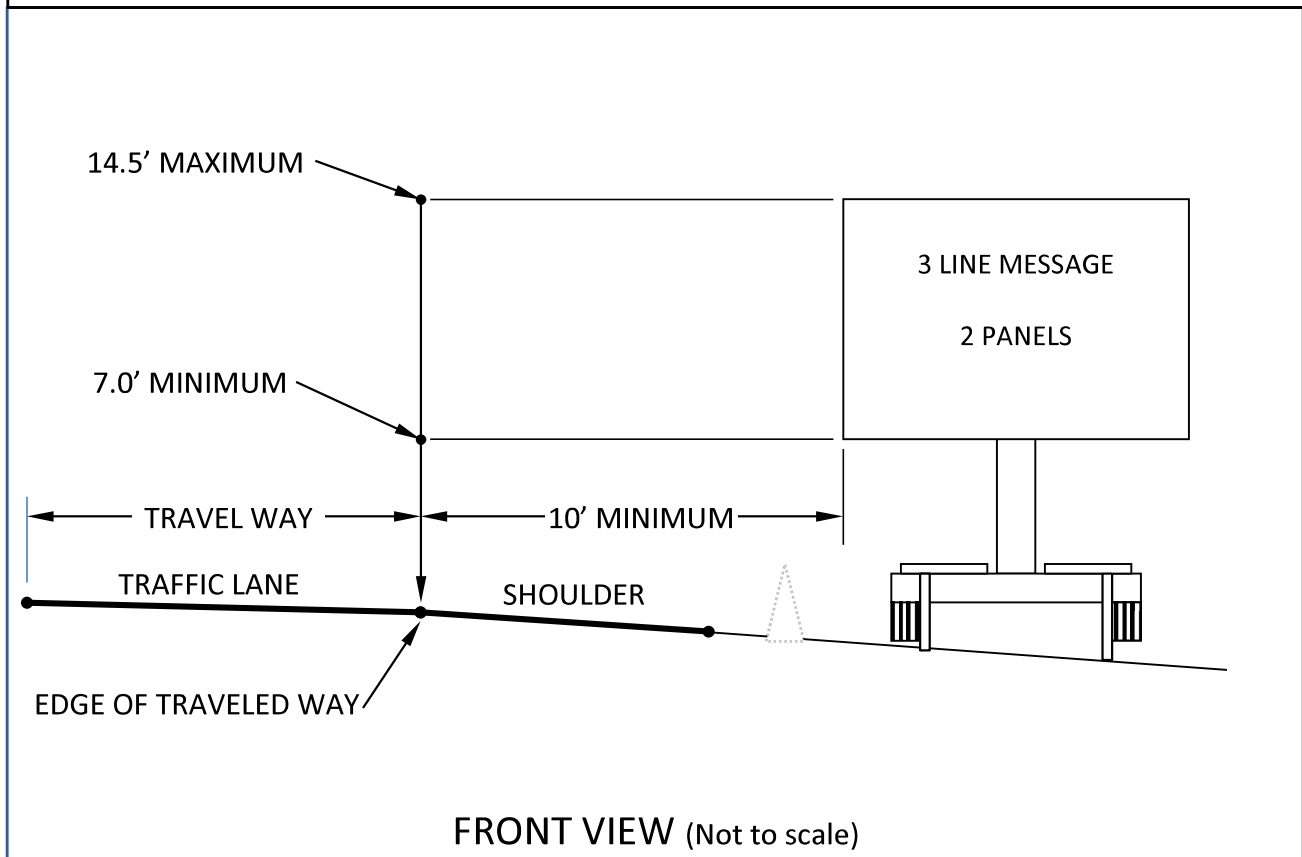
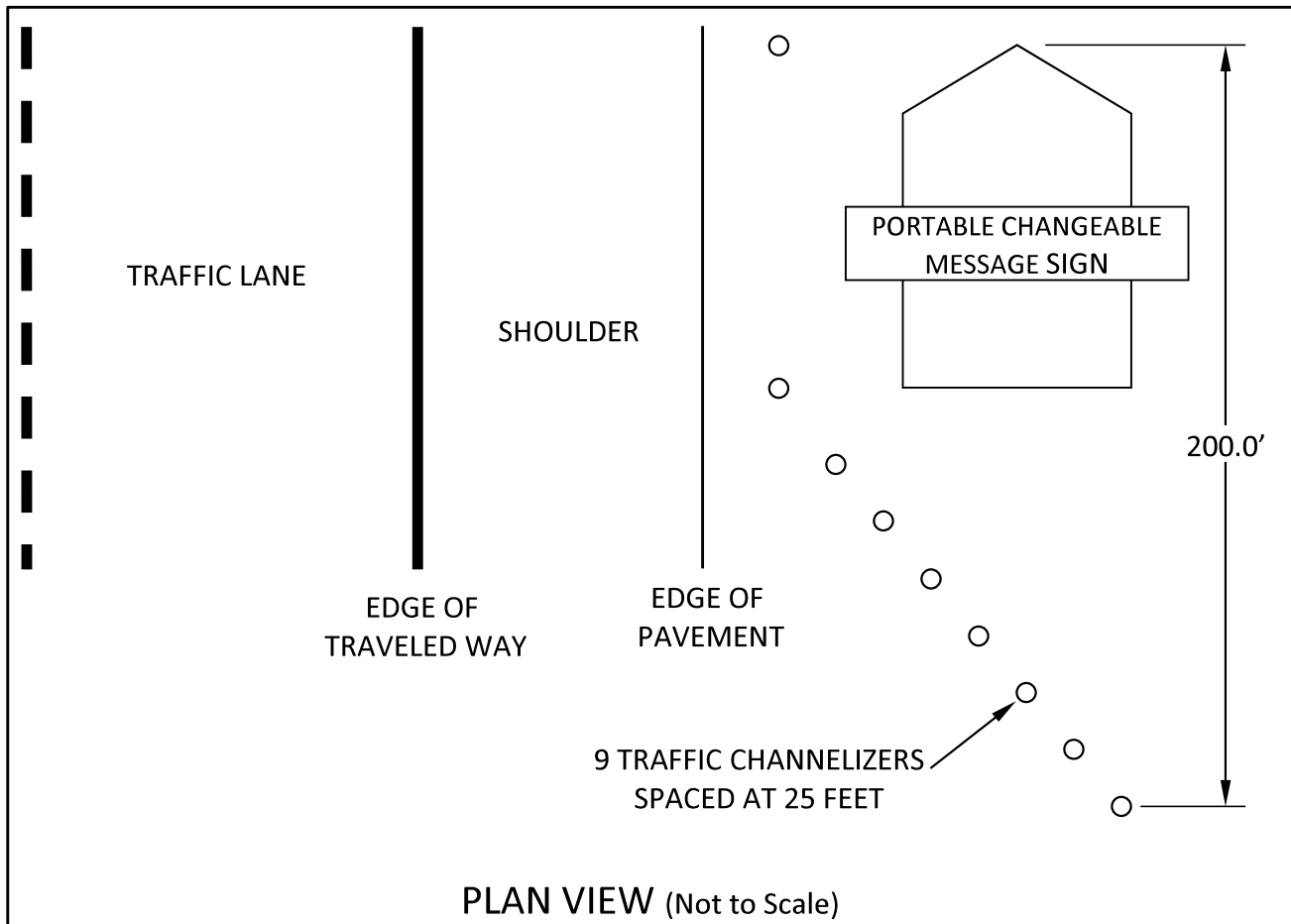
Limits of Trench Repair



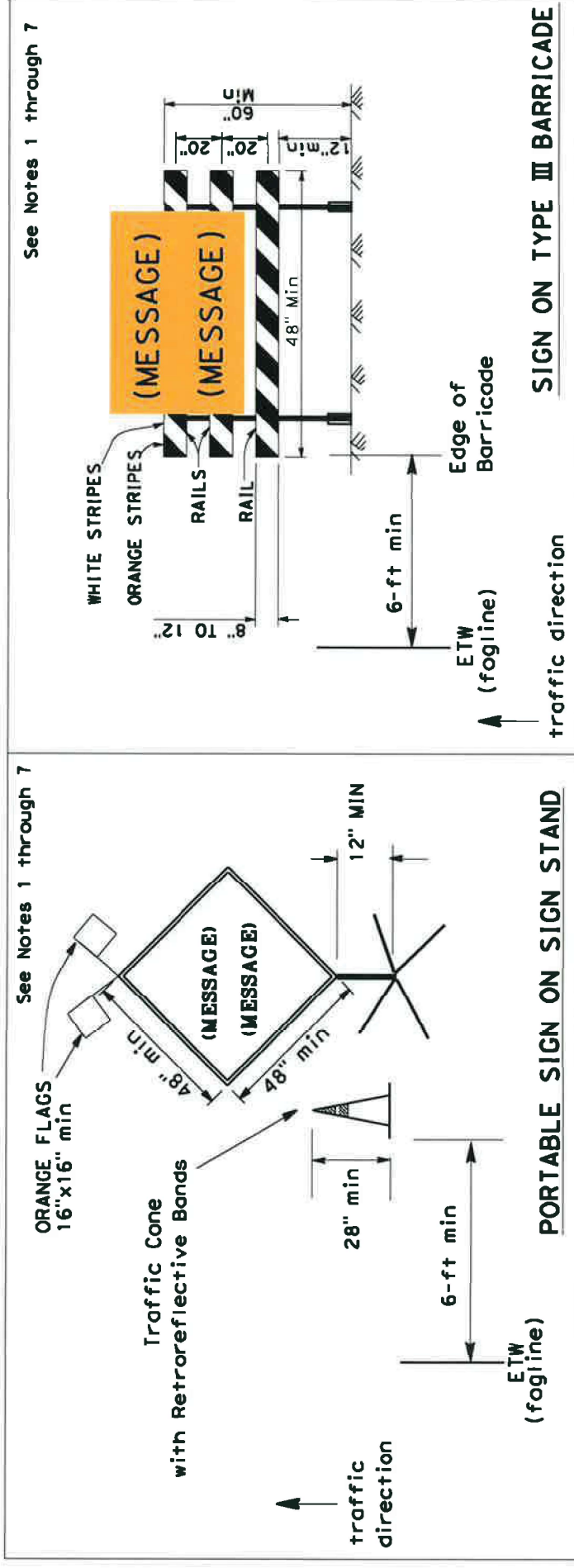
For Paved Shoulder Widths 8' or greater only

Pavement repair in open graded pavement surfaces will require in kind replacement of surface layer.

TYPICAL PORTABLE CHANGEABLE MESSAGE SIGN PLACEMENT



TYPICAL TEMPORARY SIGN SUPPORTS DETAILS



NOTES

1. Maintain a 4-foot minimum clearance on sidewalks at all times and a minimum 5-foot clearance adjacent to a drop off, such as a curb face or gutter.
2. Signs shall not interfere with the visibility of other existing signs.
3. Sign supports must be NCHRP Report 350 eligible or MASH (Manual for Assessing Safety Hardware) crashworthy. Information on NCHRP Report 350 eligible devices can be found at:
http://safety.fhwa.dot.gov/roadway_dept/policy_guide/road_hardware/wzd/workzone_pdmenu.cfm
 Information on MASH can be found at:
http://safety.fhwa.dot.gov/roadway_dept/policy_guide/road_hardware/ctrmeasures/mash/
4. Sign message, color, shape, and size must conform to the current Caltrans Standards Specifications and current CA MUTCD (California Manual on Uniform Traffic Control Devices). (i.e. Rectangular or diamond shape) Information on Caltrans Sign Specifications can be found at:
<http://www.dot.ca.gov/hq/traffops/engineering/control-devices/specs.htm>
5. Signs mounted on Type III barricades shall not cover the bottom rail.
6. Sign stands should be weighted down per the stand manufacturer's recommendations. (i.e. sand/gravel bags)
7. Signs to be placed for more than 3 consecutive days, shall be post mounted per Caltrans Standard Plans RS1 through RS4.

(REV. 3/18/2016)

ENCROACHMENT PERMIT SURVEY GRID

TR-0151 (REV. 09/2006)

LEGEND:

Octagon Data Points required when the diameter is < 8'.



Octagon & Triangle Data Points required when the diameter is > 8'.



Settlement Rod may be required when the diameter is > 5'. (Settlement Rod Detail is located in Appendix E of the Encroachment Permits Manual)

EP Edge of Pavement

ETW Edge of Travel Way
(Fog line, Yellow Stripe, etc.)

S Offset Distance away from the pipe alignment, as follows:

3' for casing pipe diameters < 30"

5' for casing pipe diameters 30" - 72"

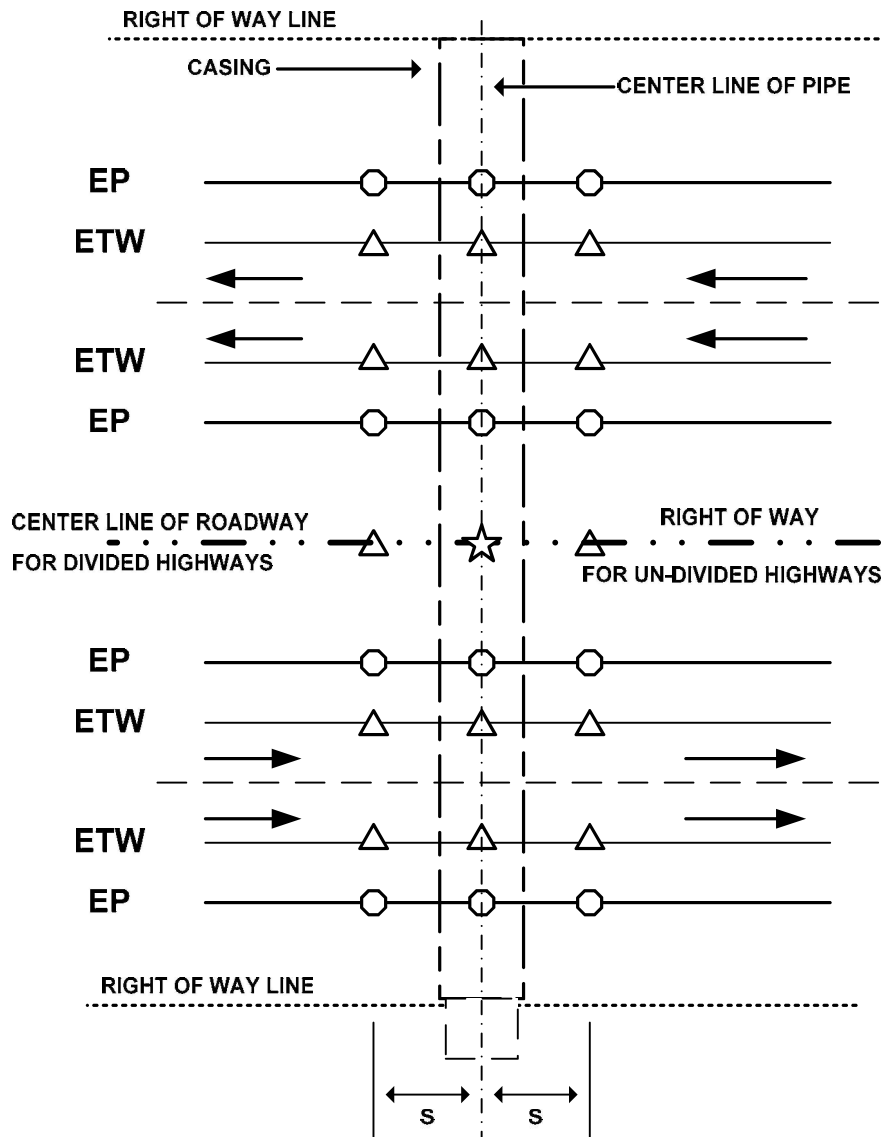
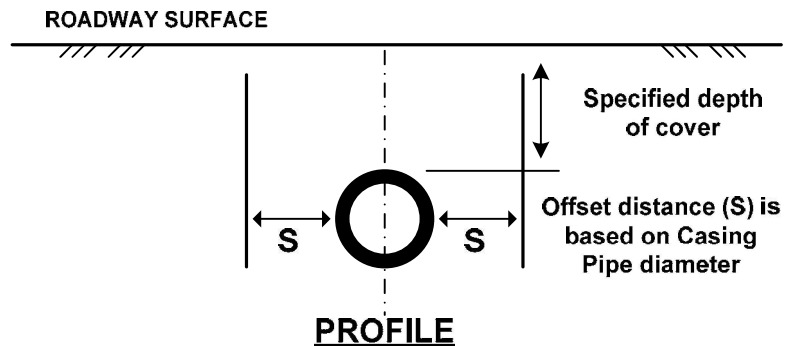
10' for casing pipe diameters 72" - 108"

15' for casing pipe diameters > 108"

NOTES:

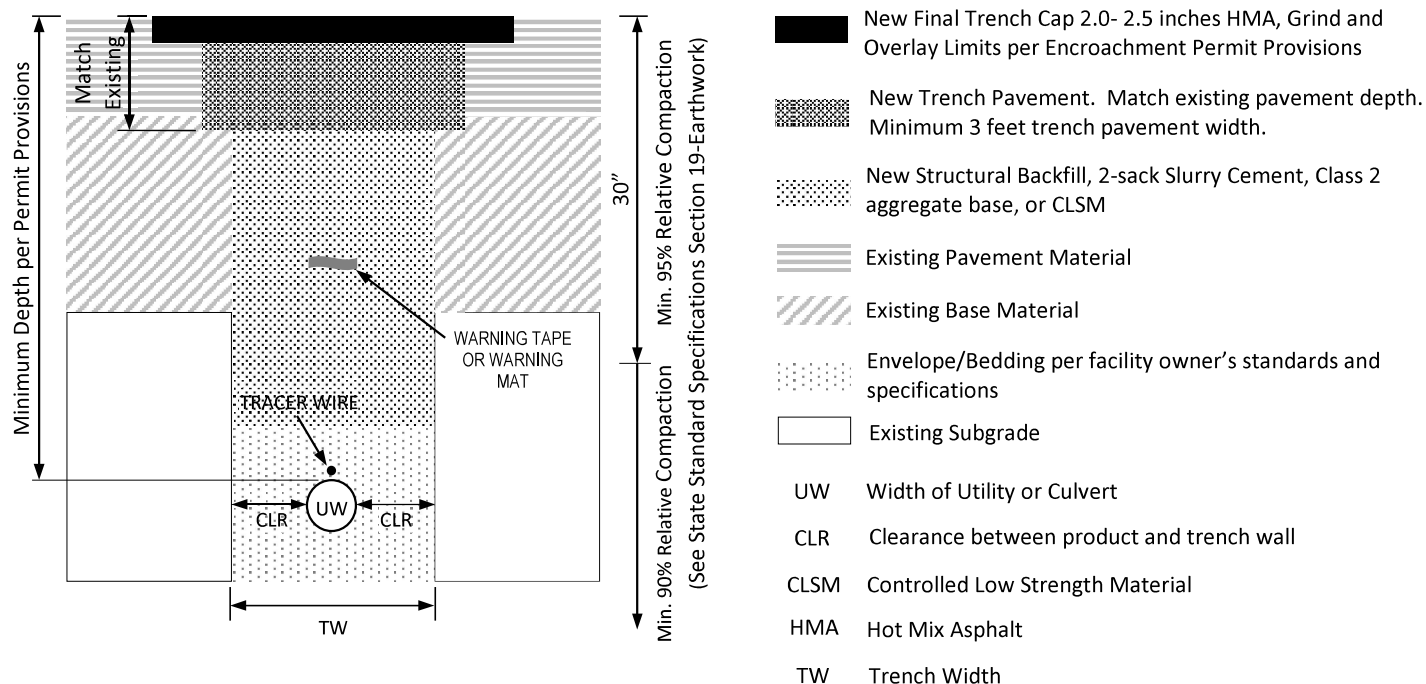
Survey data is to be collected at the specific points along the casing alignment at the following times:

1. Prior to Start of Work.
2. Every two (2) hours continuously throughout the project.
3. Upon completion of the project.
4. Every two (2) months, during a six month period after the date of completion, and or As Required by the Department.



ENCROACHMENT PERMIT TRENCH DETAIL

TR-0153 (REV. 07/2021) (REV. 04/2023 - District 5)

TYPICAL TRENCH DETAIL

1. Must include tracer wire or other continuous measure to provide positive subsurface detection for the life of the facility
2. Open trench installation of underground utility facilities must include warning tape or warning mats complying with the American Public Works Association (APWA) Uniform Color Code for identifying the type of underground utility. Where mechanical protection is installed, warning tape must be placed above the mechanical protection and below the roadbed subgrade as shown on the details. For all other backfills, warning tape or warning mat shall be placed half-way between the utility and the finished grade.
3. When the UW is $\geq 6"$ then the minimum CLR shall be 6"
4. New structural backfill shall consist of either 2-sack slurry cement, Class 2 aggregate base, or CLSM. When TW is < 24 inches, Class 2 aggregate base is not recommended for backfill
5. Structure backfill shall conform to Section 19-3.02C and 3.03 of the Standard Specifications
6. Slurry cement backfill shall conform to Section 19-3.02E of the State Standard Specifications
7. Aggregate base and its compaction shall conform to Section 26 of the State Standard Specifications
8. CLSM if used must conform to Section 19-3.02G of the Standard Specifications. When CLSM is utilized the mix design and test results must be submitted to the State's representative. See Appendix H of the Encroachment Permits Manual for additional information.
9. Hot Mix Asphalt (HMA) is used to backfill Asphalt Concrete (AC) Section of the road, HMA must conform to Section 39-2 of the State Standard Specifications
10. AC used to replace pavement section shall match existing pavement depth, unless directed otherwise by the State's representative.
11. A tack coat of asphaltic emulsion conforming to Section 29-2.01C (3) (f) shall be provided and applied
12. When the trench is within 4 feet of curb and gutter, additional cold planning may be required at the discretion of the State's representative. Potholes or trenches separated / adjoined by 10 feet or less to be overlaid together at the discretion of the State's representative.
13. Pavement markings and/or striping removed or damaged during construction must be replaced in kind as directed by the State's representative.
14. If trench is in Portland Cement Concrete (PCC) roadway, remove the concrete to a depth of at least 3 feet below finished grade as per standard Specification 15-1.03B. Replace entire concrete slab from joint to joint as directed by State's representative.
15. Electrical systems installations that are part of State Highway System must be installed in compliance with Caltrans Standard Specifications, Section 87.
16. All methods of compaction shall be by mechanical means. Ponding, jetting, or flooding shall not be allowed. Compaction shall conform to Section 19-5 of the State Standard Specifications
17. Cold planning to accommodate the placement of steel plates is required for posted speed limits 45 MPH or greater. State representative may request cold planning for steel plates to meet field conditions even if the posted speed is less than 45 MPH

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS

MAY 1, 2023 PLANS FOR TOTAL DATE REGISTERED CIVIL ENGINEER THE AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.	

TABLE 1

TAPER LENGTH CRITERIA AND CHANNELIZING DEVICE SPACING									
SPEED (S)	MINIMUM TAPER LENGTH * FOR WIDTH OF OFFSET 12 FEET (W)				MAXIMUM CHANNELIZING DEVICE SPACING				
	TANGENT 2L	MERGING L	SHIFTING L/2	SHOULDER L/3					
					X	Y	Z	**	
20	160	80	40	27	20	40	10	10	
25	250	125	63	42	25	50	12	12	
30	360	180	90	60	30	60	15	15	
35	490	245	123	82	35	70	17	17	
40	640	320	160	107	40	80	20	20	
45	1080	540	270	180	45	90	22	22	
50	1200	600	300	200	50	100	25	25	
55	1320	660	330	220	50	100	25	25	
60	1440	720	360	240	50	100	25	25	
65	1560	780	390	260	50	100	25	25	
70	1680	840	420	280	50	100	25	25	
75	1800	900	450	300	50	100	25	25	

* - For other offsets, use the following merging taper length formula for L:
 For speed of 40 mph or less, $L = WS^2/60$
 For speed of 45 mph or more, $L = WS$

Where: L = Taper length in feet

W = Width of offset in feet

S = Posted speed limit, off-peak 85th-percentile
 speed prior to work starting, or the anticipated
 operating speed in mph

** - Use for taper and tangent sections where there are no pavement markings or where there is a conflict between existing pavement markings and channelizers (CA).

TABLE 2

LONGITUDINAL BUFFER SPACE AND FLAGGER STATION SPACING				
SPEED *	Min D **	DOWNGRADE Min D ***		
		-3%	-6%	-9%
mph	ft	ft	ft	ft
20	115	116	120	126
25	155	158	165	173
30	200	205	215	227
35	250	257	271	287
40	305	315	333	354
45	360	378	400	427
50	425	446	474	507
55	495	520	553	593
60	570	598	638	686
65	645	682	728	785
70	730	771	825	891
75	820	866	927	1003

* - Speed is posted speed limit, off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph

** - Longitudinal buffer space or flagger station spacing
 *** - Use on sustained downgrade steeper than -3 percent and longer than 1 mile.

