DOCUMENT 090

ADDENDA

ADDENDUM NUMBER 6

DATE: [3/19/2026]

PROJECT: **Ke-nek Water Treatment Plant and Water Main**

PROJECT NUMBER: **CA 21-F05**

OWNER: **Yurok Tribe**

ENGINEER: Maxwell Moore

TO: Prospective Bidders

This Addendum forms a part of the Contract Documents and modifies the Bidding Documents dated 12/16/2025, Addendum Number 1 issued 12/16/2025, Addendum Number 2 issued 1/26/2026, Addendum Number 3 issued 2/9/2026, Addendum Number 4 issued 3/3/2026, and Addendum Number 5 issued 3/12/2026, with amendments and additions noted below.

Acknowledge receipt of this Addendum in the space provided in the Bid Form. Failure to do so may disqualify the Bidder.

This Addendum consists of 2 pages and 18 pages of attachments.

Additional Materials

Document	Document Title	Issue Date
EP 21075	Tulley Creek Encroachment Permit	[3/19/2026]

Revised Materials

Document	Document Title	Issue Date
040	Bid Form	[3/19/2026]

CORRECTIONS

The conduit that is to be laid with line 'F' is to be 1" (as noted on the cable and conduit schedule, E107), *not* 2" (as incorrectly noted on sheets C101, C102, C104, C105, C106, C201, C202, C203, C301, C302, C303, C304, C305, C501, C502, C504)

DOCUMENT 040 – BID FORM

Line item 14 – changed to "1-inch Conduit and Cable" from "2-inch Conduit and Cable"

END OF DOCUMENT

DOCUMENT 040 BID FORM

To: Yurok Tribe

Project: CA 21-F05 Yurok Ke-nek Water Treatment Plant and Water Main

Bid of _____ (Company Name)

(hereinafter called "BIDDER"), organized and existing under the laws of the State of California, doing business as _____ (a corporation, a partnership, an individual, etc.) to the Yurok Tribe (hereinafter called "OWNER").

In compliance with your Advertisement for Bids, BIDDER hereby proposes to perform all WORK for the completion of **CA 21-F05 - Yurok Ke-nek Water Treatment Plant and Water Main**.

The Yurok Tribe has been awarded funding from the US Environmental Protection Agency through a Drinking Water Tribal Set Aside grant. The funding will be used by the Yurok Tribe to install 8,500 LF of water mains, 750 LF of water service lines, and approximately 2000 LF of transmission main. Flow meters, hydrants, and assorted valving installation will accompany these water lines. In addition, a 60,000-gallon bolted steel water tank, a roughing filter, a slow sand filter building, a chemical treatment and monitoring building, and backup generator power for these facilities will be constructed.

All work shall be completed in strict accordance with the Contract Documents, within the time set forth therein, and at the prices stated in the BID SCHEDULE.

By submission of this BID, each BIDDER certifies, and in the case of a joint BID, each party hereto certifies as to his organization, that this BID has been arrived at independently, without consultation, communication, or agreement as to any matter relating to this BID with any other BIDDER or with any competitor.

BIDDER hereby agrees to commence WORK under this contract on or before a date to be specified in the NOTICE to PROCEED and to fully complete the PROJECT within three-hundred (300) consecutive calendar days thereafter. BIDDER further agrees to pay as liquidated damages, the sum of $150.00 for each consecutive calendar day thereafter as provided in Section 34, Liquidated Damages, of the General Conditions.

BIDDER acknowledges of receipt of the following ADDENDUM(s):

NUMBER DATE

#1:_____

_____

BIDDER agrees to perform all the work described in the CONTRACT DOCUMENTS for the unit prices or lump sum stated in the Bid Schedule. Bids are considered valid for 60 days from Bid closing date.

BID SCHEDULE

PROJECT DESCRIPTION

The following is a construction contract for completion of the specified work in the contract documents.