TABLE 3

ADVANCE WARNING SIGN SPACING				
ROAD TYPE	DISTANCE BETWEEN SIGNS *			
	A	B	C	
URBAN - 25 mph OR LESS	ft	ft	ft	ft
URBAN - MORE THAN 25 mph TO 40 mph	100	100	100	100
URBAN - MORE THAN 40 mph	250	250	250	250
RURAL	350	350	350	350
EXPRESSWAY / FREEWAY	500	500	500	500
	1000	1500	2640	2640

* - The distances are approximate, are intended for guidance purposes only, and should be applied with engineering judgment. These distances should be adjusted by the Engineer for field conditions, if necessary, by increasing or decreasing the recommended distances.

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM TABLES FOR LANE AND RAMP CLOSURES

T9

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTALS NO. SHEETS

REGISTERED CIVIL ENGINEER
 May 1, 2023
 DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS
 OR AGENTS SHALL NOT BE RESPONSIBLE FOR
 THE ACCURACY OR COMPLETENESS OF SCANNED
 COPIES OF THIS PLAN SHEET.

PROFESSIONAL ENGINEER
 No. C43029
 Exp. 3-31-24
 CIVIL
 STATE OF CALIFORNIA

NOTES:

See Standard Plan T9 for tables.
 Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.
 Provide at least one person to continuously maintain traffic control devices for lane closures.

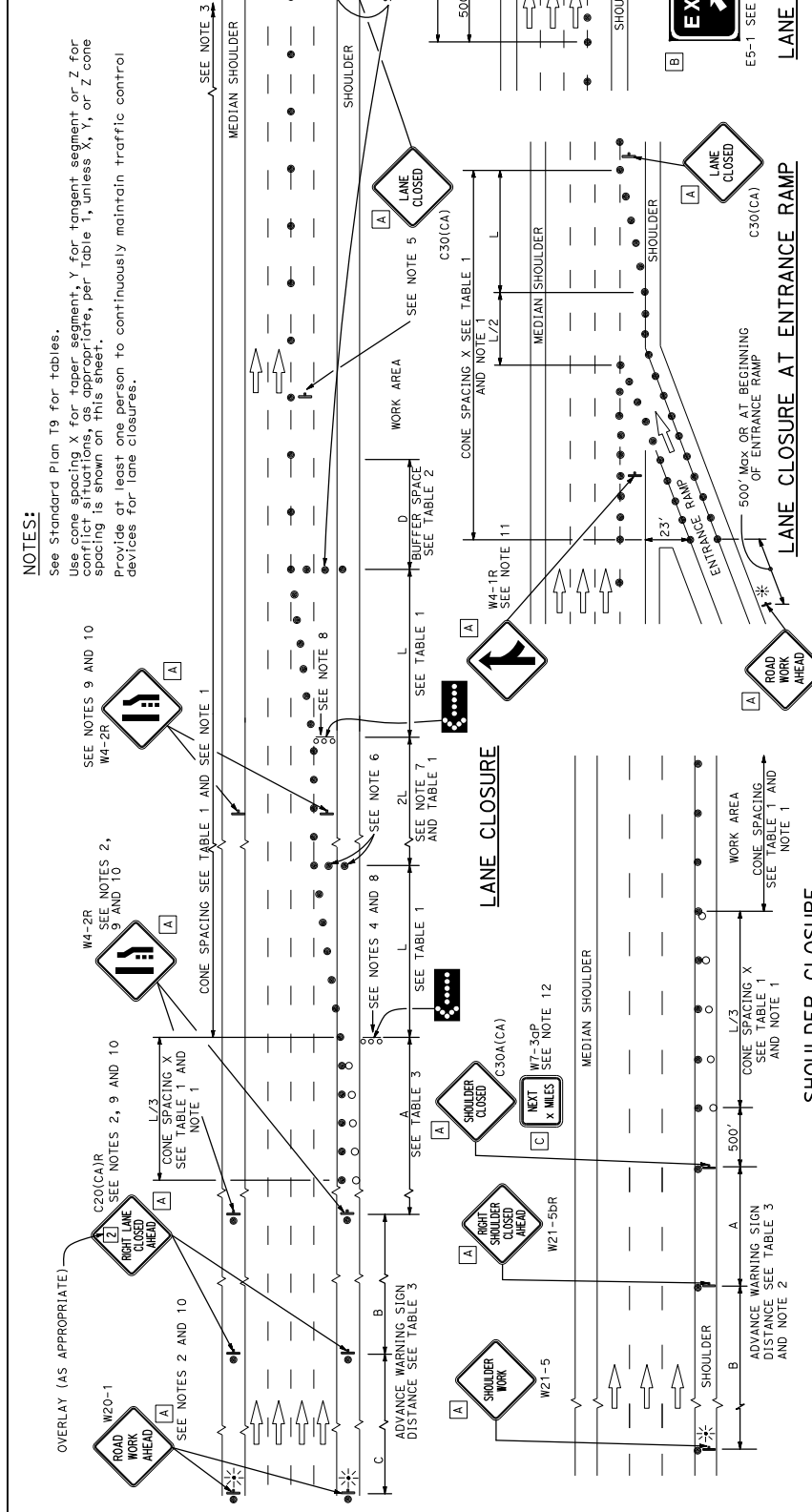
W4-2R
 SEE NOTES 9 AND 10

W4-2R
 SEE NOTES 2, 9 AND 10

C20(CA)R
 SEE NOTES 2, 9 AND 10

W20-1
 SEE NOTES 2 AND 10

OVERLAY (AS APPROPRIATE)



NOTES:

1. Portable delineators placed at one-half the spacing indicated for traffic cones may be used instead of cones for daytime closures only.
2. Each advance warning sign shall be equipped with a 48" x 24" as appropriate, shall be placed at the end of the lane closure unless the end of work area is obvious or ends within the larger project's limits.
3. A C20-2 "END ROAD WORK" sign with minimum size of 48" x 24" as appropriate, shall be placed at the end of the lane closure unless the end of work area is obvious or ends within the larger project's limits.
4. A minimum 1500' sight distance shall be provided when a flashing arrow sign, lane closures shall not begin at the top of crest vertical curve or on a horizontal curve.

5. Place a C30(CA) sign every 1000' throughout length of lane closure.
6. A minimum of 3 cones shall be placed transversely across each closed lane and shoulder at each location where a taper across a lane closure ends, and every 1000' thereafter. The cones shall be placed in a staggered pattern. The transverse alignment of the cones or barricades shall be perpendicular to the centerline of the road to provide access to the work.
7. The 2L tangent shown along lane lines shall be used between the L tapers required for each closed traffic lane.
8. Use one flashing arrow sign for each lane closed. The flashing arrow sign shall be Type 1.
9. Median lane closures shall conform to the details as shown except that C20(CA)L and W4-2L signs shall be used.

10. Duplicate sign installations are not required:
 - a) on opposite shoulder if at least one-half of the available lanes remain open to traffic.
 - b) in the median if the width of the median shoulder is less than 8' and the outside lanes are to be closed.
11. The E5-1 or SC18(CA) and W4-1 signs shall be used as shown.
12. A W7-30P "NEXT MILES" plaque must be used if the shoulder closure extends beyond the distance that can be perceived by road users.
13. For the warning sign requirements at the Exit Ramp, when work is proposed on the local street, see CA MUTCD Figure 6W-22 to 6W-27.

SHOULDER CLOSURE

LANE CLOSURE AT ENTRANCE RAMP

LANE CLOSURE AT EXIT RAMP

LEGEND

- TRAFFIC CONE
- TRAFFIC CONE (OPTIONAL TAPER)
- ⊥ TEMPORARY TRAFFIC CONTROL SIGN
- ⚡ FLASHING ARROW SIGN (FAS)
- ⚡ FAS SUPPORT OR TRAILER
- ⚡ PORTABLE FLASHING BEACON

SIGN PANEL SIZE (Min)

- | | |
|---|-----------|
| A | 48" x 48" |
| B | 72" x 60" |
| C | 36" x 30" |

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

**TRAFFIC CONTROL SYSTEM
 FOR LANE CLOSURE ON
 FREEWAYS AND EXPRESSWAYS**

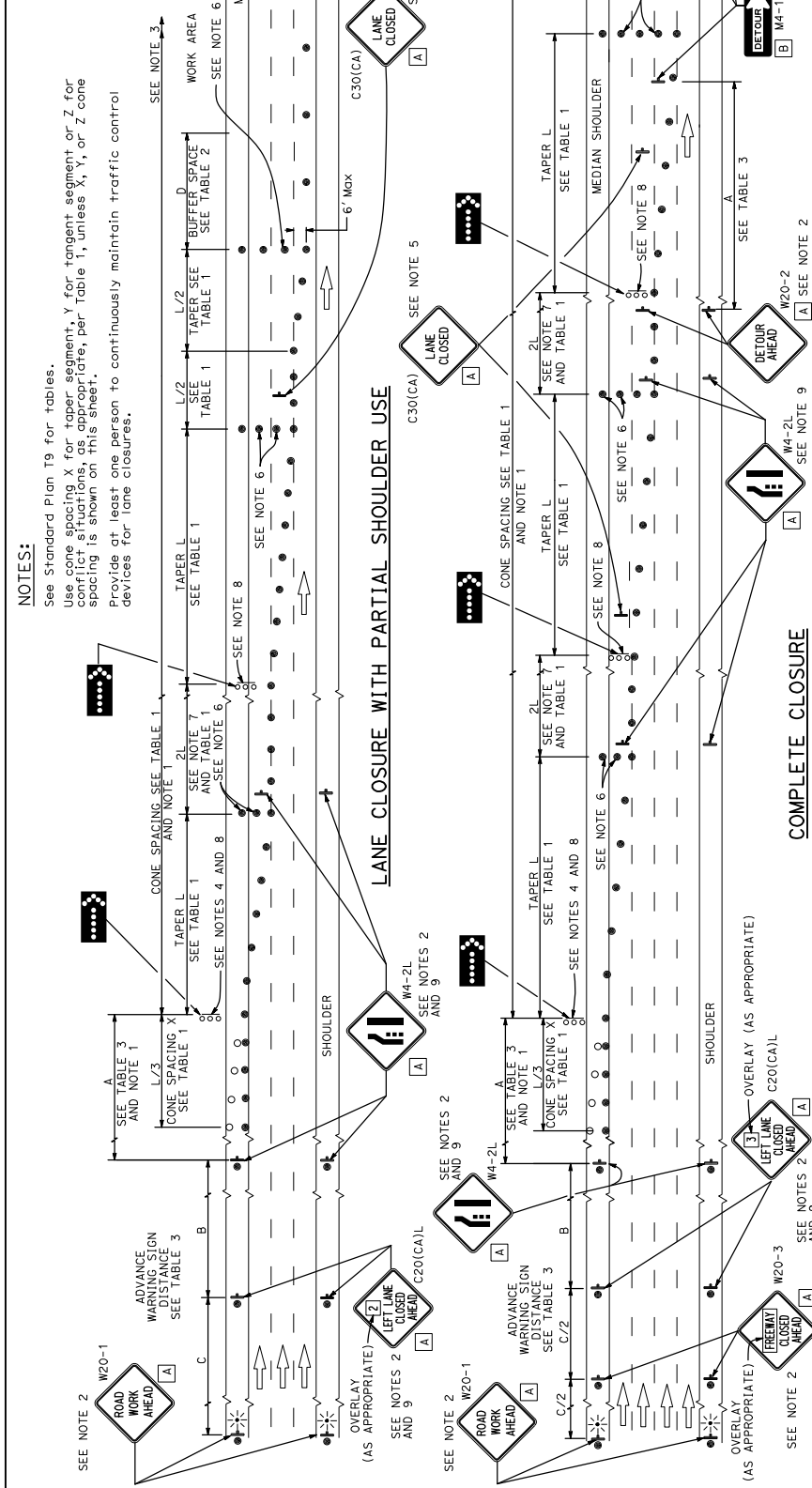
NO SCALE

T10

DIST.	COUNTY	ROUTE	POST MILES	SHEET TOTAL
			TOTAL PROJECT	NO. SHEETS

Chloe P. Sanchez
REGISTERED CIVIL ENGINEER
No. C43029
Exp. 3-31-24
STATE OF CALIFORNIA

DATE: May 1, 2023
PROJECT: 2023
SHEET: 10A
THE STATE OF CALIFORNIA OR ITS OFFICERS
OR AGENTS SHALL NOT BE RESPONSIBLE FOR
THE ACCURACY OR COMPLETENESS OF ANY
COPIES OF THIS PLAN SHEET.



NOTES:

- Portable delineators placed at one-half the spacing of the lane closure unless the end of work area is obvious or ends within a larger project limits.
- Each advance warning sign shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange and shall be placed at the locations indicated for lane closure during hours of darkness.
- A G20-2 "END ROAD WORK" sign, with minimum size of 48" x 24" as appropriate, shall be placed at the end of the lane closure unless the end of work area is obvious or ends within a larger project limits.
- A minimum 1500' of sight distance shall be provided for the advance warning sign. Lane closures shall not begin at the top of crest vertical curve or on a horizontal curve.
- Place a C30(CA) sign every 1000' throughout length of lane closure.
- A minimum of 3 cones shall be placed transversely across a traffic lane ends and every 1000' as shown on the "Lane Closure with Partial Shoulder Use" detail, two type II barricades shall be placed transversely across the closed shoulder may be shifted from the transverse alignment to provide access to the work.
- The 2L tangent shown along lane lines shall be used between the L tapers required for each closed traffic lane.
- Use one flashing arrow sign for each lane closed. The flashing arrow sign shall be Type I.
- Lane closures on the right side using partial median shoulder C20(CA)R and W4-2R signs shall be used.
- A minimum of Two Type II or III barricades shall be placed across each closed lane and shoulder at the location shown and every 200' within the complete closure area. Within the complete closure area, the closed shoulder may be shifted from the transverse alignment to provide access to the work.

LEGEND

- TRAFFIC CONE
- TRAFFIC CONE (OPTIONAL TAPER)
- ⬇️ TEMPORARY TRAFFIC CONTROL SIGN
- ⬇️ FLASHING ARROW SIGN (FAS)
- ⬇️ FAS SUPPORT OR TRAILER
- ⬇️ PORTABLE FLASHING BEACON

SIGN PANEL SIZE (Min)

A	48" x 48"
B	48" x 18"
C	48" x 30"

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**TRAFFIC CONTROL SYSTEM
FOR LANE CLOSURE ON
FREEWAYS AND EXPRESSWAYS**

NO SCALE

T10A

325





CONE SPACING SEE TABLE 1 AND NOTE 1


Provide at least one person to continuously maintain traffic control devices for lane closures.


SEE NOTE 2
SEE NOTES 2
AND 7
AND 7

5. Place C30(CA) "LANE CLOSED" sign at 500' to 1000' intervals throughout extended work area.
6. Length may be reduced by the Engineer to address site conditions.
7. Median lane closures shall conform to the details shown except that C20(CAL) and W4-2L signs shall be used.
8. For approach speeds over 50 MPH, use the "Traffic Control System for Lane Closure on Freeways and Expressways" plan for lane closure details and requirements.

SIGN PANEL SIZE (Min)

- TRAFFIC CONE
 - TRAFFIC CONE (OPTIONAL TAPER)
 - ⏏ TEMPORARY TRAFFIC CONTROL SIGN
 -  FLASHING ARROW SIGN (FAS)
 -  FAS SUPPORT OR TRAILER
 -  PORTABLE FLASHING BEACON
-  A 48" x 48"

 B 36" x 18"

 C 30" x 30"

NO SCALE

T11

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTALS NO. SHEETS

REGISTERED CIVIL ENGINEER DATE MAY 1, 2023 PROJECT NO. 24-0000 SHEET NO. 3-31-24 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.	
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SIGN PANEL SIZE (Min)

- A 48" x 48"
- B 24" x 24"
- C 36" x 18"

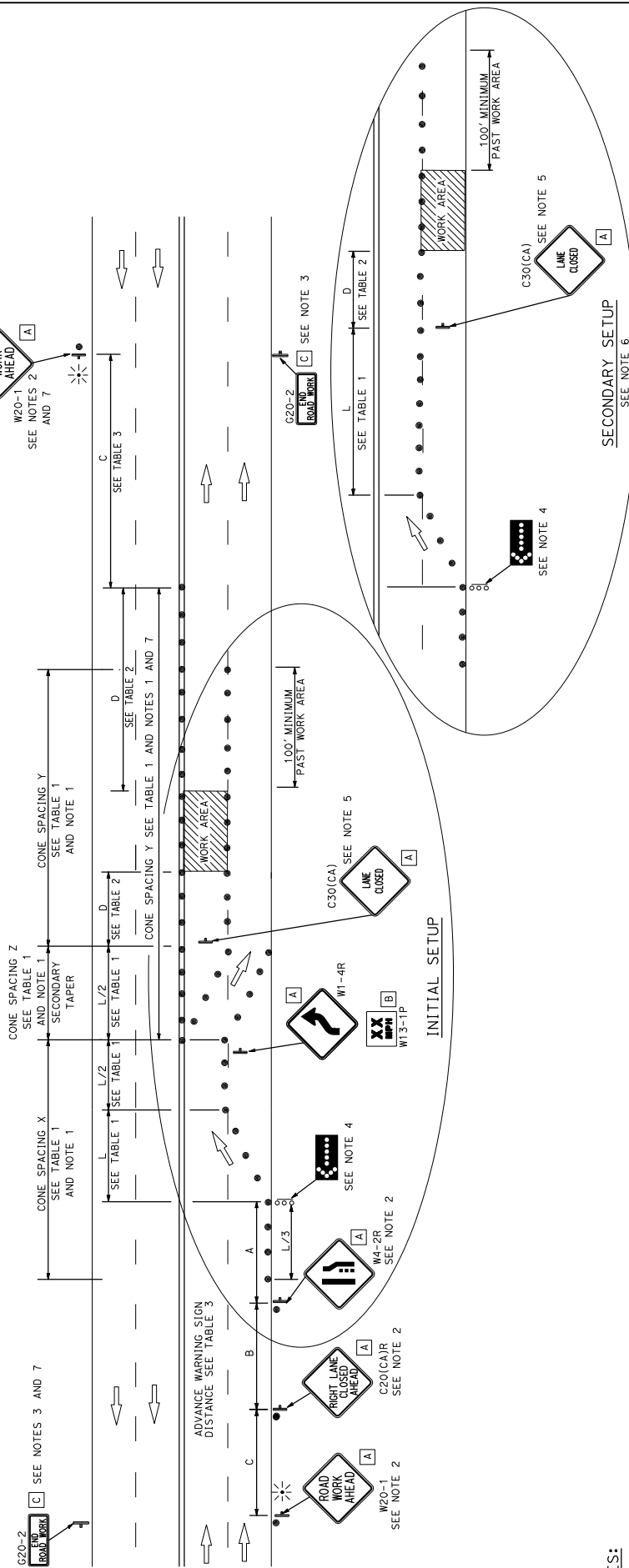
LEGEND

- TRAFFIC CONE
- † TEMPORARY TRAFFIC CONTROL SIGN
- ⬢ FLASHING ARROW SIGN (FAS)
- ⬢ FAS SUPPORT OR TRAILER
- ⬢ PORTABLE FLASHING BEACON

NOTES:

- See Standard Plan T9 for tables.
- Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.
- Provide at least one person to continuously maintain traffic control devices for lane closures.

TYPICAL CHANGEABLE LANE CLOSURE



NOTES:

1. Portable delineators placed at one-half the spacing indicated for traffic cones may be used instead of cones for daytime closures only.
2. Each advance warning sign shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be placed at the locations indicated for lane closure during hours of darkness.
3. A G20-2 "END ROAD WORK" sign shall be placed at the end of the lane closure unless the end of work area is obvious or ends within the larger project's limits.
4. A minimum 1500' of sight distance shall be provided where possible for vehicles approaching the first flashing arrow sign. Lane closures shall not begin at the top of crest vertical curve or on a horizontal curve.
5. Place C30(CA) "LANE CLOSED" sign at 500' to 1000' intervals throughout extended work area.
6. Relocate secondary taper to tangent location and relocate C30(CA) sign. Remove W1-4R/W13-1P sign package.
7. Sign installations and cones are not required when a median barrier is in place.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**TRAFFIC CONTROL SYSTEM
FOR CHANGEABLE LANE CLOSURE
ON MULTILANE CONVENTIONAL
HIGHWAYS AND EXPRESSWAYS**

NO SCALE

T11A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL SHEETS

REGISTERED CIVIL ENGINEER <i>Chloe P. Smith</i>	DATE May 1, 2023
THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS THIS PLAN IS FOR THE USE OF THE OFFICERS OF THE DIVISION OF HIGHWAYS AND IS NOT TO BE USED FOR ANY OTHER PURPOSES. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OF THE DATA OR THE COMPLETENESS OF THE SCANNED COPIES OF THIS PLAN SHEET.	

NOTES:

See Standard Plan T9 for tables.

Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.

Provide at least one person to continuously maintain traffic control devices for lane closures.

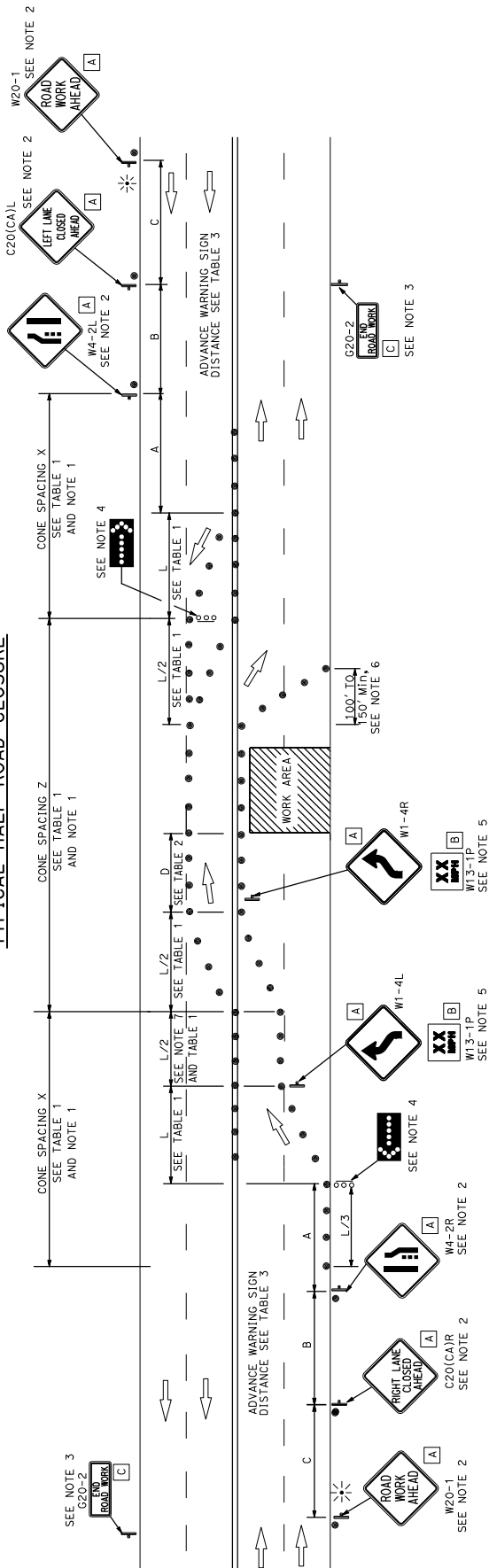
SIGN PANEL SIZE (Min)

- A 48" x 48"
 B 24" x 24"
 C 36" x 18"

LEGEND

- TRAFFIC CONE
 T TEMPORARY TRAFFIC CONTROL SIGN
 FLASHING ARROW SIGN (FAS)
 FAS SUPPORT OR TRAILER
 PORTABLE FLASHING BEACON

TYPICAL HALF ROAD CLOSURE



NOTES:

- Portable delineators placed at one-half the spacing indicated for traffic cones may be used instead of cones for daytime closures only.
- Each advance warning sign shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
- A G20-2 "END ROAD WORK" sign shall be placed at the end of the lane closure unless the end of work area is obvious or ends within the larger project's limits.
- A minimum 1500' sight distance shall be provided where possible for vehicles approaching the first flashing arrow sign. Lane closures shall not begin at the top of crest vertical curve or on a horizontal curve.
- Advisory speed will be determined by the Engineer. The W13-1P Plaque will be required when advisory speed is more than the posted or maximum speed limit.
- Length may be reduced by the Engineer to address site conditions.
- The tangent (L/2) shall be used.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM FOR HALF ROAD CLOSURE ON MULTILANE CONVENTIONAL HIGHWAYS AND EXPRESSWAYS

NO SCALE

T12

DIS#	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS

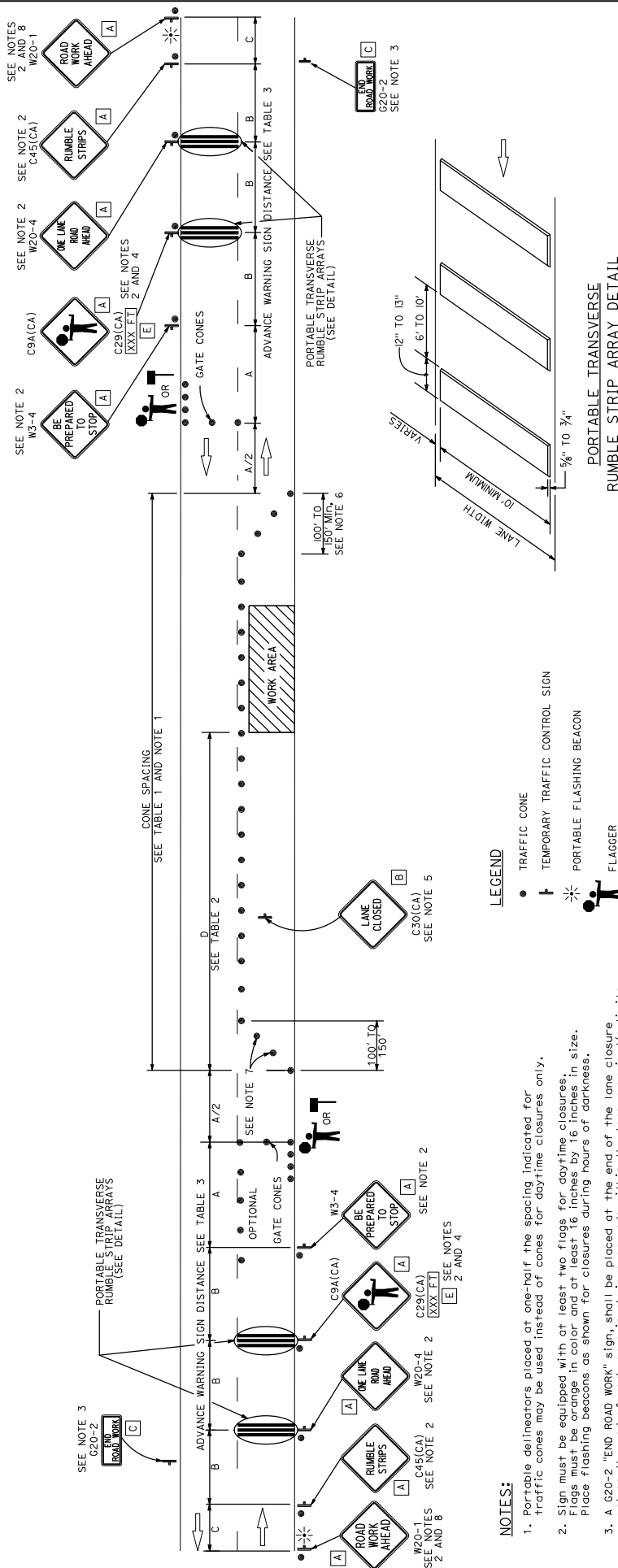
REGISTERED CIVIL ENGINEER <i>Chloe P. Smith</i> No. C45029 DATE MAY 1, 2023 THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS THIS PLAN AND SPECIFICATIONS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ANY INFORMATION OR DATA OBTAINED FROM ANY SOURCE OTHER THAN THE SOURCE OF THE INFORMATION OR DATA.	
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SIGN PANEL SIZE (Min)

- | | |
|---|-----------|
| A | 48" x 48" |
| B | 30" x 30" |
| C | 36" x 18" |
| D | 36" x 42" |
| E | 20" x 7" |

NOTES:

- See Standard Plan T9 for tables.
- Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.
- Provide at least one person to continuously maintain traffic control devices for lane closures.
- Portable delineators placed at one-half the spacing indicated for traffic cones may be used instead of cones for daytime closures only.
 - Sign must be equipped with at least two flags for daytime closures. Flags must be orange in color and at least 16 inches in size. Place flashing beacons as shown for closures during hours of darkness.
 - A G20-2 "END ROAD WORK" sign, shall be placed at the end of the lane closure unless the end of work area is obvious or ends within the larger project's limits.
 - An optional C29(CA) sign may be placed below the C9A(CA) sign.
 - Place C30(CA) "LANE CLOSED" sign at 500' to 1000' intervals throughout extended work area. They are optional if the work area is visible from the flagger station.
 - Length may be reduced by the Engineer to address site conditions.
 - Either traffic cones or barricades shall be placed on the taper. Barricades shall be Type I, II, or III.
 - If C45(CA) is not used, measure distance C from W20-4.



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**TRAFFIC CONTROL SYSTEM
WITH REVERSIBLE CONTROL ON
TWO LANE CONVENTIONAL HIGHWAYS**
NO SCALE

T13

LEGEND:

- TRAFFIC CONE
- ⬮ TEMPORARY TRAFFIC CONTROL SIGN
- ⚡ PORTABLE FLASHING BEACON
- 🚚 TRAILER

PORTABLE CHANNEL
MESSAGE SIGN



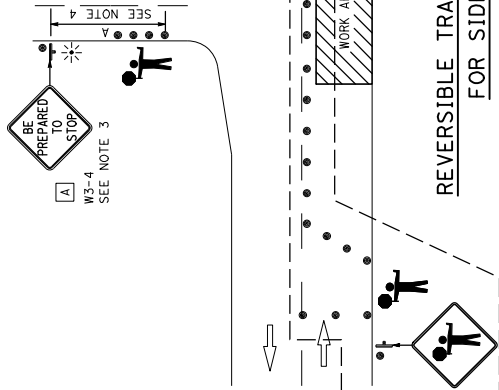
T13A

- NOTES:

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTALS NO. SHEETS

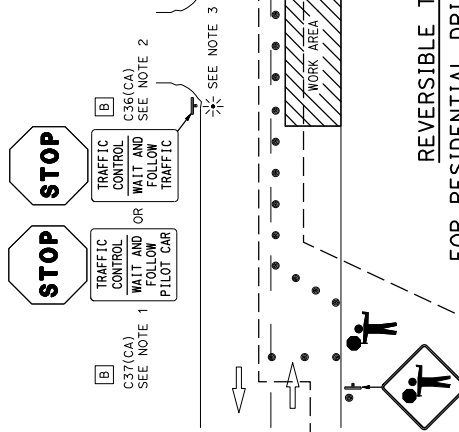
REGISTERED CIVIL ENGINEER
MAY 1, 2023
DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

TRAFFIC CONTROL SYSTEM DEVICES SHOWN FOR REFERENCE ONLY, SEE STANDARD PLAN T13 FOR REQUIRED TRAFFIC CONTROL DEVICES AND SPACING.



REVERSIBLE TRAFFIC CONTROL WITH ADDITIONAL FLAGGERS
FOR SIDE ROADS AND BUSINESS DRIVEWAYS

TRAFFIC CONTROL SYSTEM DEVICES SHOWN FOR REFERENCE ONLY, SEE STANDARD PLAN T13 FOR REQUIRED TRAFFIC CONTROL DEVICES AND SPACING.



REVERSIBLE TRAFFIC CONTROL WITH SIGNS
FOR RESIDENTIAL DRIVEWAYS AND LOW VOLUME SIDE ROADS

NOTES:

- Place C37(CA) sign when pilot car is used.
- Place C36(CA) sign when pilot car is not used.
- Sign must be equipped with at least two flags for daytime closures. Flags must be orange in color and at least 16 inches in size. Place flashing beacons as shown for closures during hours of darkness.
- See Standard Plan T9, Table 3 for advance warning sign spacing.

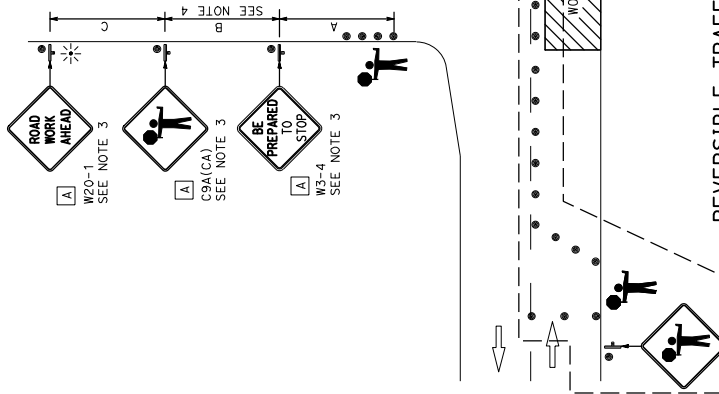
LEGEND:

- TRAFFIC CONE
- TEMPORARY TRAFFIC CONTROL SIGN
- PORTABLE FLASHING BEACON
- FLAGGER

SIGN PANEL SIZE (Min)

- A 48" x 48"
- B 36" x 42"

REVERSIBLE TRAFFIC CONTROL WITH ADDITIONAL FLAGGERS
AT HIGH VOLUME INTERSECTIONS



TRAFFIC CONTROL SYSTEM DEVICES SHOWN FOR REFERENCE ONLY, SEE STANDARD PLAN T13 FOR REQUIRED TRAFFIC CONTROL DEVICES AND SPACING.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
TRAFFIC CONTROL SYSTEM
TWO LANE CONVENTIONAL HIGHWAYS
NO SCALE

T13B

DIST.	COUNTY	ROUTE	POST MILES	SHEET TOTALS
			TOTAL PROJECT	NO. SHEETS

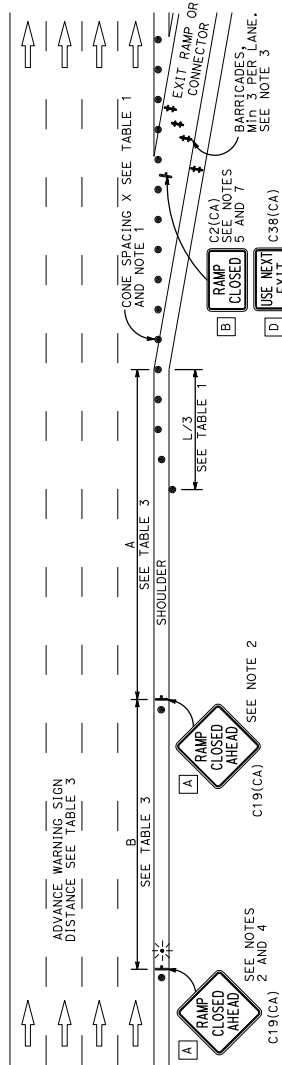
REGISTERED CIVIL ENGINEER	DATE
MAY 1, 2023	
I, Charles D. Smith , hereby certify that I am a duly Licensed Professional Engineer in the State of California, and that I am the Designer of the above project.	
I, Charles D. Smith , hereby certify that I am a duly Licensed Professional Engineer in the State of California, and that I am the Designer of the above project.	

- LEGEND**
- TRAFFIC CONE
 - TEMPORARY TRAFFIC CONTROL SIGN
 - BARRICADES
 - PORTABLE FLASHING BEACON

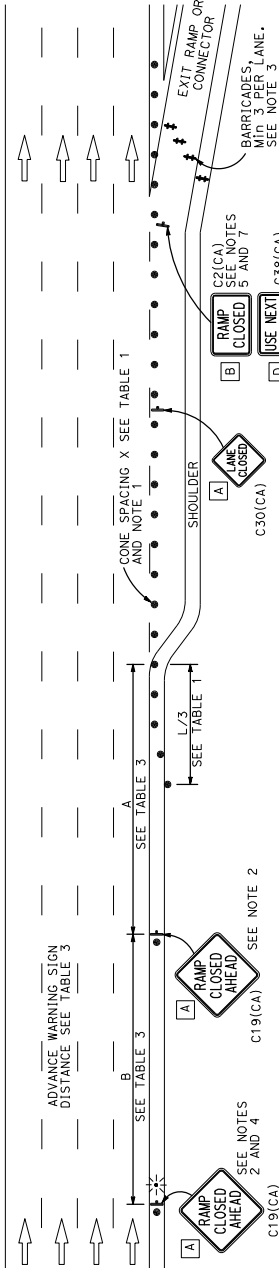
SIGN PANEL SIZE (Min)

- | | |
|---|-----------|
| A | 48" x 48" |
| B | 48" x 30" |
| C | 36" x 36" |
| D | 48" x 36" |

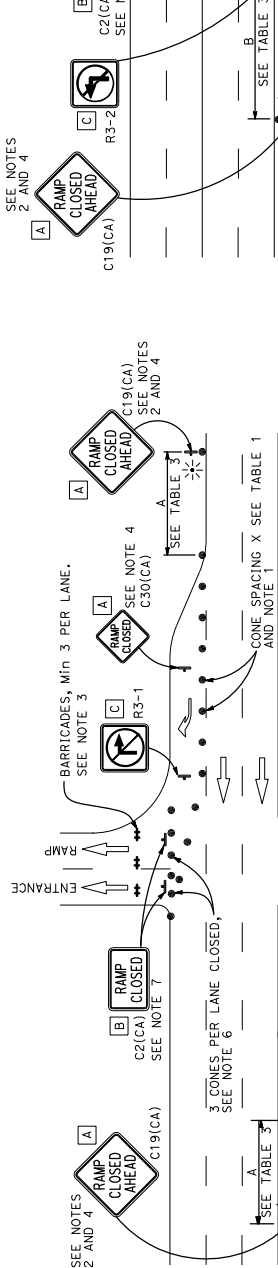
TYPICAL RAMP CLOSURES



EXIT RAMP OR CONNECTOR



EXIT RAMP OR CONNECTOR WITH ADDITIONAL LANE



ENTRANCE RAMP WITHOUT TURNING POCKETS



ENTRANCE RAMP WITH TURNING POCKETS



NOTES:

- Portable delineators placed at one-half the spacing indicated for traffic cones may be used instead of cones for daytime closures only.
- Each advance warning C19(CA) "RAMP CLOSED AHEAD" sign shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. A flashing beacon shall be placed on top of the first C19(CA) sign during hours of darkness.
- Barricades shall be Type I, II or III for closures lasting one week or less and Type III for closures lasting longer than one week.
- In addition to placing the C19(CA) "RAMP CLOSED AHEAD" and C30(CA) "RAMP CLOSED" signs, black on orange overlay plates with the word "closed" may be mounted. As directed by the Engineer on all guide signs that refer to the closed ramp. The letter size on the overlay shall be the same as the guide sign.
- The existing "EXIT" signs shall be covered during ramp closures.
- A minimum of 3 cones shall be placed transversely across each closed lane and shoulder.
- C2(CA) sign shall be black and white.

NOTES:


- See Standard Plan T9 for tables.
- Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per table 1, unless X, Y, or Z cone spacing is shown on this sheet.
- Provide at least one person to continuously maintain traffic control devices for lane closures.

TRAFFIC CONTROL SYSTEM FOR RAMP CLOSURE

NO SCALE

T14

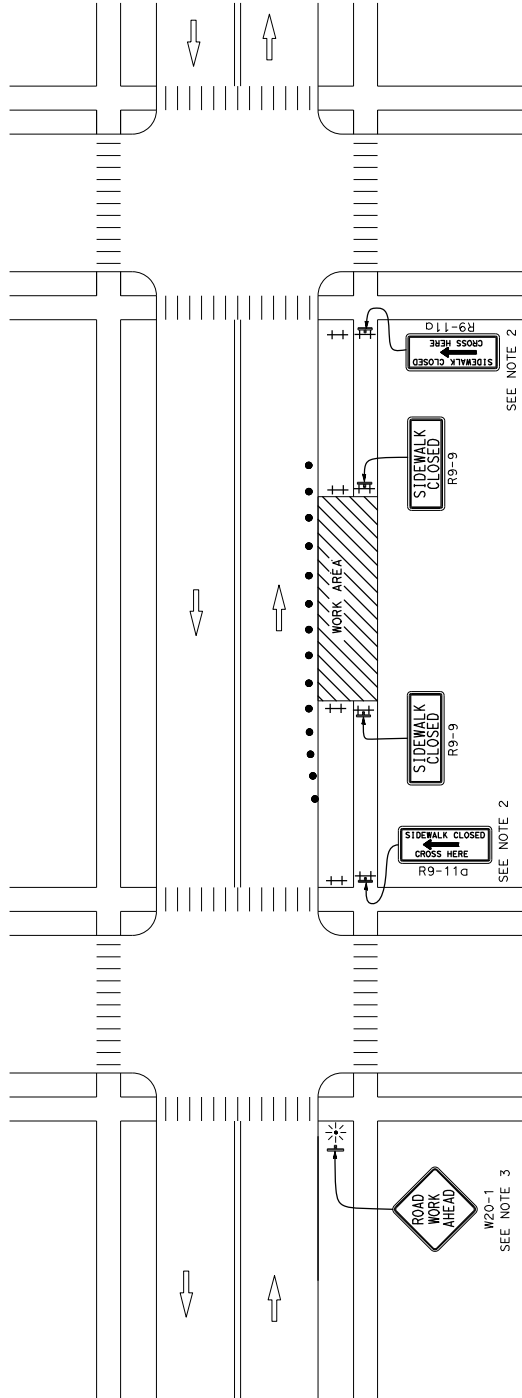
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS

	
REGISTERED CIVIL ENGINEER May 1, 2023 DATE THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ANY COPIES OF THIS PLAN SHEET.	

NOTES:

See Standard Plan T9 for tables.
 Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1 unless X,Y, or Z cone spacing is shown on this sheet.

- Only signs related to pedestrians are shown. For all other signs see appropriate T-sheets.
- Barricades closing sidewalk shall cover the full width of the sidewalk. Use R9-11 sign when there are destination points between the detour and the work area. Locate the R9-11 sign to allow pedestrian access.
- Advance warning sign is not required if the work area is within the limits of a larger work zone. Sign shall be equipped with at least two flags for daytime closure. Each flag shall be orange or fluorescent red-orange in color.

**LEGEND:**

- † BARRICADE
- TRAFFIC CONE
- ✱ PORTABLE FLASHING BEACON
- ↑ SIGN
- ⚡ TEMPORARY TRAFFIC CONTROL SIGN ON BARRICADE

SIGN PANEL SIZE (Min)

SIGN DESIGNATION	SIGN OR PLAQUE	SIGN SIZE
R9-9	SIDEWALK CLOSED	24" x 12"
R9-11	SIDEWALK CLOSED AHEAD CROSS HERE	24" x 18"
R9-11a	SIDEWALK CLOSED CROSS HERE	24" x 12"
W20-1	ROAD WORK AHEAD	36" x 36"

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

TEMPORARY PEDESTRIAN ACCESS ROUTES TYPICAL SIDEWALK CLOSURE AND PEDESTRIAN DETOUR

NO SCALE

T30

DI+ COUNTY ROUTE POST MILES TOTAL PROJECT NO. SHEET TOTAL NO. SHEETS

REGISTERED CIVIL ENGINEER
May 1, 2023
DATE
THE STATE OF CALIFORNIA DEPT. OF TRANSPORTATION
OFFICIALS SHALL NOT BE RESPONSIBLE FOR
ANY ERRORS OR OMISSIONS OR FOR THE
CORRECTNESS OF THIS PLAN SHEET.

NOTES:

1. Only signs related to pedestrians are shown. For all other signs see appropriate T-sheets.
2. Separate pedestrian walkway from traffic and work zone activities, when temporary walkway is adjacent to traffic.
3. The temporary pedestrian access route must not lead into conflict with vehicles or work.
4. Advance warning sign is not required if the work area is within the limits of a larger work zone. Sign shall be equipped with at least two flags for daytime closure. Each flag shall be orange or fluorescent red-orange in color.
5. All devices used to channelize pedestrian flow must connect such that gaps do not allow pedestrians to stray from the channelized path.
6. Barricades closing sidewalk shall cover the full width of the sidewalk.
7. Separate the temporary pedestrian access route from traffic using a temporary barrier and a crash cushion if necessary.
8. When it is not possible to maintain a minimum of 60 inches throughout the length of the pedestrian route, maintain a minimum width of 48 inches and provide a 60 X 60-inch passing space at least every 200 feet.
9. See Standard Plan A88A for detectable warning surface for curb ramps to apply to temporary curb ramps.
10. See Standard Plan T34 for temporary curb ramp options.

See Standard Plan T9 for tables.

Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1 unless X,Y, or Z cone spacing is shown on this sheet.

- LEGEND:
- † BARRICADE

▬ TEMPORARY CURB RAMP

▬ CHANNELIZING DEVICE

• TRAFFIC CONE

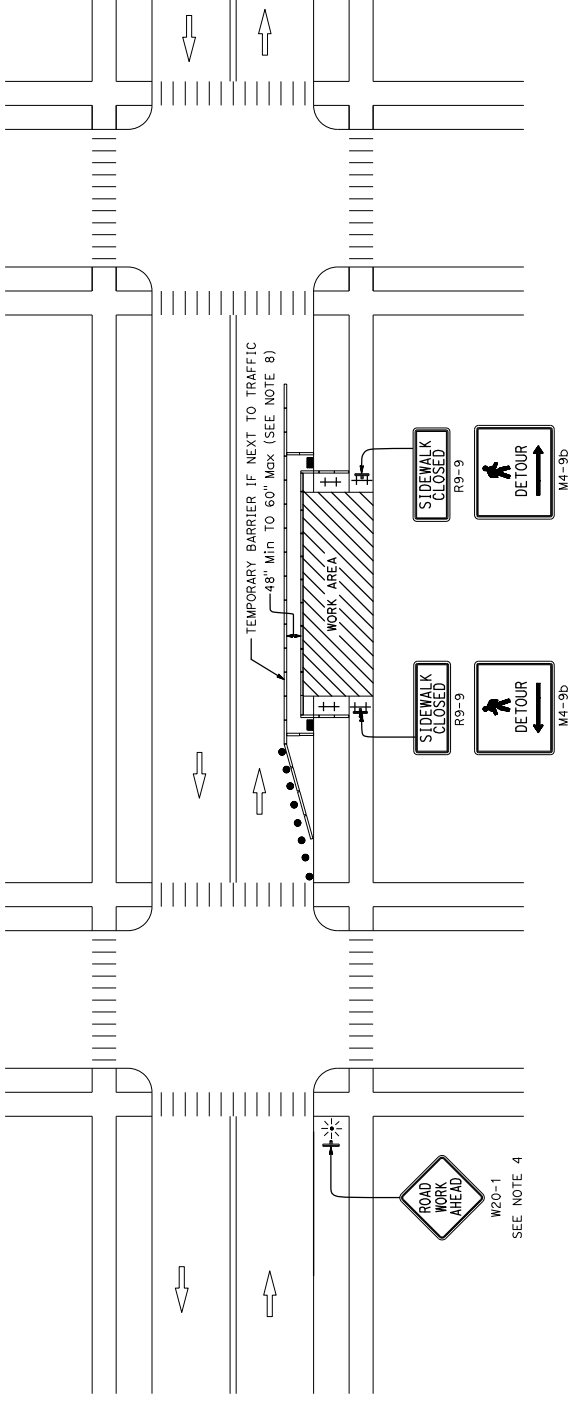
✱ PORTABLE FLASHING BEACON

↑ TEMPORARY TRAFFIC CONTROL SIGN

⚡ TEMPORARY TRAFFIC CONTROL SIGN ON BARRICADE

SIGN PANEL SIZE (Min)

SIGN DESIGNATION	SIGN OR PLAQUE	SIGN SIZE
M4-9b	PEDESTRIAN DETOUR	30" x 24"
R9-9	SIDEWALK CLOSED	24" x 12"
W20-1	ROAD WORK AHEAD	36" x 36"



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TEMPORARY PEDESTRIAN ACCESS ROUTES
TYPICAL SIDEWALK DIVERSION
WITHIN ROADBED

NO SCALE

T31

DIS#	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS

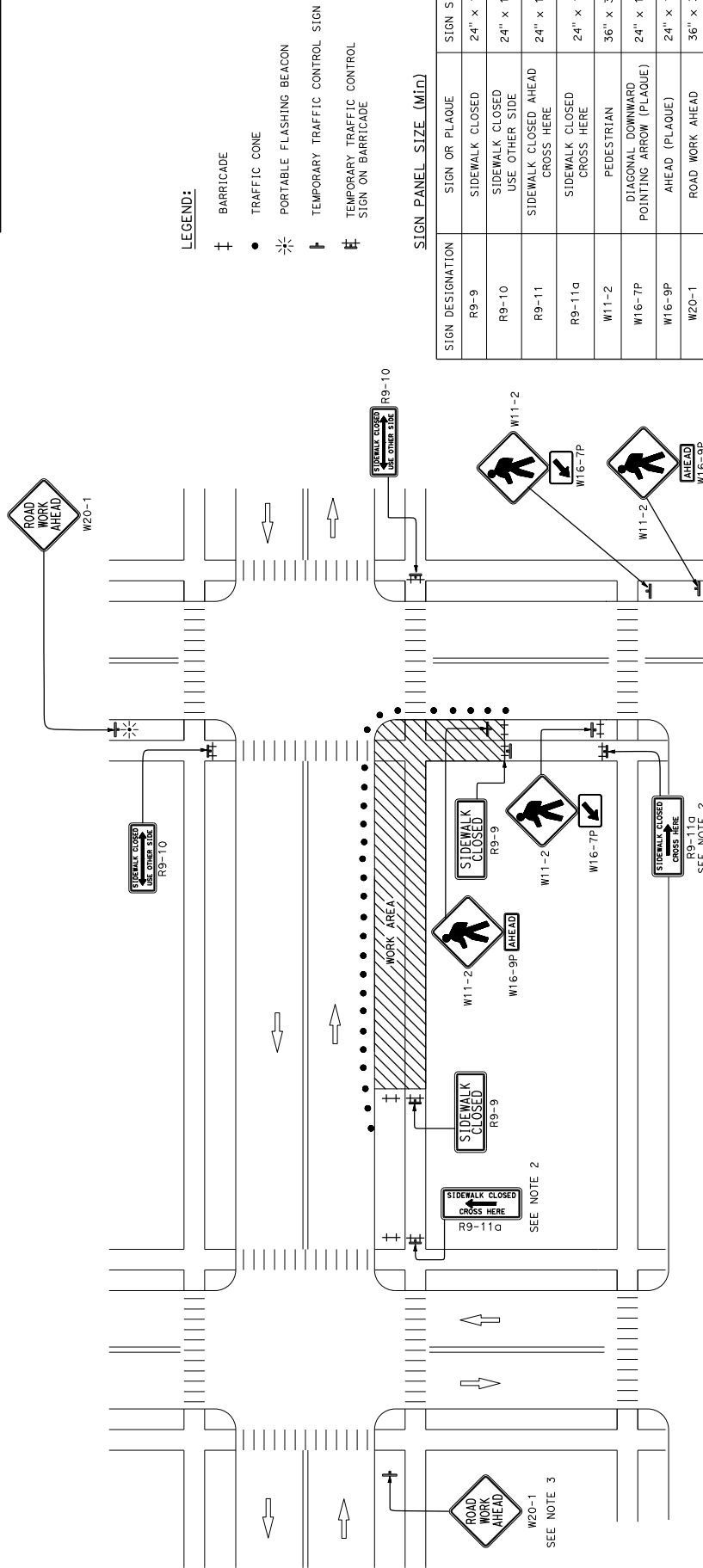
REGISTERED CIVIL ENGINEER May 1, 2023 DATE THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.	

NOTES:

1. Only signs related to pedestrians are shown. For all other signs see appropriate T-sheets.
2. Barricades closing sidewalk shall cover the full width of the sidewalk. Use R9-11 sign when there are destination points between the detour and the work area. Locate the R9-11 sign to allow pedestrian access.
3. Advance warning sign is not required if the work area is within the limits of a larger work zone. Sign shall be equipped with at least two flags for daytime closure. Each flag shall be orange or fluorescent red-orange in color.

See Standard Plan T9 for tables.

Use cone spacing X for taper segment, Y for tangent segment, and Z for conflict situations, as appropriate, Table 1, unless X, Y, or Z cone spacing is shown on this sheet.



LEGEND:

- † BARRICADE
- TRAFFIC CONE
- ✱ PORTABLE FLASHING BEACON
- ⌋ TEMPORARY TRAFFIC CONTROL SIGN
- ⌋ TEMPORARY TRAFFIC CONTROL SIGN ON BARRICADE

SIGN PANEL SIZE (Min)

SIGN DESIGNATION	SIGN OR PLAQUE	SIGN SIZE
R9-9	SIDEWALK CLOSED	24" x 12"
R9-10	SIDEWALK CLOSED USE OTHER SIDE	24" x 12"
R9-11	SIDEWALK CLOSED AHEAD	24" x 18"
R9-11a	CROSS HERE	24" x 12"
W11-2	PEDESTRIAN	36" x 36"
W16-7P	DIAGONAL DOWNWARD POINTING ARROW (PLAQUE)	24" x 12"
W16-9P	AHEAD (PLAQUE)	24" x 12"
W20-1	ROAD WORK AHEAD	36" x 36"

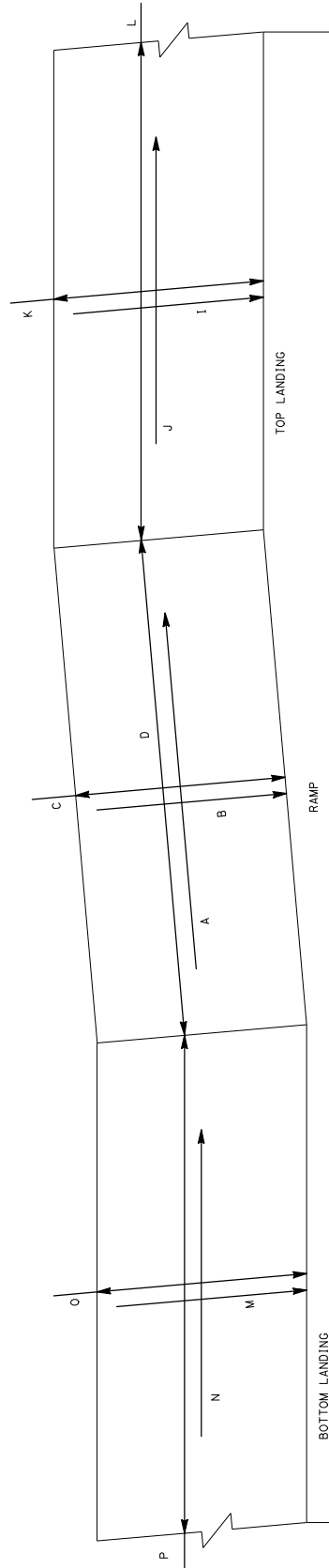
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**TEMPORARY PEDESTRIAN ACCESS ROUTES
TYPICAL SIDEWALK/CROSSWALK CLOSURE
AND PEDESTRIAN DETOUR**

NO SCALE

T32

RAMP				HAND RAIL		EDGE PROTECTION	
SLOPE	CROSS SLOPE	WIDTH	LENGTH	HEIGHT RIGHT SIDE	HEIGHT LEFT SIDE	RAIL RIGHT SIDE	RAIL LEFT SIDE
A	B	C	D	E	F	G	H
8.3% OR LESS	2.0% OR LESS	48 INCHES OR GREATER	30 FEET OR LESS	34 TO 38 INCHES	34 TO 38 INCHES	WITHIN 2 INCHES FROM GROUND	WITHIN 2 INCHES FROM GROUND
TOP LANDING				BOTTOM LANDING			
CROSS SLOPE	SLOPE	WIDTH	DEPTH	CROSS SLOPE	SLOPE	WIDTH	DEPTH
I	J	K	L	M	N	O	P
2.0% OR LESS	2.0% OR LESS	48 INCHES OR GREATER	60 INCHES OR GREATER	2.0% OR LESS	2.0% OR LESS	48 INCHES OR GREATER	60 INCHES OR GREATER



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**TEMPORARY PEDESTRIAN
ACCESS ROUTES
RAMP**

NO SCALE

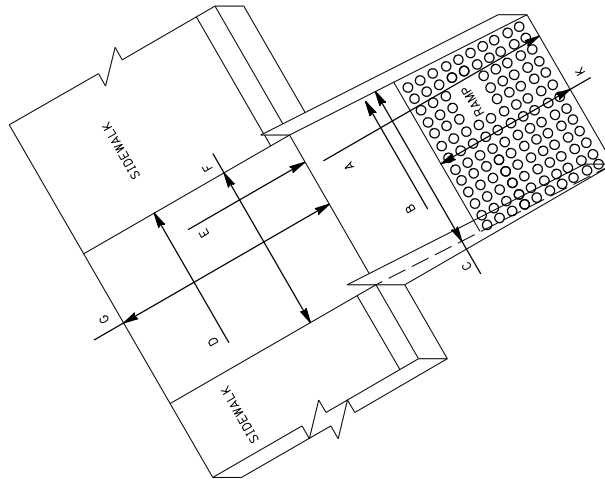
T33

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS

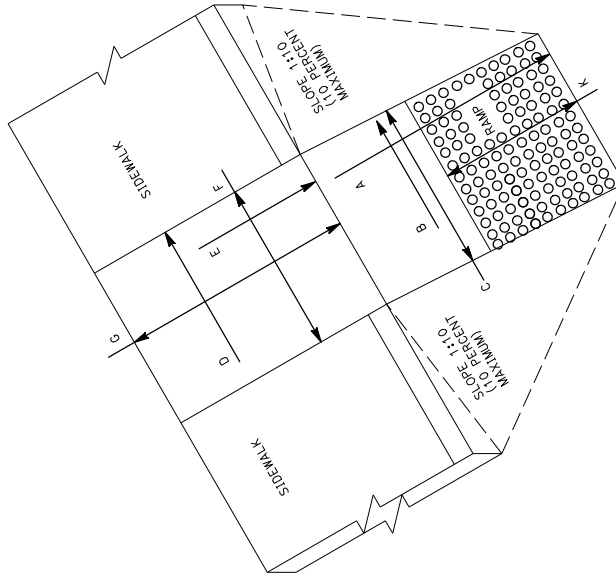
MAY 1, 2023 DATE REGISTERED CIVIL ENGINEER Douglas D. Sanchez	MAY 1, 2023 DATE THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ANY COPIES OF THIS PLAN SHEET.

CURB RAMP			TOP LANDING			DETECTABLE WARNING SURFACE	
SLOPE	CROSS SLOPE	WIDTH	CROSS SLOPE	SLOPE	WIDTH	DEPTH	DEPTH
A	B	C	D	E	F	G	K
8.3% OR LESS	2.0% OR LESS	48 INCHES OR GREATER	2.0% OR LESS	2.0% OR LESS	48 INCHES OR GREATER	60 INCHES OR GREATER	MINIMUM 36 INCHES

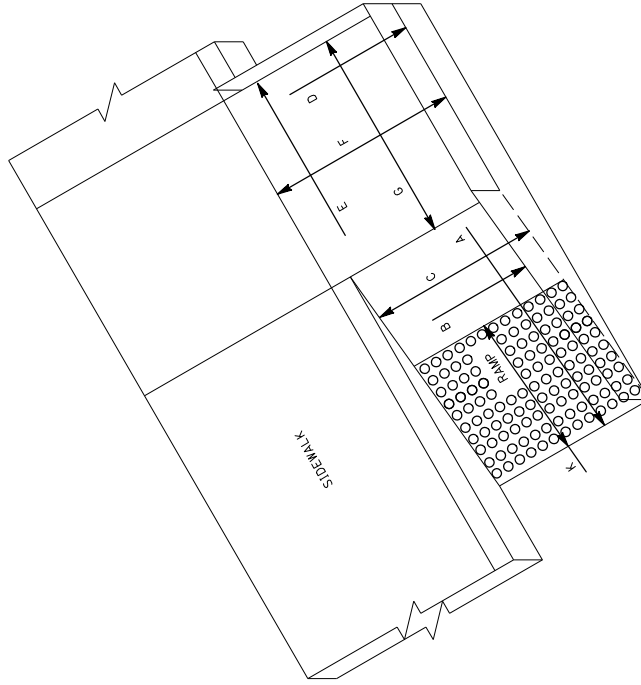
NOTES: If the above requirements cannot be met, on existing sites with space limitations, the following slopes are allowed:
 For a maximum rise of 6 inches a slope between 1:12 to 1:10 is allowed.
 For a maximum rise of 3 inches a slope between 1:10 to 1:8 is allowed.



OPTION A
SHOWN WITH SIDE EDGE



OPTION B
SHOWN WITH SIDE APRON



OPTION C
PARALLEL RAMP
SHOWN WITH SIDE EDGE

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**TEMPORARY PEDESTRIAN
 ACCESS ROUTES
 CURB RAMP OPTIONS**
 NO SCALE

T34

STANDARD ENCROACHMENT PERMIT APPLICATION

TR-0100 (REV 12/2018)

Complete ALL fields, write "N/A" if not applicable. Type or print clearly.

This application is not complete until all requirements have been approved.

Permission is requested to encroach on the State Highway right-of-way as follows:

1. COUNTY SANTA CRUZ	2. ROUTE (ALL)	3. POST MILE N/A	FOR CALTRANS USE TRACKING NO. DIST/CO/RTE/PM SIMPLEX STAMP DATE OF SIMPLEX STAMP
4. ADDRESS OR STREET NAME N/A	5. CITY N/A		
6. CROSS STREET (Distance and direction from project site) N/A			

7. WORK TO BE PERFORMED BY <input checked="" type="checkbox"/> APPLICANT <input type="checkbox"/> CONTRACTOR	8. IS THIS APPLICATION FOR THE CONTRACTOR'S (DOUBLE) PERMIT? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES. If "YES", provide the Parent Permit Number
9. ESTIMATE START DATE N/A	10. ESTIMATED COMPLETION DATE N/A

11. ESTIMATED NUMBER OF WORKING DAYS WITHIN STATE HIGHWAY RIGHT-OF-WAY N/A

12. ESTIMATED CONSTRUCTION COSTS WITHIN STATE HIGHWAY RIGHT-OF-WAY N/A

13. HAS THE PROJECT BEEN REVIEWED BY ANOTHER CALTRANS BRANCH? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES. If "YES", which branch?

14. FUNDING SOURCE(S) <input checked="" type="checkbox"/> FEDERAL <input checked="" type="checkbox"/> STATE <input checked="" type="checkbox"/> LOCAL <input checked="" type="checkbox"/> PRIVATE <input checked="" type="checkbox"/> SB 1 (ROAD REPAIR AND ACCOUNTABILITY ACT OF 2017)	16. APPLICANT'S REFERENCE / UTILITY WORK ORDER NUMBER N/A
15. CALTRANS PROJECT CODE (ID) N/A	

17. DESCRIBE WORK TO BE DONE WITHIN STATE HIGHWAY RIGHT-OF-WAY Attach 6 complete sets of plans (folded to 8.5" x 11") and any applicable specifications, calculations, maps, traffic control plans, etc. Maintenance of County facilities within State ROW by County forces and private contractors hired by the County including the following activities: Surveying, mowing & vegetation management, landscaping maintenance, irrigation maintenance, graffiti removal, pavement resurfacing, patching, roadbed maintenance, pavement markings, lighting, signage, stormwater system maintenance, underground utility maintenance, sidewalk maintenance, litter control, ditch cleaning, traffic control, placement of temporary signage and PCMS units.
--

18 (a). PORTION OF STATE HIGHWAY RIGHT-OF-WAY WHERE WORK IS BEING PROPOSED (check all that apply) <input type="checkbox"/> Traffic lane <input type="checkbox"/> Shoulder <input type="checkbox"/> Sidewalk <input type="checkbox"/> Median <input type="checkbox"/> At or near an intersection <input type="checkbox"/> Mobile work <input type="checkbox"/> Outside of the shoulder, _____ feet from edge of pavement <input checked="" type="checkbox"/> Other County road facilities located within State Highway ROW

18 (b). PROPOSED TRAFFIC CONTROL PLANS AND METHOD <input type="checkbox"/> No traffic control needed <input type="checkbox"/> State Standard Plans (T-Sheets) # _____ <input type="checkbox"/> Project specific Traffic Control Plans included <input type="checkbox"/> To be submitted by contractor

19. EXCAVATION	MAX. DEPTH (in) N/A	MIN. DEPTH (in) N/A	AVG. WIDTH (in) N/A	LENGTH (ft) N/A	SURFACE TYPE (e.g. Asphalt, concrete, soil, etc.) N/A
----------------	------------------------	------------------------	------------------------	--------------------	--

20. PIPES	PRODUCT BEING TRANSPORTED N/A	CARRIER PIPE DIAMETER N/A (in.) MATERIAL N/A	CASING PIPE DIAMETER N/A (in.) MATERIAL N/A
-----------	----------------------------------	---	--

PROPOSED INSTALLATION METHOD (e.g. HDD, Bore & Jack, Open Cut, etc.) N/A	VOLTAGE / PSIG N/A
---	-----------------------

DOES THE PROPOSED PROJECT INVOLVE THE REPLACEMENT AND/OR ABANDONMENT OF AN EXISTING FACILITY? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES. If "YES", provide a description

21. IS A CITY, COUNTY OR OTHER PUBLIC AGENCY INVOLVED IN THE APPROVAL OF THIS PROJECT? <input type="checkbox"/> YES (if "YES", check the type of project AND attach the environmental documentation and conditions of approval) <input type="checkbox"/> COMMERCIAL DEVELOPMENT <input type="checkbox"/> BUILDING <input type="checkbox"/> GRADING <input type="checkbox"/> OTHER _____ <input type="checkbox"/> CATEGORICALLY EXEMPT <input type="checkbox"/> NEGATIVE DECLARATION <input type="checkbox"/> ENVIRONMENTAL IMPACT REPORT <input type="checkbox"/> OTHER _____ <input checked="" type="checkbox"/> NO (if "NO", check the category below which best describes the project AND answer questions A-K on page 2)
--

ADA Notice

For individuals with sensory disabilities, this document is available in alternate formats. For alternate format information, contact the Forms Management Unit at (916) 445-1233, TTY 711, or write to Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

TRACKING NO.

- | | | |
|---|--|--|
| <input type="checkbox"/> DRIVEWAY OR ROAD APPROACH, RECONSTRUCTION,
MAINTENANCE OR RESURFACING | <input type="checkbox"/> FENCE | <input type="checkbox"/> EROSION CONTROL |
| <input type="checkbox"/> PUBLIC UTILITY MODIFICATION, EXTENSIONS, HOOKUPS | <input type="checkbox"/> MAILBOX | <input type="checkbox"/> LANDSCAPING |
| <input type="checkbox"/> FLAGS, SIGNS, BANNERS, DECORATIONS, PARADES AND CELEBRATIONS | <input checked="" type="checkbox"/> OTHER <u>General County Road Maintenance</u> | |

TRACKING NO. _____

The following questions must be answered when a City, County or other public agency IS NOT involved in the approval of this project.

Your answers to these questions will assist Caltrans staff in identifying any physical, biological, social or economic resources that may be affected by your proposed project within State Highway right-of-way and to determine which type of environmental studies may be required to approve your application for an encroachment permit. It is the applicant's responsibility for the production of all required environmental documentation and supporting studies and in some cases this may be costly and time consuming. If possible, attach photographs of the location of the proposed project. Answer these questions to the best of your ability. Provide a description of any "YES" answers (type, name, number, etc.).

A. Will any existing vegetation and/or landscaping within State Highway right-of-way be disturbed?

B. Are there waterways (e.g. river, creek, pond, natural pool or dry streambed) adjacent to or within the limits of the proposed project?

C. Is the proposed project located within five miles of the coast line?

D. Will the proposed project generate construction noise levels greater than 86 decibels (dBA) (e.g. Jack-hammering, pile driving)?

E. Will the proposed project incorporate land from a public park, recreation area or wildlife refuge open to the public?

F. Are there any recreational trails or paths within the limits of the proposed project?

G. Will the proposed project impact any structures, buildings, rail lines or bridges within State Highway right-of-way?

H. Will the proposed project impact access to any businesses or residences?

I. Will the proposed project impact any existing public utilities or public services?

J. Will the proposed project impact any existing pedestrian facilities, such as sidewalks, crosswalks or overcrossings?

K. Will new lighting be constructed within or adjacent to State Highway right-of-way?

22. Will the proposed project cause a substantial change in the significance of a historical resource (45 years or older), or cultural resource? ☐ YES ☐ NO (if "YES", provide a description)

23. Will the proposed project be on an existing State Highway or street where the activity involves removal of a scenic resource? (e.g. A significant tree or stand of trees, a rock outcropping or a historic building) ☐ YES ☐ NO (if "YES", provide a description)

24. Is work being done on the applicant's property in addition to State Highway right-of-way? ☐ YES ☐ NO
(If "YES", attach 6 complete sets of site and grading plans)

25. Will the proposed project require the disturbance of soil? ☐ YES ☐ NO
If "YES", estimate the area of disturbed soil within State Highway right-of-way in acres: _____
and estimate the area of disturbed soil outside State Highway right-of-way in acres: _____

26. Will the proposed project require dewatering? ☐ YES ☐ NO
If "YES", estimate Total gallons AND gallons/month. _____ (Total gallons) AND _____ (gallons/month)
SOURCE*: ☐ STORMWATER ☐ NON-STORMWATER
(*See Caltrans SWMP for definition of non-storm water discharge: <http://www.dot.ca.gov/env/stormwater/>)

27. How will any storm water or ground water be disposed?
☐ Storm Drain System ☐ Combined Sewer / Stormwater System ☐ Stormwater Retention Basin ☐ N/A
☐ Other (explain) _____


TRACKING NO.

READ THE FOLLOWING CLAUSES PRIOR TO SIGNING THIS ENCROACHMENT PERMIT APPLICATION.

The applicant's submission of this application to the California Department of Transportation constitutes the applicant's agreement and representation that the work or other activity contemplated by the encroachment permit application shall comply with all applicable standards, specifications, policies, requirements, conditions, and regulations of the California Department of Transportation, and the applicant understands the application may be denied if there is non-compliance with any of the above. An exception process exists and may result in approval of a non-compliant encroachment, in the discretion of the California Department of Transportation, but the exception process may require additional time to complete. The applicant understands and agrees all work or other activity contemplated by the encroachment permit application is subject to inspection and oversight by the California Department of Transportation. The applicant understands and agrees encroachment permit fees must still be paid if an application is withdrawn or denied. The applicant understands a denial may be appealed, in accordance with California Streets and Highways Code, Section 671.5, and the related regulations found in California Code of Regulations, Title 21, Division 2, Chapter 8, Article 2.

The applicant understands and agrees that immediately upon issuance of the encroachment permit the applicant is bound by, subject to, and must comply with the "Encroachment Permit General Provisions" (TR-0045), "Stormwater Special Provisions" (TR-0400) and any other applicable Special Provisions and Conditions of the encroachment permit. The "Encroachment Permit General Provisions" (TR-0045), and the Stormwater Special Provisions (TR-0400) are available at: [http://www.dot.ca.gov/trafficops/ep/docs/Appendix_K_\(WEB\).pdf](http://www.dot.ca.gov/trafficops/ep/docs/Appendix_K_(WEB).pdf). If a paper copy is needed of the "Encroachment Permit General Provisions" (TR-0045) and/or "Stormwater Special Provisions" (TR-0400), please contact the District Office of Encroachment Permits. Their contact information is available at: [http://www.dot.ca.gov/trafficops/ep/docs/Appendix_G_\(WEB\).pdf](http://www.dot.ca.gov/trafficops/ep/docs/Appendix_G_(WEB).pdf). The "Encroachment Permit General Provisions" (TR-0045) and any other applicable Special Provisions and Conditions will be provided as part of the encroachment permit. Information about Stormwater requirements is available at the Internet address: <http://www.dot.ca.gov/hq/construc/stormwater/>.

The applicant understands an encroachment permit may be denied, revoked, and/or a bond may be required, for non-payment of prior or present encroachment permit fees. An encroachment permit is not a property right and does not transfer with the property to a new owner. Each of the persons purporting to execute this application on behalf of the applicant and/or on behalf of the applicant's authorized agent or engineer represents and warrants such person has full and complete legal authority to do so and to thereby bind applicant to the terms and conditions herein and to the terms and/or conditions of the encroachment permit. Applicant understands and agrees this application may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Executed copies of this application and/or its counterparts may be reproduced and/or exchanged by copy machine, mailing, facsimile, or electronic means (such as e-mail), and such copies shall be deemed to be effective as originals.

28. NAME OF APPLICANT (Project or Property Owner or Organization) COUNTY OF SANTA CRUZ DEPARTMENT OF PUBLIC WORKS, ATTN: MATT MACHADO, DIRECTOR/ DEPUTY CAO		
ADDRESS OF APPLICANT (Include City, State and Zip Code) 701 OCEAN STREET, SANTA CRUZ CA 95060		
E-MAIL ADDRESS MATT.MACHADO@SANTACRUZCOUNTYCA.GOV	PHONE NUMBER (831) 454-2160	FAX NUMBER (831) 454-2385
29. NAME OF AUTHORIZED AGENT / ENGINEER (A "Letter of Authorization" is required if different from #28) (SAME AS ABOVE)		IS A LETTER OF AUTHORIZATION ATTACHED? <input type="checkbox"/> YES <input type="checkbox"/> NO
ADDRESS OF AUTHORIZED AGENT / ENGINEER (Include City, State and Zip Code) N/A		
E-MAIL ADDRESS N/A	PHONE NUMBER N/A	FAX NUMBER N/A
30. NAME OF BILLING CONTACT (Same as #28 <input checked="" type="checkbox"/> Same as #29 <input type="checkbox"/> N/A		
BILLING ADDRESS WHERE INVOICE(S) IS / ARE TO BE MAILED (Include City, State and Zip Code) N/A		
E-MAIL ADDRESS N/A	PHONE NUMBER N/A	FAX NUMBER N/A
* I hereby certify under penalty of perjury under the laws of the State of California that the information in this application and any document submitted with or in support of this application are true and correct to the best of my knowledge and belief, and that copies of any documents submitted with or in support of this application are true and correct copies of unaltered original documents. I further understand that if I have provided information that is false, intentionally incomplete, or misleading I may be charged with a crime and subjected to fine or imprisonment, or both fine and imprisonment. (Penal Code Section 72)		
31. SIGNATURE OF APPLICANT OR AUTHORIZED AGENT* 		32. PRINT OR TYPE NAME MATT MACHADO
33. TITLE DEPUTY CAO, DIRECTOR OF COMMUNITY DEVELOPMENT AND INFRASTRUCTURE		34. DATE 9/3/24

INSTRUCTIONS

Complete ALL fields, write "N/A" if not applicable. Type or print clearly. All dimensions must be in U.S. Customary (English) units.

Print your application single sided and submit all of the required attachments (See Section VII A&B of the "Encroachment Permit Application Guide Booklet" found at: http://www.dot.ca.gov/trafficops/ep/docs/EP_Application_Guide_Booklet.pdf).

1. County (e.g. Fresno, San Francisco, Los Angeles, etc.)
2. State Highway Route Number (e.g. I-5, SR-99, etc.)
3. Highway Postmile: (location of work, see <https://postmile.dot.ca.gov/>)
If unable to determine, contact the appropriate District Encroachment Permits Office for assistance at: [http://www.dot.ca.gov/trafficops/ep/docs/Appendix_G_\(WEB\).pdf](http://www.dot.ca.gov/trafficops/ep/docs/Appendix_G_(WEB).pdf)
4. Address of project site (if the property has a physical address with a Number and Street/Road Name)
5. City (e.g. Sacramento, Redding, Irvine, etc.)
6. Distance and the direction from the nearest cross street to the project site (e.g. 500 ft. north of "C" Street).
7. Indicate whether the work will be performed by the applicant (your own forces) or by a contractor.
8. Indicate if you are applying for a "Contractor's (Double) Permit" and provide the "Parent Permit Number".
9. Estimated start date for the proposed work. (Allow a minimum of 60 calendar days from the submittal date of your application for processing)
10. Estimated completion date for the proposed work.
11. Estimated number of working days within State Highway right-of-way.
12. Estimated construction costs for all work to be done within State Highway right-of-way.
13. Has another Caltrans' branch seen or reviewed your project? Which branch? (e.g. Design, Project Management, Right-of-Way, Environmental, etc.)
14. Identify funding source(s) for the proposed work.
15. Caltrans' Project Code (ID) if this is a State project, capital project, or joint venture project.
16. Your company's reference number or utility work order number for this project.
17. Describe the proposed work to be done entirely. If applicable, attach six (6) complete sets of FOLDED plans (folded 8-½" X 11") and any applicable specifications, calculations, maps, etc.
18. (a) Identify portion(s) of State right-of-way where work will occur and (b) proposed traffic control plans to be used if any.
19. Maximum and minimum depth, average width, and length of the excavation area. Existing surface type (e.g. Asphalt, concrete, soil, etc.)
20. Product being transported (e.g. water, natural gas, etc.)
Carrier pipe, diameter (inches) and material (e.g. Steel, HDPE, etc.)
Casing pipe (if any), diameter and material Proposed installation method, Voltage of electrical current or pressure of liquid or gas.
21. Check "YES", if you are getting a permit or approval from another agency (City, County, etc.), and an environmental determination has been made. Then check the Categorically Exempt, Negative Declaration, Environmental Impact Report box or Other if one has been prepared. Attach a copy of the approved document and a copy of the Notice of Determination. Skip questions A-K on page 2 of the application.

If you checked "NO", check the box of the appropriate type of work to be done, or check "other" and fill in the type of work to be done. Also answer questions A-K on page 2 of the application.
22. A Historical Resource includes, but is not limited to, any object, building, structure, site, area, place, record, or manuscript that has historical or archaeological significance, or significance in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California.
23. In this context a Scenic Resource includes, but is not limited to, trees that display outstanding features of form or age; unique, massive rock formations; historic buildings that are rare examples of their period, style, design, or which have special architectural features and details of importance.
24. Is there any work being done on the applicant's property?
25. Indicate if the proposed project will require the disturbance of soil. If "YES," estimate the area within AND outside of State Highway right-of-way in acres.
26. Indicate if the proposed project will require dewatering. If "YES," estimate volume in total gallons AND gallons per month. Also indicate the source: Stormwater or Non-Stormwater (see Caltrans Stormwater Management Plan for definitions of non-stormwater discharge at: <http://www.dot.ca.gov/hq/env/stormwater>).
27. Indicate how any stormwater or ground water will be disposed of from or near the limits of the proposed project.
28. Name of the applicant or organization applying for the permit. List the mailing address, e-mail address, phone and fax numbers.
29. Name of the authorized agent or engineer acting on behalf of the applicant or organization. Attach a letter of authorization signed by the applicant or organization. List the mailing address, e-mail address, phone and fax numbers.
30. Name of the billing contact. List the mailing address where invoices are to be mailed, email address, phone and fax numbers.
31. Signature of the applicant or applicant's authorized agent.
32. Name of the applicant or applicant's authorized agent.
33. Title (owner, president, etc.) of the applicant or applicant's authorized agent.
34. Date of the signature.

ADA Notice

For individuals with sensory disabilities, this document is available in alternate formats. For alternate format information, contact the Forms Management Unit at (916) 445-1233, TTY 711, or write to Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

Santa Cruz County DPW Roads - List of Contractors

Contractor Name	Address	Phone
A.J. Fistes Corporation	2214 Atlantic Ave, Long Beach	(562) 424-2230
Advanced Geotechniques Inc	1049 Nichols Dr, Rocklin	(916) 768-3955
AJ Vasconi General Engineering	1136 Willow Pass Court, Concord	(925) 691-9400
American Civil Constructors West Coast, Inc.	2990 Bay Vista Court Suite D, Benicia	(707) 746-8028
American Pavement Systems	1012 11th St, Modesto, CA 95354	(209) 522-2277
Anderson Pacific Engineering Construction	1390 Norman Ave, Santa Clara	(408) 970-9900
Andy's Roofing Company, Inc.	2161 Adams Ave, San Leandro	(510) 777-1100
Anvil Builders	1475 Donner Ave, San Francisco	(415) 285-5000
Arthurs Contracting, Inc.	PO Box 2650, Atascadero	(805) 461-0140
Ashron Construction and Restoration	641 Reed St, Santa Clara	(408) 956-0909
Asphalt Surfacing, Inc.	980 Ames Ave, Milpitas, CA 95035	(408) 586-8824
AZ Construction	727 Glendora Ave, La Puente	(626) 333-0727
Bay Line Cutting and Coring, Inc.	1634 4th St, Berkeley	(510) 527-1000
Bear Electric Solutions, Inc.	1252 State St., PO Box 924, Alviso, CA 95002	(408) 449-5178
Bond Blacktop, Inc.	27607 Industrial Blvd, Hayward, CA 94545	(510) 783-9909
Brannon Corporation	873 Savaker St, San Jose, CA 95126	(408) 294-2910
Bugler Construction, Inc.	4847 Hopyard Rd Suite 4 #395, Pleasanton	(925) 416-0700
Bustichi Construction Inc	4652 Scotts Valley Dr #202, Scotts Valley, CA 95066	(831) 438-2356
C.F. Archibald Paving, Inc.	3624 Haven Ave, Redwood City, CA 94063	(650) 364-3045
Cal West Construction	11745 Bennetta Lane, Gilroy	(408) 355-0951
Cal West Lighting & Signal	530 Marburg Way, San Jose, CA 95133	(408) 923-1313
California Trenchless, Inc.	11875 Dublin Blvd # C240, Dublin, CA 94568	(510) 782-5335
Cazador Engineering, Inc.	P.O. Box 835, Soquel	(530) 680-1266
Chrisp Co	43650 Osgood Rd, Fremont, CA 94539	(510) 656-2840
Christianson Tree Experts Co.	13041 Pine St, Boulder Creek, CA 95006	(831) 201-6367
Cimarron Construction	10554 Rodden Rd, Oakdale	(209) 848-1655
Community Tree Service	831 Walker St, Watsonville, CA 95076	(831) 763-2391
Condon-Johnson Associates Inc.	480 Roland Wy, Oakland	(510) 636-2100
Conley General Engineering, Inc.	1017 Smith Grade, Santa Cruz	(831) 429-8111
CRW Industries, Inc.	5346 Scotts Valley Dr, Scotts Valley	(831) 426-0743
Cumiskey Construction Corp.	P.O. Box 27601, San Francisco	(650) 591-2884
Dees-Hennessy, Inc.	200 Industrial Rd #190, San Carlos	(650) 595-8933
Diana Prince Construction Inc	PO Box 5206, Irvine	(714) 550-9377
Don Chapin Company	560 Crazy Horse Canyon Rd, Salinas	(831) 444-4133
Drill Tech Drilling & Shoring, Inc.	2200 Wymore Way, Antioch, CA 94509	(925) 978-2060
EagleLIFT, Inc.	3175-D Sedona Crt., Ontario, CA 91764	(877) 752-2522
Earthworks Paving Contractors, Inc.	310A Kennedy Dr, Capitola	(831) 475-1223
Engineered Soil Repairs, Inc.	1267 Springbrook Rd, Walnut Creek	(925) 210-2150
ETIC Engineering	2285 Morella Ave, Pleasant Hill	(925) 602-4710
Euro Style Management, Inc.	3612 Madison Ave #33, Sacramento	(916) 331-4858
George Bianchi Construction, Inc.	775A Mabury Rd, San Jose	(408) 453-3037
Goodwin Construction	140 Rancho Del Mar, Aptos	(831) 685-1624
Gordon N. Ball, Inc.	333 Camille Ave, Alamo	(925) 838-5675
Graham Contractors, Inc.	860 Lonus St, San Jose, CA 95126	(408) 293-9516
Granite Construction Company	580 West Beach St, Watsonville	(831) 763-6100
Granite Rock Construction	120 Granite Rock Way, San Jose	(408) 574-1400
Guerra Construction Group	984 Memorex Dr, Santa Clara	(408) 279-2027
Hillside Drilling, Inc.	539 South 11th Street, Richmond	(510) 234-6532
HSR, Inc.	1345 Vander Way, San Jose	(408) 562-9956
Infiniti Engineering	4606 Redding St, Oakland	(510) 393-2792
Innovative Construction Solutions	6693 Sierra Ln Suite A, Dublin	(408) 898-6315
Intermountain Slurry Seal, Inc.	9062 Union Park Way Elk Grove, CA 95624	(916) 852-7021
J W Ebert Corp	1620 S 7TH St, San Jose, CA, 95112-5931	(408) 297-1031
J.V. Lucas Paving, Inc.	865 Howe Rd, Martinez, CA 94553	(925) 283-8027
JC Randolph Inc.	1097 Pleasant Valley Rd, Aptos, CA 95003-9770	(831) 724-2499
Jeff Hill & Sons	PO Box 434, Ben Lomond, CA 95005	(831) 336-5092
Jim Walters Tractor Service	240 Lorenzo St, Boulder Creek, CA 95006	(831) 338-2206
John Madonna Construction	12165 Los Osos Valley Rd, San Luis Obispo	(805) 543-7751
Johnson & Company, Inc.	600 Calabasas Rd, Watsonville	(831) 722-8452
Joseph Albanese Construction	840 Parker St, Santa Clara	(408) 727-5700
KJ Woods Construction	PO Box 947 So, South San Francisco, CA 94083	(415) 759-0506
Koala Tree Care	125 Franklin St, Santa Cruz 95060	(831) 239-7023
Kroeker, Inc	4627 S. Chestnut Avenue, Fresno, CA 93725	(559) 237-3764
Lewis Tree Service	1500 Brommer St, Santa Cruz, CA 95062	(831) 476-1200
McGuire & Hester	9009 Railroad Ave, Oakland	(510) 632-7676
MCM Construction	6413 32nd Street, North Highlands, CA 95660	(916) 334-1221

MGE Underground, Inc.	PO Box 4189, Paso Robles	(805) 238-3510
Miksis Services, Inc	PO Box 591-I, Healdsburg, CA 95448	(707) 433-8053
Monterey Peninsula Engineering, Inc.	192 Healy Ave, Marina	(831) 384-4081
MONTIETH CONSTRUCTION	5843 Graham Hill Rd B, Felton, CA 95018	(831) 335-5001
Mountain Cascade Inc.	555 Exchange Ct, Livermore	(925) 373-8370
Myers and Sons Construction, LP	4600 Northgate Blvd Suite 100, Sacramento	(916) 283-9950
Nor-Cal Contruction	260 Espinosa Rd, Salinas	(831) 840-0281
Northwest Demolition, Inc.	719 38th Ave, San Francisco	(415) 902-5050
O'Grady Paving, Inc.	2513 Wyandotte St, Mountain View	(650) 966-1926
On Grade Contracting	PO Box 3714, Sonora	(209) 743-0458
Pacific Underground Construction, Inc.	1817 Stone Ave, San Jose	(408) 977-1655
Pavement Coatings Company	2150 Bell Avenue Suite 125, Sacramento, CA 95838	(916) 642-1751
Pavement Recycling Systems, Inc.	10240 San Seavine Way, Jurupa Valley, CA 91752	(951) 934-4733
Precision Grade, Inc.	107 The Alameda, San Juan Bautista, CA 95045	(831) 800-1602
QA Constructors	850 S. Van Ness Ave Ste 35, San Francisco, CA 94110	(415) 340-7283
R & R Pacific Construction	433 Second St Suite 103, Woodland	(530) 668-7525
R.P. Engineering Contractors, Inc.	2 N Santa Cruz Ave Suite 209, Los Gatos	(408) 402-3747
Reber Construction, Inc.	PO Box 273, Santa Cruz	(831) 429-9777
Robert F. Enz Construction Inc.	700 Park Center Dr, Hollister	(831) 363-8179
Robert J. Frank Construction, Inc.	2806 Tarmac Rd, Redding	(916) 222-1408
Santana Paving & Grading, Inc	P.O. Box 1273 Capitola, CA 95010	(831) 818-1800
SCQ Construction	12100 Stevens Canyon Rd, Cupertino	(408) 253-2512
Soil Engineering Construction, Inc	927 Arguello St, Redwood City	(650) 367-9595
Statewide Safety Systems	1101 N. 5th Street, San Jose, CA 95112	(408) 993-9770
Steelhead Contractors, Inc.	2940 Innsbruck Dr, Redding	(530) 226-6400
Stewart Engineering Inc.	PO Box 990010, Redding	(530) 244-8464
Teichert Construction	223 Harrison Rd 1B, Salinas, CA 93907	(925) 621-5700
Truesdell Corporation, Inc.	1310 W. 23rd St, Tempe	(602) 437-1711
Valentine Corporation	111 Pelican Way, San Rafael	(415) 453-3732
Vanguard Construction Inc.	651 Enterprice Ct, Livermore	(925) 245-1300
Viking Construction Co. Inc.	11315 Sunrise Gold Cir # A, Rancho Cordova, CA 95742	(916) 852-5530
VSS International Sanrcramento, CA	3785 Channel Dr, West Sacramento, CA 95691	(916) 371-8480
Watsonville Grading & Excavation, Inc.	280 Marigold Ave, Freedom, CA 95019	(831) 728-4002
West Coast Arborists	390 Martin Ave, Santa Clara, CA 95050	(408) 855-8660
Western Structures	6005 Tyler St, Riverside	(951) 352-4300
William P. Young Construction	1777 Neptune Dr, San Leandro	(510) 351-7004

ENCROACHMENT PERMIT GENERAL PROVISIONS

TR-0045 (REV. 12/2022)

1. **AUTHORITY:** The California Department of Transportation ("Department") has authority to issue encroachment permits under Division 1, Chapter 3, Article 1, Sections 660 through 734 of the Streets and Highways Code.
2. **REVOCATION:** Encroachment permits are revocable on five (5) business days' notice unless otherwise stated on the permit or otherwise provided by law, and except as provided by law for public corporations, franchise holders, and utilities. Notwithstanding the foregoing, in an emergency situation as determined by the Department, an encroachment permit may be revoked immediately. These General Provisions and any applicable Special Provisions are subject to modification or abrogation by the Department at any time. Permittees' joint use agreements, franchise rights, reserved rights or any other agreements for operating purposes in State of California ("State") highway right-of-way may be exceptions to this revocation.
3. **DENIAL FOR NONPAYMENT OF FEES:** Failure to pay encroachment permit fees when due may result in rejection of future applications, denial of encroachment permits, and revocation of the encroachment permit if already issued.
4. **PERMITTEE AUTHORIZATION FOR OTHERS TO PERFORM WORK:** This encroachment permit allows only the Permittee and/or Permittee's authorized contractor or agent to work within or encroach upon the State highway right-of-way, and the Permittee may not assign or transfer this encroachment permit. Any attempt to assign or transfer this encroachment permit shall be null and void. Permittee shall provide to the Department a list of Permittee's authorized contractors/agents, in the form and at the time specified by the Department but if no time is specified then no later than the pre-construction meeting. Permittee shall keep the list current and shall provide updates to the Department immediately upon any change to the list of authorized contractors/agents, including but not limited the addition, removal, or substitution of an authorized contractor/agent, or a new address or contact information for an existing authorized contractor/agent. Permittee is responsible for the acts and/or omissions of any person or entity acting on behalf of the Permittee, even if such person or entity is not included on Permittee's list of authorized contractors and/or agents.
5. **ACCEPTANCE OF PROVISIONS:** Permittee, and the Permittee's authorized contractors and/or agents, understand and agree to accept and comply with these General Provisions, the Special Provisions, any and all terms and/or conditions contained in or incorporated into the encroachment permit, and all attachments to the encroachment permit (collectively "the Permit Conditions"), for any encroachment, work, and/or activity to be performed under this encroachment permit and/or under color of authority of this encroachment permit. Permittee understands and agrees the Permit Conditions are applicable to and enforceable against Permittee as long as the encroachment remains in, under, or over any part of the State highway right-of-way. The Permittee's authorized contractors and/or agents, are also bound by the Permit Conditions. Non-compliance with the Permit Conditions by the Permittee's authorized contractor and/or agent will be deemed non-compliance by the Permittee.
6. **BEGINNING OF WORK:** When traffic is not impacted (see General Provision Number 35), the Permittee must notify the Department's representative two (2) business days before starting permitted work. Permittee must notify the Department's representative if the work is to be interrupted for a period of five (5) business days or more, unless otherwise agreed upon. All work must be performed on weekdays during regular work hours, excluding holidays, unless otherwise specified in this encroachment permit.
7. **STANDARDS OF CONSTRUCTION:** All work performed within State highway right-of-way must conform to all applicable Departmental construction standards including but not limited to: Standard Specifications, Standard Plans, Project Development Procedures Manual, Highway Design Manual and Special Provisions.

Other than as expressly provided by these General Provisions, the Special Provisions, the Standard Specifications, Standard Plans, and other applicable Departmental standards, nothing in these General Provisions is intended to give any third party any legal or equitable right, remedy, or claim with respect to the encroachment permit and/or to these General Provisions or any provision herein. These General Provisions are for the sole and exclusive benefit of the Permittee and the Department.

Where reference is made in such standards to "Contractor" and "Engineer," these are amended to be read as "Permittee" and "Department's representative," respectively, for purposes of this encroachment permit.
8. **PLAN CHANGES:** Deviations from plans, specifications, and/or the Permit Conditions as defined in General Provision Number 5 are not allowed without prior approval from the Department's representative and the Federal Highway Administration ("FHWA") representative if applicable.
9. **RIGHT OF ENTRY, INSPECTION AND APPROVAL:** All work is subject to monitoring and inspection. The United States, the State, the Department, and the Directors, officers, employees, agents, and/or contractors of the State and/or of the Department, and other state, and federal agencies, and the FHWA, through their agents or representatives, must have full access to highway

ENCROACHMENT PERMIT GENERAL PROVISIONS

facilities/encroachment area, at any and all times for the purpose of inspection, maintenance, activities needed for construction/reconstruction, and operation of the State highway right-of-way.

Upon completion of work, Permittee must request a final inspection for acceptance and approval by the Department. The local public agency Permittee must not give final construction approval to its contractor until final acceptance and approval by the Department is obtained.

10. PERMIT AT WORKSITE: Permittee and Permittee's authorized contractors/agents must keep the permit package and current list of authorized contractors/agents, or copies thereof, at the work site at all times and must show such documents upon request to any Department representative or law enforcement officer. If the permit package or current list of authorized contractors/agents, or copies thereof, are not kept and made available at the work site at all times, then all work must be suspended.

11. CONFLICTING ENCROACHMENTS: Permittee must yield start of work to ongoing, prior authorized work adjacent to or within the limits of the Permittee's project site. When existing encroachments conflict with Permittee's work, the Permittee must bear all cost for rearrangements (e.g., relocation, alteration, removal, etc.).

12. PERMITS, APPROVALS, AND CONCURRENCES FROM OTHER AGENCIES AND/OR ENTITIES: This encroachment permit is invalidated if the Permittee has not obtained all permits, approvals, and concurrences necessary and required by law, including but not limited to those from the California Public Utilities Commission ("CPUC"), California Occupational Safety and Health Administration ("Cal-OSHA"), local and state and federal environmental agencies, the California Coastal Commission, and any other public agency and/or entity having jurisdiction. Permittee is responsible for providing notice of the encroachment to, and obtaining concurrence from, any person or entity (whether public or private) affected by the scope of work described in the encroachment permit, regardless of whether such notice or concurrence is required by law; the Department is not responsible to provide such notice or obtain such concurrence. Permittee warrants all such permits, approvals, and concurrences have been obtained before beginning work under this encroachment permit. The Department may, at the Department's discretion, require the Permittee to demonstrate that Permittee has obtained all such permits, approvals, and concurrences, and Permittee shall demonstrate this at the time and in the manner specified by the Department.

13. PEDESTRIAN AND BICYCLIST SAFETY: A safe continuous passageway must be maintained through the work area at existing pedestrian or bicycle facilities. At no time must pedestrians be diverted onto a portion of the street used for vehicular traffic. At locations where safe alternate passageways cannot be provided, appropriate signs and barricades must be installed at the limits of construction and in advance of the limits of construction at the nearest crosswalk or intersection to detour

pedestrians to facilities across the street. Attention is directed to Section 7-1.04 "Public Safety," and to Section 12-4.04 "Temporary Pedestrian Access Routes," and to Section 16-2.02 "Temporary Pedestrian Facility," of the Department's Standard Specifications, and to California Vehicle Code section 21760, subdivision (c).

14. PUBLIC TRAFFIC CONTROL: The Permittee must provide traffic control protection, warning signs, lights, safety devices, etc., and take all other measures necessary for the traveling public's safety as required by law and/or the Department. While providing traffic control, the needs of all road users, including but not limited to motorists, bicyclists and pedestrians, including persons with disabilities in accordance with the Americans with Disabilities Act, must be an essential part of the work activity.

Lane, Bike Lane, Sidewalk, Crosswalk, and/or shoulder closures must comply with the Department's Standard Specifications and Standard Plans for Temporary Traffic Control Systems & Temporary Pedestrian Access Routes, and with the applicable Special Provisions. Where issues are not addressed in the Standard Specifications, Standard Plans, and/or Special Provisions, the California Manual on Uniform Traffic Control Devices (Part 6, Temporary Traffic Control) must be followed.

15. MINIMUM INTERFERENCE WITH TRAFFIC: Permittee must plan and conduct work so as to create the least possible inconvenience to the traveling public (motorized vehicles, unmotorized vehicles such as bicycles, pedestrians, person(s) with disabilities, etc.), such that traffic is not unreasonably delayed.

16. STORAGE OF EQUIPMENT AND MATERIALS: The storage of equipment or materials is not allowed within State highway right-of-way, unless specified within the Special Provisions of this encroachment permit. If encroachment permit Special Provisions allow for the storage of equipment or materials within the State highway right-of-way, the equipment and material storage must also comply with Section 7-1.04, Public Safety, of the Department's Standard Specifications.

17. CARE OF DRAINAGE: Permittee must provide alternate drainage for any work interfering with an existing drainage facility in compliance with the Department's Standard Specifications, Standard Plans, and/or as directed by the Department's representative.

18. RESTORATION AND REPAIRS IN STATE HIGHWAY RIGHT-OF-WAY: Permittee is responsible for restoration and repair of State highway right-of-way resulting from permitted work (Streets and Highways Code, section 670 et seq.).

19. STATE HIGHWAY RIGHT-OF-WAY CLEAN UP: Upon completion of work, Permittee must remove and dispose of all scraps, refuse, brush, timber, materials, etc. off the State highway right-of-way. The aesthetics of the highway must be as it was before work started or better.

20. COST OF WORK: Unless stated otherwise in the encroachment permit or a separate written agreement with the Department, the Permittee must bear all costs

ENCROACHMENT PERMIT GENERAL PROVISIONS

- incurred for work within the State highway right-of-way and waives all claims for indemnification or contribution from the United States, the State, the Department, and from the Directors, officers, and employees of the State and/or the Department. Removal of Permittee's personal property and improvements shall be at no cost to the United States, the State, and the Department.
21. **ACTUAL COST BILLING:** When specified in the permit, the Department will bill the Permittee actual costs at the currently set Standard Hourly Rate for encroachment permits.
 22. **AS-BUILT PLANS:** When required, Permittee must submit one (1) set of folded as-built plans within thirty (30) calendar days after completion and acceptance of work in compliance with requirements listed as follows:
 - a) Upon completion of the work provided herein, the Permittee must submit a paper set of As-Built plans to the Department's representative.
 - b) All changes in the work will be shown on the plans, as issued with the permit, including changes approved by Encroachment Permit Rider.
 - c) The plans are to be prominently stamped or otherwise noted "AS-BUILT" by the Permittee's representative who was responsible for overseeing the work. Any original plan that was approved with a Department stamp, or by signature of the Department's representative, must be used for producing the As-Built plans.
 - d) If construction plans include signing or striping, the dates of signing or striping removal, relocation, or installation must be shown on the As-Built plans when required as a condition of the encroachment permit. When the construction plans show signing and striping for staged construction on separate sheets, the sheet for each stage must show the removal, relocation, and installation dates of the appropriate staged striping and signing.
 - e) As-Built plans must contain the Encroachment Permit Number, County, Route, and Post Mile on each sheet.
 - f) The As-Built Plans must not include a disclaimer statement of any kind that differs from the obligations and protections provided by sections 6735 through 6735.6 of the California Business and Professions Code. Such statements constitute non-compliance with Encroachment Permit requirements and may result in the Department retaining Performance Bonds or deposits until proper plans are submitted. Failure to comply may also result in denial of future encroachment permits or a provision requiring a public agency to supply additional bonding.
 23. **PERMITS FOR RECORD PURPOSES ONLY:** When work in the State highway right-of-way is within an area under a Joint Use Agreement (JUA) or a Consent to Common Use Agreement (CCUA), a fee exempt encroachment permit is issued to the Permittee for the purpose of providing a notice and record of work. The Permittee's prior rights must be preserved without the intention of creating new or different rights or obligations.
- "Notice and Record Purposes Only" must be stamped across the face of the encroachment permit.
24. **BONDING:** The Permittee must file bond(s), in advance, in the amount(s) set by the Department and using forms acceptable to the Department. The bonds must name the Department as obligee. Failure to maintain bond(s) in full force and effect will result in the Department stopping all work under this encroachment permit and possibly revoking other encroachment permit(s). Bonds are not required of public corporations or privately-owned utilities unless Permittee failed to comply with the provisions and/or conditions of a prior encroachment permit. The surety company is responsible for any latent defects as provided in California Code of Civil Procedure section 337.15. A local public agency Permittee also must comply with the following requirements:
 - a) In recognition that project construction work done on State property will not be directly funded and paid by State, for the purpose of protecting stop notice claimants and the interests of State relative to successful project completion, the local public agency Permittee agrees to require the construction contractor to furnish both a payment and performance bond in the local public agency's name with both bonds complying with the requirements set forth in Section 3-1.05 Contract Bonds of the Department's Standard Specifications before performing any project construction work.
 - b) The local public agency Permittee must defend, indemnify, and hold harmless the United States, the State and the Department, and the Directors, officers, and employees of the State and/or Department, from all project construction related claims by contractors, subcontractors, and suppliers, and from all stop notice and/or mechanic's lien claimants. The local public agency also agrees to remedy, in a timely manner and to the Department's satisfaction, any latent defects occurring as a result of the project construction work.
 25. **FUTURE MOVING OF INSTALLATIONS:** Permittee understands and agrees to relocate a permitted installation upon notice by the Department. Unless under prior property right or agreement, the Permittee must comply with said notice at the Permittee's sole expense.
 26. **ENVIRONMENTAL:**
 - a) **ARCHAEOLOGICAL/HISTORICAL:** If any archaeological or historical resources are identified or encountered in the work vicinity, the Permittee must immediately stop work, notify the Department's representative, retain a qualified archaeologist who must evaluate the site at Permittee's sole expense, and make recommendations to the Department's representative regarding the continuance of work.
 - b) **HAZARDOUS MATERIALS:** If any hazardous waste or materials (such as underground storage tanks, asbestos pipes, contaminated soil, etc.) are identified or encountered in the work vicinity, the Permittee must immediately stop work, notify the Department's representative, retain a qualified hazardous

ENCROACHMENT PERMIT GENERAL PROVISIONS

waste/material specialist who must evaluate the site at the Permittee's sole expense, and make recommendations to the Department's representative regarding the continuance of work.

Attention is directed to potential aerially deposited lead (ADL) presence in unpaved areas along highways. It is the Permittee's responsibility to take all appropriate measures to protect workers in conformance with California Code of Regulations Title 8, Section 1532.1, "Lead," and with Cal-OSHA Construction Safety Orders, and to ensure roadway soil management is in compliance with Department of Toxic Substances Control (DTSC) requirements.

- c) **BIOLOGICAL:** If any regional, state, or federally listed biological resource is identified or encountered in the work vicinity, the Permittee must immediately stop work, notify the Department's representative, retain a qualified biologist who must evaluate the site at Permittee's sole expense, and make recommendations to the Department's representative regarding the continuance of work.
- 27. **PREVAILING WAGES:** Work performed by or under an encroachment permit may require Permittee's contractors and subcontractors to pay appropriate prevailing wages as set by the California Department of Industrial Relations. Inquiries or requests for interpretations relative to enforcement of prevailing wage requirements must be directed to the California Department of Industrial Relations.
- 28. **LIABILITY, DEFENSE, AND INDEMNITY:** The Permittee agrees to indemnify and save harmless the United States, the State, the Department, and the Directors, officers, employees, agents and/or contractors of the State and/or of the Department, including but not limited to the Director of Transportation and the Deputy Directors, from any and all claims, demands, damages, costs, liability, suits, or actions of every name, kind, and description, including but not limited to those brought for or on account of property damage, invasion of privacy, violation or deprivation of a right under a state or federal law, environmental damage or penalty, or injury to or death of any person including but not limited to members of the public, the Permittee, persons employed by the Permittee, and/or persons acting on behalf of the Permittee, arising out of or in connection with: (a) the issuance and/or use of this encroachment permit; and/or (b) the encroachment, work, and/or activity conducted pursuant to this encroachment permit, or under color of authority of this encroachment permit but not in full compliance with the Permit Conditions as defined in General Provision Number 5 ("Unauthorized Work or Activity"); and/or (c) the installation, placement, design, existence, operation, and/or maintenance of the encroachment, work, and/or activity; and/or (d) the failure by the Permittee, or by anyone acting for or on behalf of the Permittee, to perform the Permittee's obligations under any part of the Permit Conditions as defined in General Provision Number 5, in respect to maintenance or any other obligation; and/or (e) any change to the Department's property or adjacent

property, including but not limited to the features or conditions of either of them, made by the Permittee or anyone acting on behalf of the Permittee; and/or (f) a defect or obstruction related to or caused by the encroachment, work, and/or activity whether conducted in compliance with the Permit Conditions as defined in General Provision Number 5 or constituting Unauthorized Work or Activity, or from any cause whatsoever. The duty of the Permittee to indemnify and save harmless includes the duties to defend as set forth in Section 2778 of the Civil Code.

It is the intent of the Department and the Permittee that except as prohibited by law, the Permittee will defend, indemnify, and hold harmless as set forth in this General Provision Number 28 regardless of the existence or degree of fault or negligence, whether active or passive, primary or secondary, on the part of: the United States, the State; the Department; the Directors, officers, employees, agents and/or contractors of the State and/or of the Department, including but not limited to the Director of Transportation and the Deputy Directors; the Permittee; persons employed by the Permittee; and/or persons acting on behalf of the Permittee.

The Permittee waives any and all rights to any type of expressed or implied indemnity from or against the United States, the State, the Department, and the Directors, officers, employees, agents, and/or contractors of the State and/or of the Department, including but not limited to the Director of Transportation and the Deputy Directors.

The Permittee understands and agrees to comply with the obligations of Titles II and III of the Americans with Disabilities Act in the conduct of the encroachment, work, and/or activity whether conducted pursuant to this encroachment permit or constituting Unauthorized Work or Activity, and further agrees to defend, indemnify, and save harmless the United States, the State, the Department, and the Directors, officers, employees, agents, and/or contractors of the State and/or of the Department, including but not limited to the Director of Transportation and the Deputy Directors, from any and all claims, demands, damages, costs, penalties, liability, suits, or actions of every name, kind, and description arising out of or by virtue of the Americans with Disabilities Act.

The Permittee understands and agrees the Directors, officers, employees, agents, and/or contractors of the State and/or of the Department, including but not limited to the Director of Transportation and the Deputy Directors, are not personally responsible for any liability arising from or by virtue of this encroachment permit.

For the purpose of this General Provision Number 28 and all paragraphs herein, "contractors of the State and/or of the Department" includes contractors, and their subcontractors, under contract to the State and/or the Department.

This General Provision Number 28 and all paragraphs herein take effect immediately upon issuance of this encroachment permit, and apply before, during, and after the encroachment, work, and/or activity

ENCROACHMENT PERMIT GENERAL PROVISIONS

contemplated under this encroachment permit, whether such work is in compliance with the Permit Conditions as defined in General Provision Number 5 or constitutes Unauthorized Work or Activity, except as otherwise provided by California law. The Permittee's obligations to defend, indemnify, and save harmless under this General Provision Number 28 take effect immediately upon issuance of this encroachment permit and have no expiration date, including but not limited to situations in which this encroachment permit expires or is revoked, the work or activity performed under this encroachment permit is accepted or not accepted by the Department, the encroachment, work, and/or activity is conducted in compliance with the Permit Conditions as defined in General Provision Number 5 or constitutes Unauthorized Work or Activity, and/or no work or activity is undertaken by the Permittee or by others on the Permittee's behalf.

If the United States or an agency, department, or board of the United States is the Permittee, the first two paragraphs of this General Provision Number 28 (beginning "The Permittee agrees to indemnify..." and "It is the intent of the parties...") are replaced by the following paragraph:

Claims for personal injury, death, or property damage allegedly caused by the negligent or wrongful act or omission of any employee of the United States acting within the scope of their official duties are subject to the Federal Tort Claims Act, as amended, 28 U.S.C. § 1346 and § 2671 et seq. (Chapter 171).

29. **NO PRECEDENT ESTABLISHED:** This encroachment permit is issued with the understanding that it does not establish a precedent.

30. **FEDERAL CIVIL RIGHTS REQUIREMENTS FOR PUBLIC ACCOMMODATION:**

- a) As part of the consideration for being issued this encroachment permit, the Permittee, on behalf of Permittee and on behalf of Permittee's personal representatives, successors in interest, and assigns, does hereby covenant and agree that:
 - i) No person on the grounds of race, color, or national origin may be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities.
 - ii) That in connection with the construction of any improvements on said lands and the furnishings of services thereon, no discrimination must be practiced in the selection and retention of first-tier subcontractors in the selection of second-tier subcontractors.
 - iii) That such discrimination must not be practiced against the public in their access to and use of the facilities and services provided for public accommodations (such as eating, sleeping, rest, recreation), and operation on, over, or under the space of the State highway right-of-way.
 - iv) That the Permittee must use the premises in compliance with all other requirements imposed pursuant to Title 15, Code of Federal

Regulations, Commerce and Foreign Trade, Subtitle A. Office of the Secretary of Commerce, Part 8 (15 C.F.R. Part 8) and as said Regulations may be amended.

- b) That in the event of breach of any of the above nondiscrimination covenants, the State and the Department have the right to terminate this encroachment permit and to re-enter and repossess said land and the facilities thereon and hold the same as if said permit had never been made or issued.

31. **MAINTENANCE:** The Permittee is responsible at Permittee's sole expense for the encroachment, and the inspection, maintenance, repair, and condition thereof, and is responsible to ensure the encroachment does not negatively impact State highway safety, maintenance, operations, construction, State facilities, activities related to construction/reconstruction, or other encroachments. The Permittee's obligations in the preceding sentence take effect immediately upon issuance of this encroachment permit and continue until the encroachment is entirely and permanently removed. Additional encroachment permits or approval documents may be required authorizing work related to inspection, repair, and/or maintenance activities. Contact the Department for information.

32. **SPECIAL EVENTS:** In accordance with subdivision (a) of Streets and Highways Code section 682.5 and 682.7, the Department is not responsible for the conduct or operation of the permitted activity, and the applicant agrees to defend, indemnify, and hold harmless the United States, the State, the Department, and the Directors, officers, employees, agents, and contractors of the State and/or of the Department, including but not limited to the Director of Transportation and the Deputy Directors, from any and all claims, demands, damages, costs, liability, suits, or actions of every name, kind and description arising out of any activity for which this encroachment permit is issued.

The Permittee is required, as a condition of this encroachment permit, for any event that awards prize compensation to competitors in gendered categories, for any participant level that receives prize compensation, to ensure the prize compensation for each gendered category is identical at each participant level. (Streets and Highways Code, section 682.7.)

The Permittee understands and agrees to comply with the obligations of Titles II and III of the Americans with Disabilities Act in the conduct of the event, and further agrees to defend, indemnify, and save harmless the United State, the State and the Department, and the Directors, officers, and employees of the State and/or Department, including but not limited to the Director of the Department and the Deputy Directors, from any and all claims, demands, damages, costs, liability, suits, or actions of every name, kind and description arising out of or by virtue of the Americans with Disabilities Act.

33. **PRIVATE USE OF STATE HIGHWAY RIGHT-OF-WAY:** State highway right-of-way must not be used for private purposes without compensation to the State. The gifting

ENCROACHMENT PERMIT GENERAL PROVISIONS

of public property uses and therefore public funds is prohibited under the California Constitution, Article XVI, Section 6.

34. FIELD WORK REIMBURSEMENT: Permittee must reimburse the Department for field work performed by or on behalf of the Department to correct or remedy issues created by the Permittee or by others acting on behalf of the Permittee, including but not limited to hazards or damaged facilities, or to clear refuse, debris, etc. not attended to by the Permittee or by others acting on behalf of the Permittee.

35. LANE CLOSURE REQUEST SUBMITTALS AND NOTIFICATION OF CLOSURES TO THE DEPARTMENT: Lane closure request submittals and notifications must be in accordance with Section 12-4.02, and Section 12.4-04, of the Department's Standard Specifications or as directed by the Department's representative. The Permittee must notify the Department's representative and the Traffic Management Center ("TMC") before initiating a lane closure or conducting an activity that may cause a traffic impact. In emergency situations when the corrective work or the emergency itself may affect traffic, the Department's representative and the TMC must be notified as soon as possible.

36. SUSPENSION OF TRAFFIC CONTROL OPERATION: The Permittee, upon notification by the Department's representative, must immediately suspend all traffic lane, bike lane, sidewalk, crosswalk, and/or shoulder closure operations and any operation that impedes the flow of traffic. All costs associated with this suspension must be borne by the Permittee.

37. UNDERGROUND SERVICE ALERT (USA) NOTIFICATION: Any excavation requires compliance with the provisions of Government Code section 4216 et seq., including but not limited to notice to a regional notification center, such as Underground Service Alert (USA). The Permittee must provide notification to the Department representative at least five (5) business days before, and the regional notification center at least forty-eight (48) hours before, performing any excavation work within the State highway right-of-way.

38. COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA): All work within the State highway right-of-way to construct and/or maintain any public facility must be designed, maintained, and constructed strictly in accordance with all applicable Federal Access laws and regulations (including but not limited to Section 504 of the Rehabilitation Act of 1973, codified at 29 U.S.C. § 794), California Access laws and regulations relating to ADA, along with its implementing regulations, Title 28 of the Code of Federal Regulations Parts 35 and 36 (28 C.F.R., Ch. I, Part 35, § 35.101 et seq., and Part 36, § 36.101 et seq.), Title 36 of the Code of Federal Regulations Part 1191 (36 C.F.R., Ch. XI, Part 1191, § 1119.1 et seq.), Title 49 of the Code of Federal Regulations Part 37 (49 C.F.R., Ch. A, Part 37, § 37.1 et seq.), the United States Department of Justice Title II and Title III for the ADA, and California Government Code

section 4450 et seq., which require public facilities be made accessible to persons with disabilities.

Notwithstanding the requirements of the previous paragraph, all construction, design, and maintenance of public facilities must also comply with the Department's Design Information Bulletin 82, "Pedestrian Accessibility Guidelines for Highway Projects" and Standard Plans & Specifications on "Temporary Pedestrian Access Routes."

39. STORMWATER: The Permittee is responsible for full compliance with the following:

- a) For all projects, the Department's Storm Water Program and the Department's National Pollutant Discharge Elimination System (NPDES) Permit requirements under Order No. 2012-0011-DWQ, NPDES No CAS000003; and
- b) In addition, for projects disturbing one acre or more of soil, with the California Construction General Permit Order No. 2009-0009-DWQ, NPDES No CAS000002; and
- c) In addition, for projects disturbing one acre or more of soil in the Lahontan Region with Order No. R6T-2016-0010, NPDES No CAG616002.
- d) For all projects, it is the Permittee's responsibility to install, inspect, repair, and maintain all facilities and devices used for water pollution control practices (Best Management Practices/BMPs) before performing daily work activities.

ENCROACHMENT PERMIT SPECIAL PROVISIONS**STORMWATER SPECIAL PROVISIONS FOR MINIMAL OR NO IMPACT (SWSP)**

TR-0400 (Rev 05/2018)

1. **GENERAL:** The purpose of these Special Provisions is to provide the Permittee with specifications for water pollution control to minimize, prevent, or control the discharge of material into the air, surface waters, groundwater, and storm sewers owned by the State or local agencies. These provisions are not intended to take the place of the Caltrans Water Pollution Control Program (WPCP) for projects where soil disturbance from work activities less than one acre, or work activities of one acre or more subject to the preparation of the Caltrans Storm Water Pollution Prevention Plan (SWPPP). The Permittee must comply with the following Special Provisions and the direction of the State Representative. All Stormwater Best Management Practices (BMPs) must conform to Section 13 Water Pollution Control of Caltrans' Standard Specifications.

2. **NPDES REQUIREMENTS:** The Permittee must be responsible for full compliance with the Caltrans Storm Water Program and the Caltrans National Pollutant Discharge Elimination System (NPDES) Permit requirements (*Order No. 2012-0011-DWQ, NPDES No CAS000003*) and for and projects disturbing one acre or more of soil, full compliance with the California Construction General Permit (*Order No. 2009-0009-DWQ, NPDES No CAS000002*) or for projects for projects that have one acre or more of soil disturbance in the Lahontan Region (*Order No. R6T-2016-0010, NPDES No CAG616002*). It is the Permittee's responsibility to install, inspect, and repair or maintain facilities and devices used for water pollution control practices (BMPs) before performing daily work activities. Installation, inspection and maintenance responsibilities on the job site include: 1) soil stabilization materials in work areas that are inactive or prior to storm events, 2) water pollution control devices to control sediment and erosion, 3) implementation of spill and leak prevention procedures for chemical and hazardous substances stored on the job site, 4) material storage, 5) stockpile management, 6) waste management, 7) non-stormwater management, 8) water conservation, 9) tracking controls and 10) illicit connection, illegal discharge detection and reporting. The Permittee must report to the State representative when discharges enter into receiving waters, adjacent property, drainage systems or when discharges could be a cause or a threat for water pollution. The Permittee must also control illicit discharges or illegal dumping prior to start of daily work schedule. Copies of written notices or orders from the Regional

Water Quality Control Board or other regulatory agency must be provided to the State representative within 48 hours of reported activity. For additional information on stormwater compliance, visit the State Water Resources Control Boards storm water Website at:

http://www.waterboards.ca.gov/water_issues/programs/stormwater

3. **RESPONSIBILITY FOR DEBRIS REMOVAL:** The Permittee must be responsible for preventing sediment, trash, debris, and other construction waste from entering the street, the storm drains, local creeks, or any other bodies of water.
4. **SPOILS AND RESIDUE:** The Permittee must vacuum any saw-cut concrete waste material, debris, residue, etc. No spoils, debris, residue, etc. must be washed into a drainage system.
5. **SWEEPING:** Sweep paved roads at construction entrance and exit locations and surrounding paved areas daily within the job site during: 1) clearing and grubbing, 2) earthwork, 3) trenching, 4) soil disturbance, 5) pavement grinding and/or cutting, and 6) after observing tracking of material onto or off the State property. Keep dust to a minimum during sweeping activities. Use vacuum whenever dust generation is excessive or sediment pickup is ineffective. Roadways or work areas must not be washed down with water. Street sweeping operations must conform to Section 13 Water Pollution Control of Caltrans' Standard Specifications.
6. **VEHICLES AND EQUIPMENT:** Permittee must prevent all vehicles, equipment, etc. from leakage or mud tracking onto roadways. If leaks cannot be repaired immediately, remove the vehicle or equipment from the job site.
7. **MAINTENANCE AND FUELING OF VEHICLES AND EQUIPMENT:** Maintenance and fueling of equipment must not result in any pollution at the job site. The Permittee must immediately clean up spills/leaks, and properly dispose of contaminated soil and materials.
8. **CLEANING VEHICLES AND EQUIPMENT:** Limit vehicle and equipment cleaning or washing at the job site except what is necessary to control vehicle tracking or hazardous waste. The Permittee must clean all equipment within a bermed area or over a drip pan large enough to prevent run-off. No soaps, solvents, degreasers, etc. must be used in State right-of-way. Any water from this operation must be collected and disposed of at an appropriate site. Containment berms or dikes must be used for fueling, washing, maintaining and washing vehicles or equipment in outside areas. Containment must be performed at least 100 feet from concentrated flows of

ENCROACHMENT PERMIT SPECIAL PROVISIONS

storm water, drainage courses, and storm drain inlets if within a flood plain, otherwise at least 50 feet if outside the floodplain. Keep adequate quantities of absorbent spill- cleanup material and spill kits in the fueling or maintenance area and on fueling trucks.

9. **DIESEL FUELS:** The use of diesel fuel from petroleum or other fossil fuel as a form-oil or solvent is not allowed.
10. **WEATHER CONDITIONS AT WORKSITE:** Any activity that would generate fine particles or dust that could be transported off site by stormwater must be performed during dry weather.
11. **WIND EROSION PROTECTION:** The use of Wind Erosion BMPs must be deployed year-round in instances where dust or fine particles could be transported off site.
12. **HOT MIX ASPHALT:** Runoff from washing hot mix asphalt must not enter into any drainage conveyances.
13. **PROTECTION OF DRAINAGE FACILITIES:** The Permittee must protect/cover gutters, ditches, drainage courses, and inlets with gravel bags, fiber rolls, State approved fabric filters, etc., to the satisfaction of the State representative during grading, paving, saw-cutting, etc. and materials must conform to Section 13-6.02 Materials for Water Pollution Control of Caltrans' Standard Specifications. No such protection measures must cause an obstruction to the traveling public. The Permittee must implement spill and leak prevention procedures for chemicals and hazardous substances stored on the job site (including secondary containment requirements) in accordance with section 13-4.03B Spill Prevention and Control, and 14-11 Hazardous Waste and Contamination, Water Pollution Control of Caltrans' Standard Specifications.
14. **PAINT:** Rinsing of painting equipment and materials is not permitted in State right-of-way. When thoroughly dry, dispose of the following as solid waste: dry latex paint, paint cans, used brushes, rags, gloves, absorbent materials, and drop cloths. Oil based paint sludge and unusable thinner must be disposed of at an approved hazardous waste site.
15. **CONSTRUCTION MATERIALS:** Stockpile of all construction materials, including, but not limited to; pressure treated wood, asphalt concrete, cold mix asphalt concrete, concrete, grout, cement containing premixes, and mortar, must conform to section 13-4.03C (2) Material Storage & 13-4.03C (3) Stockpile Management of Caltrans' Standard Specifications.
16. **CONCRETE EQUIPMENT:** Concrete equipment must be washed in a designated washing area in a way that does not contaminate soil, receiving waters, or storm drain systems.
17. **EXISTING VEGETATION:** Established existing vegetation is the best form of erosion control. Minimize

disturbance to existing vegetation. Damaged or removed vegetation must be replaced as directed by the State Representative.

18. **SOIL DISTURBANCE:** Soil disturbing activities must be avoided during the wet weather season. If construction activities during wet weather are allowed in your permit, all necessary erosion control and soil stabilization measures must be implemented in advance of soil disturbing activity.
19. **SLOPE STABILIZATION AND SEDIMENT CONTROL:** Consider a certified expert in Erosion and Sediment control in cases where slopes are disturbed during construction. The Permittee is directed to comply with Section 13.5 Temporary Soil Stabilization and Section 21 Erosion Control of Caltrans' Standard Specifications during application of temporary soil stabilization measures to the soil surface. Fiber rolls or silt fences may be required down slope until permanent soil stabilization is established. Remove the accumulated sediment whenever the sediment accumulates to 1/3 of the linear sediment barrier height. The Permittee must limit the use of plastic materials when more sustainable, environmentally friendly alternatives exist or when environmental regulations prohibit their use within the project.
20. **STOCKPILES:** Stockpiles containing aggregate and/or soil must be stored at least 100 feet from concentrated flows of storm water, drainage courses, and storm drain inlets if within a flood plain, otherwise at least 50 feet if outside the floodplain, and must be covered and protected with a temporary perimeter sediment barrier. Cold mix stockpiles must be stored on an impermeable surface and covered with 9 mil plastic to prevent contact with water. Minimize stockpiling of materials on the job site. Manage stockpiles by implementing the water pollution control practices in Section 13-4.03C (3) Stockpile Management of the State of California standard specifications for construction.
21. **DISCOVERY OF CONTAMINATION:** The State Representative must be notified in case any unusual discoloration, odor, or texture of ground water, is found in excavated material or if abandoned, underground tanks, pipes, or buried debris are encountered.
22. **SANITARY AND SEPTIC WASTE:** Do not bury or discharge wastewater from a sanitary or septic system within the highway. Properly connected sewer facilities are free from leaks. With State Representative approval place portable sanitary facility at least 50 feet away from storm drains, receiving waters, and flow lines. Permittee must comply with local health agency provisions when using an on-site disposal system.
23. **LIQUID WASTE:** Prevent job site liquid waste from entering storm drain systems and receiving waters. Drilling slurries, grease or oil-free waste water or rinse water, dredging, wash water or rinse water running off a surface or other non-storm water liquids not covered

ENCROACHMENT PERMIT SPECIAL PROVISIONS

under separate waste water permits must be held in structurally sound, leak-proof containers, such as portable bins or portable tanks. Store containers at least 50 feet away from moving vehicles and equipment. Liquid waste may require testing to determine hazardous material content prior to disposal. All measures must conform to section 13-4.03D (5) Liquid Waste, Water Pollution Control of Caltrans' Standard Specifications.

24. WATER CONTROL AND CONSERVATION:

Manage water use in a way that will prevent erosion and the discharge of pollutants into storm drain systems and receiving waters. Direct runoff, including water from water line repair from the job site to areas where it can infiltrate into the ground. Direct water from off-site sources around the job site or from contact with jobsite runoff.

25. PILE DRIVING: Keep spill kits and cleanup materials at pile driving locations. Park pile driving equipment over drip pans, absorbent pads, or plastic sheeting with absorbent material, and away from stormwater run-on when not in use.**26. DEWATERING:** Dewatering consists of discharging accumulated storm water, groundwater, or surface water from excavations or temporary containment facilities. All dewatering operations must comply with the latest Caltrans guidelines including the Field Guide for Construction Site Dewatering. Contact State representative for approval of dewatering discharge by infiltration or evaporation, otherwise, any effluent discharged into a permitted storm water system requires approval from the Regional Water Quality Control Board. Prior to the start of dewatering, the Permittee must provide the State Representative with a dewatering and discharge work plan that complies with section 13-4.03G Dewatering, Water Pollution Control of Caltrans' Standard Specifications. A copy of the Waste Discharge Permit and a copy of a valid WDID number issued by the Regional Board must be provided to the State representative.

TRAFFIC STRIPING, MARKINGS, AND SIGNS

In addition to the attached Encroachment Permit General Provisions (TR-0045), the following special provisions are also applicable:

1. Traffic striping, pavement markings and signs shall be furnished and placed by the permittee and the cost shall be borne by the permittee. Where new asphalt concrete has been placed, painted striping and pavement markings shall be installed within 24-hours. Where shown on the plans, after thirty (30) days curing time, thermoplastic materials shall be applied in compliance with Section 84 of the Standard Specifications.
2. Roadside signs shall be placed at locations shown on the permit plans and shall be installed in compliance with the latest edition of Caltrans Standard Plans.
3. Permittee shall furnish to State's representative a completed Form CEM-3101 "Notice of Materials to be Used," and approval of the material used shall be obtained prior to its installation.

SIDEWALKS (CS)

In addition to the attached Encroachment Permit General Provisions (TR-0045), the following special provisions are also applicable:

1. A State issued permit is required for any landscaping or tree installation, including installation of tree wells.
2. A separate permit must be obtained from Caltrans for any driveway, handicap-ramp installations or any sidewalks that are other than Portland Cement Concrete constructed in compliance with Caltrans Standard Specifications.
3. Traffic control is authorized only between 9 a.m. and 3 p.m., Monday through Friday, holidays excluded. Any traffic control that requires lane closure shall be in compliance with the appropriate traffic control plan. Where required by the plan, the use of a flashing arrowboard is MANDATORY.
4. New curb and gutter installations shall be State Standard Type A2-6, unless necessary to conform to existing adjacent curb and gutter installations.
5. The minimum width of a sidewalk should be 8 feet between a curb and a building when in urban and rural main street place types. For all other locations the minimum width of sidewalk should be 6 feet when contiguous to a curb or 5 feet when separated by a planting strip.
6. Alignment and grade of gutter and sidewalk shall match the existing.
7. Existing concrete curb and paved shoulder shall be saw cut to a neat line prior to excavating and forming. Existing concrete sidewalk shall be saw cut at the scoreline. Paved shoulder shall be replaced with asphalt concrete paving material equal "in kind" and thickness to existing shoulder and shall conform to lip of new curb and gutter.
8. Permittee shall be responsible for the relocation or adjustment of any utility required as the result of work authorized by this permit, and utility relocation shall be completed prior to the installation of any new curb, gutter or sidewalk.
9. A monolithic pour of sidewalk and curb and gutter shall not be permitted.

ENCROACHMENT PERMIT SPECIAL PROVISIONS

UTILITY OVERHEAD PROVISIONS (OH)

TR – 0162 (Rev. 07/2023)

In addition to the attached Encroachment Permit General Provisions (TR-0045), the following special provisions are also applicable:

OH1. LOCATION POLE LINES, ETC.: Pole lines shall be located as specifically directed in the provisions of the permit.

OH2. INSTALLATIONS AND CLEARANCES: Horizontal clearance, as measured from the edge of traveled way to the installation must be in accordance with the minimum clearance required for Discretionary Fixed Objects. According to Caltrans' Highway Design Manual (309.1) The installation should be located beyond the clear recovery zone at a minimum of 52 feet horizontally or 8 feet vertically up-slope from the edge of traveled way, unless they are made breakaway or shielded behind existing guardrail, barrier or other safety devices. In no case is a pole allowed closer than 1.5 feet behind a curb face or less than 2 feet from the edge of a slope catch point or 3 feet from the curb returns of intersections and near the edges of driveways, or within a drainage ditch. New installations should adhere to setback limits or should be protected. Consideration should be given to placing such encroachments underground in shoulder or parking areas. Also, installations and clearances must comply with applicable orders of the California Public Utilities Commission (CPUC), or the Division of Occupational Safety and Health (Cal/OSHA) Safety Orders, whichever is more restrictive.

OH3. PERMISSION FROM PROPERTY OWNERS: When necessary, permission must be secured from the abutting property owner(s) in written form by the permittee before starting work.

OH4. CLEARANCE OF TREES: Unless otherwise specifically required by the Department, protected cables, tree wires or plastic tree wire guards used for communication lines may be used through trees where necessary, provided the installation and any necessary pruning does not damage or affect the appearance of the tree or the tree itself will not be damaged. This allowance does not apply to scenic highways.

OH5. GUY WIRES: No guy wires are to be attached to trees except as may be specified in the permit and in no event must they be so attached as to girdle the tree or interfere with its growth. Guy wires must be kept to a minimum elevation above ground as directed.

OH6. ANCHOR: In general, anchor must not be placed closer to the traveled way than the pole itself.

OH7. REMOVE OLD POLES, GUY, and STUBS: The entire length of poles and stubs must be removed from the ground and the holes backfilled. Guy rods must be removed to a minimum depth of 3 feet below original ground.

OH8. AERIAL CROSSING: Work involving new or additions to existing aerial crossings must not be performed in rainy, foggy or inclement weather which creates hazardous conditions for highway users.

OH9. CLEARANCE FROM CURBS: The face of poles must not be placed closer than 1.5 feet from any curb face.

OH10. POLE INSTALLATION OR REMOVAL: Where poles are to be installed or removed behind the curb in a parkway that is paved with Portland Cement Concrete, the concrete must be saw cut, removed and replaced to the nearest score lines or expansion joints. The hole in the PCC sidewalk created by pole removal must be temporarily backfilled with 2 inches minimum temporary AC at the time the pole is removed. Poles are not to be installed without prior approval of the final location by the Department's field representative.

OH11. CONTROLLED ACCESS R/W: Poles, anchors, etc., must not be installed inside of any controlled access right of way. All such requests are "exceptions" to policy.

PEDESTRIAN SAFETY (MCP)

In addition to the attached Encroachment Permit General Provisions (TR-0045), the following special provisions are also applicable:

1. When the work area encroaches upon a sidewalk, walkway, or crosswalk area, special consideration must be given to pedestrian safety. Protective barricades, fencing, handrails and bridges, together with warning and guidance devices and signs must be utilized so that the passageway for pedestrians, especially blind and other physically handicapped, is safe and well defined and shown on the approved permit plan.
2. Pedestrian walkways and canopies within State Right of Way shall comply with the requirements of the applicable local agency or of the latest edition of the Uniform Building Code whichever contains the higher standards.

UTILITY ANNUAL PROVISIONS

TR – 0160 (Rev. 7/2022)

In addition to the attached Encroachment Permit General Provisions (TR-0045), the following special provisions are also applicable:

Annual utility permits UE are issued to utilities who maintain their facilities within State highway right-of-way. Any utility or public corporation, who lawfully maintains a utility encroachment, or their agent, may perform routine or emergency maintenance on such facility in accordance with the following provisions:

UE1. EXCLUSIONS: These provisions do not authorize any work on freeways and expressways, tree trimming, aerial capacity increases on designated "Scenic Highways", pole replacement / relocation work, or other activities not specifically provided for in this permit.

UE2. EMERGENCY REPAIRS: The permittee may make emergency repairs, alter traffic flow, and excavate through improved surfaces only when breaks in the conduit, cable, or pipeline over or under the pavement presents a definite public hazard or serious interruption of essential services. An **emergency** is defined in the Public Resources Code as "[...] a sudden, unexpected occurrence, involving a clear and imminent danger, demanding immediate action to prevent or mitigate loss of, or damage to, life, health, property, or essential public service. 'Emergency' includes such occurrences as fire, flood, earthquake, or other soil or geologic movements, as well as such occurrences as riot, accident, or sabotage." In such cases, the Department's representative shall be notified immediately.

Replace poles knocked down by vehicles, accidental causes or natural disasters. The entire length of poles and stubs must be removed from the ground and replacement pole must be placed at the exact location. Planned pole replacements/installations are not allowed under this permit.

UE3. OPEN EXCAVATIONS: Excavation must not be left open after daylight hours unless specifically authorized and adequate protection for traffic is provided in accordance with the Encroachment Permit General Provisions, "Public Traffic Control" And "Minimum Interference with Traffic". Backfill and pavement replacement must be performed in

accordance with General Provisions, "Restoration and Repairs in State Highway right-of-way."

UE4. TRAFFIC CONTROL: Work requiring traffic control shall be conducted between Monday-Friday 9:00 a.m. and 3:00 p.m. or as otherwise authorized by the Permit Engineer. Adequate traffic control must be provided in accordance with the Encroachment Permit General Provisions, "Public Traffic Control", "Minimum Interference with Traffic" and "Suspension of Traffic Control Operation."

Only those maintenance activities that can be performed using a Caltrans Standard Plans for Temporary Traffic Control Systems and Temporary Pedestrian Access Routes are authorized under the annual maintenance permit. Otherwise a separate permit application for the work, along with a traffic control plan designed and signed by a California Registered Civil or Traffic Engineer must be submitted for review and approval.

Advanced notification must be provided to Caltrans Traffic Management Center for any activities that may cause a traffic impact including all lane closures. Adequate notice must be provided in accordance with the Encroachment Permit General Provisions, "Notification of Closure to Department and Traffic Management Center (TMC)."

UE5. WORK PERMITTED - AERIAL: All permitted activity must not be over the traveled way or within the limits of officially designated scenic highways and/or on Caltrans structures.

1. Maintain, inspect, remove, repair or replace (in the same location) all aerial facilities. Work over the traveled way requires a separate permit and the placement of "H" poles and netting as per form TR-0108, located in Appendix "E" of the Encroachment Permits Manual.

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Replace broken pins and/or insulators, repair broken wires, pull slack wires, and replace or pull broken or slack guys.

Replace aerial wires and cross arms on existing poles except where wires cross the highway. Unless otherwise specifically required by the Department, protected cable, tree wire or plastic tree wire guard used for communication lines may be used through trees where necessary, provided the appearance of the tree or the tree itself will not be damaged.

Perform insulator washing and interconnect splicing of cables.

Install additional capacity (in the same location), install, maintain, remove, repair or replace aerial service connections with potential to ground of 300 volts or less.

2. Installations and clearances must be equal to those required by either the California Public Utilities Commission orders or the Division of Occupational Safety and Health (Cal/OSHA) regulations promulgated in the California Code of Regulations, Title 8, Chapter 4, whichever is more restrictive.

UE6. WORK PERMITTED - UNDERGROUND:

1. Maintain, inspect, remove, repair or replace (in the same location) all underground facilities except those requiring trenching in the traveled way or require uncovering more than 50 feet of line at any one time. The permittee may open existing manholes to repair underground cables. Where the manhole lies within the improved surface of the highway, the permittee will provide adequate protection for traffic in accordance with the Encroachment Permit General Provisions "Public Traffic Control" and "Minimum Interference with Traffic".
2. Install additional capacity in existing ducts except for facilities not in compliance with the Department's High priority utility policies or on Structures.
3. Install air flow monitoring transducers and piping in existing ducts.
4. Barholing, potholing, cleaning, rodding and placing float ropes.

5. Adjust access cover to grade and replace in kind or with larger size pull boxes.
6. Interconnect splicing of cables.
7. Install service connections (laterals) perpendicular to the highway for the following:
 - i. Natural gas service lines less than 2 inches in pipe diameter that have normal operating pressures of 60 psig or less
 - ii. Subsurface electrical service connections with a potential to ground of 50 volts or less
 - iii. Service connections for water, sewer, telephone, telecommunication, and cable service
8. Permanent pavement patching for work authorized by this permit. The patching must be made within thirty (30) days of completion of backfill unless otherwise specified by the Permit Engineer. See Underground Utility Provision UG 9 (form TR-0163).

UE7. POLE MAINTENANCE & CHEMICAL TREATMENT:

1. Utility Companies are to provide a list of the pole identification, locations, type of chemicals and quantities used for their pole treatment maintenance operations. This information must be provided upon expiration of their annual permit or upon request of the Department as needed.
2. Utility Companies must submit copies of the Safety Data Sheets (SDS) for all chemical compounds to be used in their pole treatment maintenance operations, in conjunction with the permit application submittal.
3. Utility Companies are to notify the District Landscape Specialist or their designee and the District Encroachment Permits Office when there is any change or modification in the type(s) of chemical used in their pole treatment maintenance operations.
4. Prior to any application of Tree Growth Regulators (TGR) approval shall be obtained from the District Landscape Specialist or their designee.

UE8. MISCELLANEOUS:

1. Install new and replace existing transformers on existing poles.
2. Clear grass from around base of poles and excavate around poles for inspection, including tamping and straightening. The use of herbicides or other chemicals is not authorized by this permit. A separate encroachment permit is required for that purpose.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
ENCROACHMENT PERMIT STEEL PLATE BRIDGING UTILITY PROVISIONS

TR -0157 (Rev. 04/2018)

To accommodate excavation work, steel plate bridging may be necessary. All conditions for use of steel plate bridging should be set forth in the special provisions.

Consideration of steel plate bridging should take into account the following factors:

1. Traffic speed.
2. Traffic Volume and Composition.
3. Duration and dimensions (width & daily estimated lengths) of the proposed excavation.
4. Weather conditions.

When backfilling operations of an excavation in the traveled way, whether transverse or longitudinal, cannot be properly completed within a work day, steel plate bridging with a non-skid surface and shoring (see Trenching & Shoring) may be required to preserve unobstructed traffic flow. In such cases, the following conditions shall apply:

1. Steel plate bridging on freeways is not allowed.
2. Steel plates used for bridging must extend a minimum of 12" beyond the edges of the trench.
3. Steel plate bridging shall be installed to operate with minimum noise.
4. The trench shall be adequately shored, (as mentioned in Section 603.6B-2 of the Encroachment Permits Manual) to support the bridging and traffic loads.
5. Temporary paving with cold asphalt concrete shall be used to feather the edges of the plates, if plate installation by Method (2) described below, is used.
6. Bridging shall be secured against displacement by using adjustable cleats, shims, or other devices.

As required by the district, steel plate bridging and shoring shall be installed using either Method (1) or (2):

Method 1 For speeds of 45 MPH or greater:

The pavement shall be cold planed to a depth equal to the thickness of the plate and to a width and length equal to the dimensions of the plate.

Approach plate(s) and ending plate (if longitudinal placement) shall be attached to the roadway by a minimum of 2 dowels pre-drilled into the corners of the plate and drilled 2" into the pavement. Subsequent plates are to be butted and tack welded to each other.

Method 2 For Speeds less than 45 mph:

Approach plate(s) and ending plate (if longitudinal placement) shall be attached to the roadway by a minimum of 2 dowels pre-drilled into the corners of the plate and drilled 2" into the pavement. Subsequent plates are to be butted and tack welded to each other. Fine graded asphalt concrete shall be compacted to form ramps, maximum slope 8.5 % with a minimum 12" taper to cover all edges of the steel plates. When steel plates are removed, the dowel holes in the pavement shall be backfilled with either graded fines of asphalt concrete mix, concrete slurry, epoxy or an equivalent that is satisfactory to the Caltrans' representative.

The permittee is responsible for maintenance of the steel plates, shoring, asphalt concrete ramps, and ensuring that they meet minimum specifications. Unless specifically noted or granted in the special provisions, or approved by the State representative, steel plate bridging shall not exceed 4 consecutive working days in any given week. Backfilling of excavations shall be covered with a minimum 3" temporary layer of cold asphalt concrete.

The following table shows the advisory minimal thickness of steel plate bridging required for a given trench width (A-36 grade steel, designed for HS20-44 truck loading per Caltrans Bridge Design Specifications Manual).

Trench Width	Minimum Plate Thickness
10"	1/2"
1'-11"	3/4"
2'-7"	7/8"
3'-5"	1"
5'-3"	1 3/4"

NOTE: For spans greater than 5'-3", a structural design shall be prepared by a California registered civil engineer.

All steel plates within the right of way whether used in or out of the traveled way shall be without deformation. Inspectors can determine the trueness of steel plates by using a straight edge and should reject any plate that is permanently deformed.

Steel plates used in the traveled portion of the highway shall have a surface that was manufactured with a nominal Coefficient Of Friction (COF) of 0.35 as determined by California Test Method 342 (See Appendix H, Encroachment Permits Manual). If a different test method is used, the permittee may utilize standard test plates with known coefficients of friction available from each Caltrans District Materials Engineer to correlate skid resistance results to California Test Method 342. Based on the test data, the permittee shall determine what amount of surface wear is acceptable, and independently ascertain when to remove, test, or resurface an individual plate.

Caltrans Inspectors should not enforce plate removal unless it is permanently deformed or delivered without the required surfacing. However, an inspector should document in a diary all contacts with the contractor.

A "Rough Road" (W8-8) sign and a "Steel Plate Ahead" (W8-24) sign with black lettering on an orange background must be used in advance of steel plate bridging along with the required construction area signs. These signs must be used along with any other construction area signs.

Surfacing requirements are not necessary for steel plates used in parking strips, on shoulders not used for turning movements, or on connecting driveways, etc., not open to the public.

HAZARDOUS MATERIALS AND HAZARDOUS WASTE MANAGEMENT SPECIAL PROVISIONSTR-0408 (New 09/2017)

By acceptance of this encroachment permit, Permittee hereby agrees that:

1. All construction debris/materials/water/excess soil must become the property of the Permittee, and must be transported and disposed of, outside of Caltrans' right-of-way, in accordance with all applicable environmental laws and regulations. The Permittee must be identified as the generator for all construction debris/materials/water/excess soil and must be responsible for proper identification (including sampling and analysis) and management of all construction and contaminated debris/materials/water/excess soil that are removed, and/or excavated, from the work site. If hazardous waste is generated, the Permittee must obtain an Environmental Protection Agency (EPA) Identification Number issued in their name. State Permit Inspector does not sign any manifests or shipping papers. The Permittee must be named as the generator on all Uniform Hazardous Waste Manifests and shipping papers. Caltrans must not be identified or written anywhere on the manifests or shipping papers. Prior to waste disposal, the Permittee should submit the waste generator form(s) to State Permit Inspector for verification. The Permittee must submit to the State Permit Inspector, a copy of all manifests and/or shipping papers generated for materials removed, transported and/or excavated from the state right-of-way.
2. If contaminated material is encountered, Permittee is to stop work and contact the State Permit Inspector immediately. The Permittee must submit a Sampling and Analysis Plan (SAP), and a Health and Safety Plan (HaSP) prepared by a Certified Industrial Hygienist (CIH) and in conformance with California Code of Regulations title 8, section 5192, "Hazardous Waste Operations and Emergency Response" for sampling activity through a separate permit application. Upon the permit review, additional environmental documents may be required prior to resumption of construction activity.
3. Permittee is responsible for any violation, penalty, enforcement action, corrective action, remedial action, and any other type of consequences resulting from cross contamination of groundwater (including perched groundwater), improper handling/managing of hazardous materials and/or placement of contaminated materials inside Caltrans right-of-way.
4. It is the Permittee's responsibility to comply with the Department of Toxic Substances Control (DTSC) ADL requirements for roadway soil management. Reuse of soils containing greater than 80 mg/kg total lead is not allowed without written approval of the DTSC and Caltrans. The Soil Management Agreement for Aerially Deposited Lead-Contaminated Soils between Caltrans and the DTSC does not constitute written approval for the Permittee to reuse soils containing greater than 80 mg/kg total lead.
5. The Permittee must implement the emergency notification requirements established in the California Office of Emergency Management Hazardous Materials, Spill / Release Notification Guidance (<http://www.caloes.ca.gov/>).
6. Any imported material used for backfill must be free of contamination, and a certificate of the material as "clean" with the source area of the material must be provided to Permit Inspector upon request. Importing soils containing greater than 80 mg/kg total lead for use in state right-of-way is not allowed.
7. Stockpiles of material containing aerially deposited lead shall not be placed where affected by surface run-on or run-off. Stockpiles shall be covered with plastic sheeting 13 mils minimum thickness or with one foot of nonhazardous material. Stockpiles shall not be placed in environmentally sensitive areas. Stockpiled material shall not enter storm drains, inlets, or waters of the State.

TREE PRUNING (TRIMMING) AND CHEMICAL APPLICATION

TR – 0159 (Rev. 07/2022)

In addition to the attached Encroachment Permit General Provisions (TR-0045), the following special provisions are also applicable:

I. GENERAL (Applies to BOTH Non-Utility and Utility Projects):

1. Scheduled pruning work may be restricted by Caltrans to maintain mobility during special events, commuter traffic, or other periods of projected high traffic volumes.
 - i. Traffic control is generally authorized from 9 a.m. to 3 p.m., Monday through Friday, excluding holidays. Extended traffic control hours may be required by Caltrans.
 - ii. Traffic control must conform to requirements shown in the State Standard Plans. When required, the use of a flashing arrow board is MANDATORY.
 - iii. Suspend work during inclement weather, such as heavy fog, if lane or shoulder closures will be required. Do not perform pruning work during periods of high wind to minimize the spread of debris into the traveled way.
2. Prune trees in compliance with the most recent version of ANSI A300-Pruning Part 1, the American National Standard for Tree Care Operations, Tree, Shrub and Other Woody Plant Maintenance-Standard Practices (Pruning), and the International Society of Arboriculture (ISA) Tree Pruning Best Management Practices.
3. Prune trees in compliance with the seasonal tree pruning restrictions specified in the Migratory Bird Act and meet the seasonal requirements of specific tree species. Perform pruning based upon the age of the tree (newly planted or established), type of tree (evergreen or deciduous), purpose for pruning (maintenance of form, structure, maintaining sight lines, utility clearance), and to minimize the spread of disease (pine pitch canker, eucalyptus psyllid, eucalyptus borer beetles, Dutch elm disease, or mistletoe).
4. Tree trimmers must be licensed by the California State Contractors State License Board and hold a current C61/D49 license.
5. Do not use climbing spurs to prune trees, except when working in the tops of Eucalyptus, Palms, and Conifers.
6. Prune trees to maintain their natural structure and shape. If unbalanced growth already exists, first thin and head prune the tree. Where prior topping or side pruning has resulted in excessive growth over the State right-of-way, prune to restore a balanced, symmetrical shape. Avoid creating large holes in the canopy. Upon completion of work, trees should present a balanced, symmetrical shape that is characteristic of their species.
7. Prune trees to maintain their natural open crown structure. Do not cut young growth year after year at the same fixed distance from the trunk. This technique creates very dense growth at the tree canopy margin, growth called “crow’s nests” or “brooms”. Maintain the natural open crown structure by thinning out dense growth.
8. Prune trees to restore an open crown structure. Remove limbs larger than 2-inches in diameter as necessary to open up dense growth, called “crows' nests” or “brooms.” Make these cuts at laterals or parent branches in older wood so that the following season’s growth will result in a crown structure free of dense, disfiguring growth.

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9. Prune trees to avoid redirecting growth over the highway. Maintain the terminal bud of the leader. Perform top or center pruning only after these trees have recovered their natural balance and form.
10. Final cuts must not leave stubs. Prune in ways that maximize wound recovery from callus growth. Keep wounds as small as practicable, reasonably flush, within the shoulder ring area, keeping cambial tissues at the cut edge alive and healthy. Do not make extreme flush cuts that produce large wounds and weaken the tree.
11. Remove debris, cuttings, and tree limbs from the State right-of-way at the end of each workday, leaving the work area in a safe and presentable condition. In regions where pruned limbs and bark might harbor pests or disease (such as pine pitch canker, eucalyptus psyllid, eucalyptus borer beetles, Dutch elm disease, or sudden oak death) dispose pruned materials in accordance with Federal, State, and local agency requirements.
12. Topping of trees is not allowed.
13. Prune trees to allow 8 feet over sidewalks and 17 feet over vehicular pavement.
14. Pruning must not change the character of the tree.

II. ADDITIONAL TREE PRUNING REQUIREMENTS FOR UTILITIES ONLY:

Comply with the requirements under “I. General” above, and the following:

1. Severity of utility tree pruning work may be restricted by the District Landscape Specialist to preserve the appearance of trees that possess high value due to local community significance, historic landscape potential, or documented horticultural value.
2. Limit pruning severity such that required minimum clearances are maintained for no more than two years.
3. Comply with minimum utility clearances as established by the CPUC General Orders, California Public Resources Code and Federal and State laws. Clearances that exceed the established minimum must be agreed upon by Caltrans and the Utility Company. For most locations, pruning should not take place more frequently than once per year. Pruning clearances and pruning frequencies must reflect the species, growth habit, condition, and health of each tree.
4. Prune trees receiving their first pruning, or recently pruned trees with “directional pruning” as defined in the ISA Tree-Pruning Guidelines. Trees that cannot be directionally pruned, such as older trees that have been topped many times may be submitted for consideration of removal.
5. Do not perform initial, severe “V” shaped pruning on trees along any highway, expressway or freeway without approval from the District Landscape Specialist or District Landscape Architect. Do not perform severe “V” pruning on any tree along a state or federally designated scenic highway without approval first from the local agency and then the District Landscape Architect.
6. Maintain previously “rounded over” trees consistent with past practices, unless Caltrans and the Electric Utility owner agree that the tree can be directionally pruned or have its crown restored without creating structural defects or growth that presents a liability.

III. CHEMICAL CONTROL:

1. Do not apply chemicals to trees located on scenic highways.
2. Upon approval by Caltrans to use chemicals, also obtain approval by the County Agricultural Commissioner.

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3. Control resprouting tree species using integrated vegetation management program techniques, including chemical and non-chemical methods.
4. Prior to chemical application, obtain a pest control recommendation from a licensed Pest Control Advisor. Submit a copy of the recommendation to the Caltrans District Landscape Specialist or their designee.
5. Utility Companies must maintain a list of locations, chemical types, and quantities used for treatment in pruning operations. Provide this information upon expiration of your annual permit or upon request of the Department during the annual/biennial permit period.
6. Utility Companies must submit copies of MSDS sheets for all chemical compounds used in tree pruning operations along with their permit application.
7. Utility Companies must notify the District Encroachment Permits Office when they change or modify the chemicals used in their pruning operations.

ENCROACHMENT PERMIT SPECIAL PROVISIONS**UTILITY UNDERGROUND PROVISIONS (UG)**

TR-0163 (Rev. 07/2023)

In addition to the attached Encroachment Permit General Provisions (TR-0045), the following special provisions are also applicable:

High priority utilities, pressurized facilities, pipes or ducts six (6) inches or larger in diameter, or placement of multiple pipes or ducts regardless of diameters are required to be encased on both conventional and access-controlled State highway right-of-way. An exception to this encasement policy may be allowed on a case-by-case basis with the “Uncased High-Pressure Natural Gas Pipeline” Special Provisions (TR-0158).

A “High Priority Utility” is defined as: 1) natural gas pipelines greater than six (6) inches in diameter, or with normal operating pressures greater than sixty (60) psig; 2) petroleum pipelines; 3) pressurized sanitary sewer pipelines; 4) high-voltage electric supply lines, conductors, or cables that have a potential to ground of greater than or equal to sixty (60) kV; or 5) hazardous materials pipelines that are potentially harmful to workers or the public if damaged.

The pavement or roadway must not be open cut unless specifically allowed. Utility installations are not allowed inside culverts or drainage structures.

All installations must comply with Chapter 17 of the Caltrans Project Development Procedures Manual for utility clearance and offset requirements.

For additional details regarding longitudinal utility encroachments on both conventional and access-controlled State highway right-of-way, see Section 602 of the Encroachment Permits Manual.

UG 1. ENCASEMENT: Casings must have an inside diameter sufficiently larger than the outside diameter of the pipe or duct to accommodate placement and removal.

When Horizontal Directional Drilling (HDD) is authorized, High-Density Polyethylene (HDPE) is acceptable as the casing.

When Reinforced Concrete pipe in accordance with Section 65-2 of Caltrans Standard Specifications is installed by Bore & Jack, it must have rubber gaskets at the joints and see “D” below for grouting of voids left by jacking operations.

- A. Spiral welded casings may be allowed provided the casing is new and the weld is smooth.
- B. The ends of the casing must be plugged with ungrouted bricks or other suitable material approved by the Department’s representative.
- C. Minimum wall thicknesses of steel encasements for different lengths and diameters of pipes are as follows:

Minimum Wall Thickness

Casing Diameter	Up to 150 feet in length	Over 150 feet in length
6 to 28 inches	1/4 inch	1/4 inch
30 to 38 inches	3/8 inch	1/2 inch
40 to 60 inches	1/2 inch	3/4 inch
62 to 72 inches	3/4 inch	3/4 inch

- D. When required by the Department’s representative, the permittee must pressure grout to fill any voids

caused by the permitted work at the permittee’s expense. The grout holes when placed the inside of the casing must be on eight (8) feet centers, longitudinally and offset twenty-two (22) degrees from the vertical axis of the casing and staggered to the left and right of the top longitudinal axis of the casing. Grout pressure must not exceed five (5) psig for a duration sufficient to fill all voids.

- E. When the placement of multiple encasements is requested, the distance between multiple encasements must be the greater of twenty-four (24) inches or twice the diameter of the larger pipe being installed.
- F. Casings within access-controlled highways must extend to the right-of-way lines.
- G. Wing cutters, if used, must be a maximum of one (1) inch larger in diameter than the outside diameter of the casing. Voids caused by the use of wing cutters must be grouted in accordance with “D” above.
- H. A band welded to the leading edge of the casing must be placed square to the alignment and not on the bottom edge. A flared lead section on bores over one hundred (100) feet is not allowed.
- I. The length of the auger strand must be equal to that of the section of encasement pipe.
- J. The casings within conventional highways must extend at least five (5) feet beyond the back of curb or edge of pavement, or to the right-of-way line if less. Where Portland Cement Concrete (PCC) cross-gutter exists, the casings must extend at least five (5)

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feet beyond the back of the cross-gutter, or to the right-of-way line if less.

UG 2. OPEN-CUT METHOD: When the encroachment permit authorizes installation by the open-cut method, surfacing and base materials and thickness thereof must be as specified in the encroachment permit.

No more than one (1) lane of the highway pavement must be open cut at any time unless otherwise approved in writing by the Department's representative. After the pipe is placed in the open-cut section, the trench must be backfilled in accordance with Section 19-3 of Caltrans Standard Specifications. The backfilled section must be open to traffic safely with temporary repairs to the surfacing before the next section of pavement is cut.

If backfilling operations have not been properly completed at the end of a working day, steel plate bridging is required to make the entire highway facility open to traffic in accordance with the "Steel Plate Bridging Utility" Special Provisions (TR-0157).

Sides of open-cut trenches in paved areas must be kept as nearly vertical as possible. Trenches must not be two (2) feet wider than the sum of the outside diameter of the pipe to be laid therein plus the necessary width to accommodate shoring.

UG 3. TRENCHLESS CONSTRUCTION: The following provisions are applicable for installing conduit with the bore diameter less than thirty (30) inches using trenchless methods (e.g., Bore & Jack, HDD, Microtunneling, Pipe Bursting, Pipe Ramming, etc.). For installations with the bore diameter equal to or greater than thirty (30) inches, permittees must comply with Non-Standard Special Provision (NSSP) 19-15, Trenchless Construction. A copy of the NSSP 19-15 can be obtained from the Department's representative or District Encroachment Permits Office.

3.1. Definitions

Bore: Borehole excavated using trenchless construction for the installation of conduit.

Overcut: Radial annular gap between bore and outer pipe wall.

3.2. Construction: The superintendent must be at the site at all times when work is being conducted, if the borehole diameter is greater than ten (10) inches and the depth of installation is less than eight (8) times the diameter of the borehole.

Trenchless excavation and conduit installation must be performed to the line and grade shown. When excavation or installation is out of line or grade, make immediate alignment correction.

Existing structures, pavement, and utilities must be protected during installation. Restore and repair immediately any damage resulting from construction.

Repair or replace any damaged pipe sections.

Overcut must be less than:

- A. One (1) inch or five (5) percent of the conduit outside radius, whichever is less, and
- B. Two (2) inches for trenchless construction using HDD method

Notify the Department's representative immediately if you encounter obstruction or condition that impedes construction.

3.3. Quality Assurance

3.3-1. Pre-construction Meeting: Contact the Department's representative to schedule and have a pre-construction meeting at least seven (7) business days before the start of trenchless construction or as identified in the permit.

Attendees should include:

1. The Department's representative
2. Your project manager
3. Your project superintendent
4. The contractor for trenchless construction

Provide and present:

1. Trenchless construction shop drawings, work plans, and calculations
2. Mitigation plans for both during and after construction
3. Construction timeline and critical path activities

3.3-2. Contractor Qualifications: The contractor must employ a superintendent, who has successfully completed at least five (5) of such projects, if the borehole diameter is greater than ten (10) inches and the depth of installation is less than eight (8) times the diameter of the borehole. Before pre-construction meeting, the following must be submitted to Department's representative if requested:

1. Summary of the contractor's experience demonstrating that the contractor has successfully completed at least five (5) projects in the past five (5) years using similar trenchless construction in similar ground and groundwater conditions with similar drive lengths and diameter range.
2. Summary of the superintendent's experience demonstrating that the superintendent has successfully completed at least five (5) projects using similar construction methods for trenchless construction in similar ground and groundwater

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conditions with similar drive lengths and diameter range.

3.3-3. Conduit Line, Grade, and Shape: When monitoring is required:

1. Survey and record control lines at least seven (7) business days before trenchless construction.
2. Observe and adjust measurements of survey control lines weekly. Report discrepancies to the Department's representative.

Survey and record the centerline of the constructed conduit after each section is advanced or every five (5) feet of advancement, whichever is shorter.

3.3-4. Ground Surface Movement Monitoring: Ground surface movement monitoring is required if the installation meets the following criteria or if required by the Department's representative:

1. Bore diameter is greater than ten (10) inches, and
2. Minimum vertical distance between the pavement or sidewalk surface and the top of bore is less than eight (8) times the diameter of the borehole.

Mark monitoring points on critical structures and utilities at locations shown. Include these points in monitoring surveys. Perform monitoring surveys before noon and at ambient temperature below eighty-five (85) degrees Fahrenheit. Perform ground surface survey under the Caltrans Surveys Manual and supplemental guidance.

Establish a minimum of four (4) control points for ground surface movement monitoring. Perform baseline ground surface survey at least fifteen (15) business days before trenchless construction. Notify the Department's representative at least ten (10) business days before the survey.

Develop baseline surface model. Use the baseline surface model to determine the movement of ground surface and embankment slope. See Encroachment Permit Survey Grid (TR-0151) in Appendix E of the Encroachment Permits Manual for survey grid spacing and other requirements.

Perform ground surface movement monitoring survey:

1. Weekly during construction or as required by the Department's representative
2. Biweekly for one (1) month after completion of each installation or as required by the Department's representative

Produce the surface model based on the monitoring survey data and calculate the movement of monitoring points using baseline surface model. Each monitoring survey may have different grid points.

Each ground surface horizontal and vertical measurement must be accurate to ± 0.03 feet on pavement and ± 0.1 feet

on unpaved surfaces at the ninety-five (95) percent confidence level. Vertical movement produced by comparing current surface model with pre-construction surface model must be accurate to ± 0.01 feet on pavement and ± 0.1 feet on unpaved surfaces at the ninety-five (95) percent confidence level.

If ground surface movement in the pavement above the advancing pipe meets the requirements for two (2) consecutive weeks, the frequency of monitoring survey may be reduced to biweekly.

Notify the Department's representative at completion of each installation. Ground surface vertical movement requirements are:

Ground Surface Vertical Movement

Quality Characteristic	Requirement
Critical Structure Monitoring Points - Horizontal or Vertical (max, feet)	0.02
Highway surface (max, feet)	0.04
Embankment slope (max, feet)	0.2

If ground surface vertical movement requirements are not met:

1. Stop work immediately.
2. Notify the Department's representative.
3. Submit an alternative construction method.
4. Submit a mitigation plan that includes methods to fill the voids created under the ground surface and restore the density of subsurface materials.
5. Monitor ground surface movement in the area above the advancing pipe:
 - 5.1. Daily until no additional vertical movement is detected in the areas that exceed the movement requirements
 - 5.2. Every two (2) working days until the vertical movement meets the requirements for two (2) consecutive weeks

3.4. Submittals**3.4-1. Monitoring Plans:** Submit monitoring plans for:

1. Conduit grade and alignment control, including monitoring instruments, layout of instrumentation points, construction details, and monitoring frequency
2. Logging of excavated materials, including anticipated volume of excavation and measured volume of removed spoil
3. Critical operations of applicable trenchless construction, including excavation, boring, spoil removal, lubrication, jacking, installation, and grouting
4. Ground surface movement, including digital surface survey method, survey data processing and analysis

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method, and digital surface file for the bore diameter greater than ten (10) inches and the vertical distance between the pavement or sidewalk surface and the top of bore less than eight (8) times the diameter of the borehole

3.4-2. Daily Construction Record: Maintain Daily Construction Record and submit to the Department's representative upon request.

Daily Construction Record must include:

1. Date and time of operation
2. Names of key personnel
3. Length of constructed conduit, including coordinates and elevation of the beginning and ending (latitude, longitude and northing, easting, elevation) of the conduit advanced during each work shift. Record must reference the project coordinate system.
4. Rate of advance
5. Jacking force
6. Problems encountered, possible causes, and mitigation performed
7. Geological log of excavated face and materials, with the logging performed by a geologist who is registered as an engineering geologist in the State
8. Records and field note of:
 - 8.1. Any visible cracks
 - 8.2. Conduit line and grade control
 - 8.3. Anticipated and actual volumes of spoil removed and causes of the volume discrepancy
 - 8.4. Groundwater table elevation if dewatering is required

3.4-3. Ground Surface Movement Monitoring Records: Submit:

1. Before construction: survey data and surface model to demonstrate compliance with the Caltrans Surveys Manual and supplemental guidance
2. During and after construction: survey data, surface model, and vertical movement based on the comparison between current and pre-construction surface model

3.4-4. Contact Grouting Record: Maintain Contact Grouting Record and submit to the Department's representative upon request.

Contact Grouting Record must include:

1. Injection locations
2. Grout quantity]
3. Grout pressure
4. Measurements and observations, including heave, casing or carrier pipe movement, grout loss quantity,

communication between grout ports, ground surface, and nearby utilities and storm drains

5. Problems encountered, possible causes, and mitigation performed

3.4-5. Post-Construction Record: Maintain Post-Construction Record and submit to the Department's representative upon request.

Post-Construction Record must include:

1. Completed conduit construction inspection records, including video recording and photographs
2. As-built plans showing details and alignment of the constructed conduit, horizontal and elevation survey based on project coordinate system, any problems encountered, and mitigation actions performed
3. As-built plans showing details of pavement restoration work performed

3.5. Restore Highway Pavement: After completion of trenchless construction of conduit, restore highway pavement to conditions as it was prior to beginning of construction activities or better. Restore Asphalt Concrete (AC) pavement with mill and fill. Repair or replace AC pavement with dowels for any cracks and spalling caused by construction.

UG 4. Bore and receiving pits must:

1. be located at least ten (10) feet from the edge of pavement on rural conventional highways.
2. be located at least five (5) feet beyond the concrete curb and gutter or AC dike on urban conventional highways.
3. be located at least five (5) feet beyond the toe of slope of embankments.
4. be located outside access-controlled highway right-of-way.
5. be protected by placement of six (6)-foot chain link fence or Type K railing around them.
6. be adequately shored in accordance with Cal/OSHA requirements. Shoring for jacking and receiving pits located within fifteen (15) feet of traffic lanes on a State highway must not extend more than thirty-six (36) inches above the pavement grade unless otherwise authorized by Department's representative. Reflectors must be affixed to the shoring on the sides facing traffic. A six (6)-foot chain link fence must be installed around the perimeter of the pits during non-working hours.
7. have crushed rock and sump areas to clear groundwater and water used to clean the casing. Where groundwater is found and pumping is required, the pits must be lined with filter fabric.

UG 5. LIMIT OF EXCAVATION: No excavation is allowed within ten (10) feet from the edge of pavement

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except in curbed urban areas or as specified in the encroachment permit. Where no curb exists and excavations within ten (10) feet of the traveled way are to remain open, a temporary Type K railing must be placed at a 10:1 taper or as otherwise directed by the Department's representative.

UG 6. TUNNELING: In addition to the requirements of "UG 1" and Section 603.6 of the Encroachment Permits Manual, the following requirements are also applicable:

- A. For this provision, a tunnel is defined as any installation that is thirty (30) inches or greater in diameter.
- B. When tunneling is authorized, the permittee must provide full-time inspection of tunneling operations. The Department's representative must monitor projects.
- C. Sand shields may be required as ground conditions change.
- D. Pressure grouting for liner plate, rib and spiling, or rib and lagging tunnels must be at every eight (8) feet section or the end of work shift before the next section is excavated. All grouting must be completed by the end of each workday.
- E. The headway must be secured at the end of each workday. Breast boards or plates must be installed during working hours for running sand or super-saturated soil.

UG 7. FACILITIES EXEMPT FROM UTILITY POLICIES: The following utilities are exempt from the requirements for location and depiction on the project plans unless the depiction of the utility is needed for interconnectivity with the proposed work (see Chapter 17 of the Project Development Procedures Manual):

- Natural gas service lines less than two (2) inches in pipe diameter that have normal operating pressures of sixty (60) psig or less
- Service connections (laterals) for water, sewer, electric, and telecommunication including fiber optic and cable service

All State-owned utilities must be plotted on the plans.

UG 8. DETECTOR STRIP: A continuous metallic detectable strip must be provided for non-metallic main utility installations. Service connections must be installed at right angles to the centerline of the State highway.

UG 9. BACKFILLING: All backfilling operations must be in accordance with Section 19-3 of Caltrans Standard Specifications.

Any required compaction tests must be performed by a certified laboratory at no cost to the Department and the

laboratory report must be furnished to the Department's representative.

UG 10. ROADWAY SURFACING AND BASE MATERIALS: Temporary repairs to pavements must be made and maintained upon completion of backfill until permanent repairs are made. Permanent repairs to pavements must be made within thirty (30) calendar days of completion of backfill unless otherwise authorized by the Department's representative. Temporary pavement patches must be placed and maintained in a smooth riding plane free of humps and depressions.

UG 11. DAMAGE TO TREE ROOTS: Tree roots three (3) inches or larger in diameter must not be cut within the tree drip line when trenching or other underground work is necessary adjacent to roadside trees. If such roots are encountered, they must be tunneled under, wrapped in burlap, and kept moist until the trench is backfilled. Trenching machines must not be used under trees if the trunk or limbs can be damaged by their use. Manholes must not be installed within twenty (20) feet of any trunk.

If the trees involved are close together and of such sizes that it is impractical to protect all roots three (3) inches or larger in diameter, or when roots are less than four (4) inches in diameter, outside tree drip line, special arrangements may be made whereby pruning of the tree tops to balance the root loss can be done by the permittee only when approved by and under the close supervision of the District Landscape Specialist or District Tree Maintenance Supervisor.

UG 12. PIPES ALONG ROADWAY: Pipes and conduits paralleling the pavement must be located as shown on the plans or as close as possible to the right-of-way line.

UG 13. BORROW AND WASTE: Borrow and waste must not be allowed within the work limits unless otherwise specified in the encroachment permit.

UG 14. MARKERS: All markers must not create a safety hazard for the traveling public or highway workers.

UG 15. CATHODIC PROTECTION: The permittee must perform stray current interference tests on underground utilities under cathodic protection and notify the Department's representative prior to the tests. The permittee must perform any corrective measures as necessary and authorized by the Department's representative.

UG 16. PAVEMENT REMOVAL: ASPHALT CONCRETE (AC) pavement must be saw cut to the full depth to provide a neat and straight pavement break along sides of the trench. Portland Cement Concrete (PCC)

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pavement must be saw cut at the slab joints and to the full slab depth.

Where the edge of the trench is within two (2) feet of the existing curb and gutter or pavement edge, the AC pavement between the trench and the curb or pavement edge must be removed.

UG 17. EXCAVATION UNDER FACILITIES:

Where it is necessary to excavate under the existing curb and gutter or underground facilities, the void must be backfilled with two (2) sack cement-sand slurry.

UG 18. PERMANENT REPAIRS TO PCC

PAVEMENT: Repairs must be of PCC containing at least six hundred fifty-eight (658) pounds or seven (7) sacks of cement per cubic yard. The new pavement must have the same thickness as the adjacent pavement. The PCC must be satisfactorily cured and protected from

disturbance until it can be open to traffic with a compressive strength of at least 3,000 psig or for not less than forty-eight (48) hours. The new pavement may be open to traffic after six (6) hours of curing when no more than two (2) percent by weight of calcium chloride is added to the PCC mix as an accelerating chemical admixture.

UG 19. REMOVAL OF PCC SIDEWALKS OR

CURBS: PCC sidewalks or curbs must be saw cut to the nearest score marks and reconstructed to match the existing sidewalk or curb.

UG 20. SPOILS: No earth or construction materials must be tracked onto the highway pavement and public or private approach. The permittee must remove these materials immediately if tracked from the highway pavement and public or private approach.

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SURVEYS (SV)

In addition to the attached Encroachment Permit General Provisions (TR-0045), the following special provisions are also applicable:

1. Two days before work is started under this permit, contact _____ concerning the permittee's operation.
2. All survey operations shall be conducted off the traveled way except where necessary to cross pavements and medians.
3. When survey operations are being conducted, the permittee shall furnish, place and maintain signs and safety equipment in accordance with the latest edition of the "California Manual on Uniform Traffic Control Devices" (Part 6, Temporary Traffic Control).
4. All personnel shall wear hard hats and orange vests, shirts or jackets as appropriate. Any painted markings shall be made with water soluble paint.
5. Permission is also granted to park survey vehicles temporarily within the right of way, outside the shoulders, while survey work is in progress.
6. SURVEY WORK IS PROHIBITED ON FREEWAYS.
7. Survey information and assistance may be obtained upon request to: Survey Section, Department of Transportation, _____.