ITEM	ITEM DESCRIPTION	UNIT	QTY	UNIT PRICE	TOTAL PRICE
1	Mobilization / Demobilization (NTE 10% of Total Bid) *Section 01 27 00*	LS	1		
2	Hot Mix Asphalt *Section 02 30 00*	CY	2215		
3	Concrete *Section 03 30 00*	CY	169		
4	Wood Frame Building - Water Treatment Building *Section 06 10 00*	LS	1		
5	Metal Frame Building - Sand Filter Building *Section 13 34 19*	LS	1		
6	5000 Gallon Poly Tank *Section 22 11 00*	LS	1		
7	Roughing Filter *Section 22 11 00*	LS	1		
8	Booster Pump *Section 22 11 00*	EA	2		
9	Unistrut - 1-5/8" *Section 22 11 00*	LF	85		
10	Magnetic Flow Meter (No Box) *Section 01 11 90 / 22 11 00*	EA	1		
11	Magnetic Flow Meter and Box *Section 01 11 90 / 22 11 00*	EA	1		
12	Pressure Gauge *Section 01 11 90 / 22 11 00*	EA	2		
13	~~4" Conduit and Cable~~ ~~*Section 26 05 33*~~	LF	0		
14	1" Conduit and Cable *Section 26 05 33*	LF	4150		
15	~~18kW Propane Generator~~ ~~*Section 01 11 90 / 26 32 13*~~	EA	0		
16	~~Automatic Transfer Switch~~ ~~*Section 01 11 90 / 26 32 13*~~	EA	0		
17	Retaining Wall *Section 31 22 13*	LS	1		

18	Excavation and Grading *Section 31 22 13*	LS	1		
19	Cultural Monitoring *Section 31 23 17*	LS	1		
20	4' Manhole Drain Inlet *Section 31 25 13*	LS	1		
21	Drain Dissipater *Section 01 11 90 / 31 37 00*	EA	2		
22	Class 2 Aggregate Base *Section 32 11 23*	CY	533		
23	Class 3 Aggregate Base *Section 01 11 90 / 32 11 23*	CY	2		
24	Imported Fill *Section 01 11 90 / 32 11 23*	CY	975		
25	10" Drain Line - PVC C900 *Section 33 11 13*	LF	5		
26	10" Drain Line - CPP *Section 33 11 13*	LF	335		
27	6" Water Main - PVC C900 *Section 33 11 13*	LF	4340		
28	4" Water Main - PVC C900 *Section 33 11 13*	LF	3620		
29	3" Water Main - PVC SCH80 *Section 33 11 13*	LF	200		
30	2" Water Main - PVC SCH80 *Section 33 11 13*	LF	428		
31	1.5" Water Main - PVC SCH80 *Section 33 11 13*	LF	260		
32	3/4" Water Main - PVC SCH80 *Section 33 11 13*	LF	25		
33	6" Water Main - HDPE *Section 33 11 13*	LF	150		
34	4" Water Main - HDPE *Section 33 11 13*	LF	450		
35	4" Water Main - Ductile Iron Pipe *Section 33 11 13*	LF	45		
36	1" Water Service Line - PE Pipe *Section 33 11 13*	LF	740		
37	2" Transmission Main - PE Pipe *Section 33 11 13*	LF	1900		

38	Connection at Intake *Section 33 11 13*	LS	1		
39	Culvert Crossing *Section 33 11 13*	EA	7		
40	6" Gate Valve (No Box) *Section 33 11 16*	EA	1		
41	4" Gate Valve (No Box) *Section 33 11 16*	EA	2		
42	6" Gate Valve and Riser *Section 33 11 16*	EA	20		
43	4" Gate Valve and Riser *Section 33 11 16*	EA	14		
44	3" Gate Valve and Riser *Section 33 11 16*	EA	1		
45	2" Gate Valve and Riser *Section 33 11 16*	EA	1		
46	1" Gate Valve and Riser *Section 33 11 16*	EA	1		
47	6" Check Valve and Box *Section 33 11 16*	EA	1		
48	4" Check Valve and Box *Section 33 11 16*	EA	2		
49	3" Check Valve and Box *Section 33 11 16*	EA	1		
50	2" Check Valve and Box *Section 33 11 16*	EA	1		
51	2" PVC Check Valve (No Box) *Section 33 11 16*	EA	8		
52	Flush Hydrant *Section 33 11 16*	EA	1		
53	Altitude Valve and Box *Section 01 11 90 / 33 11 16*	LS	1		
54	Combination Air Valve *Section 33 11 16*	EA	4		
55	Air Release Valve *Section 33 11 16*	EA	1		
56	Float Valve *Section 01 11 90 / 33 11 16*	EA	1		
57	3" Pressure Reducing Valve and Box *Section 01 11 90 / 33 11 16*	EA	1		

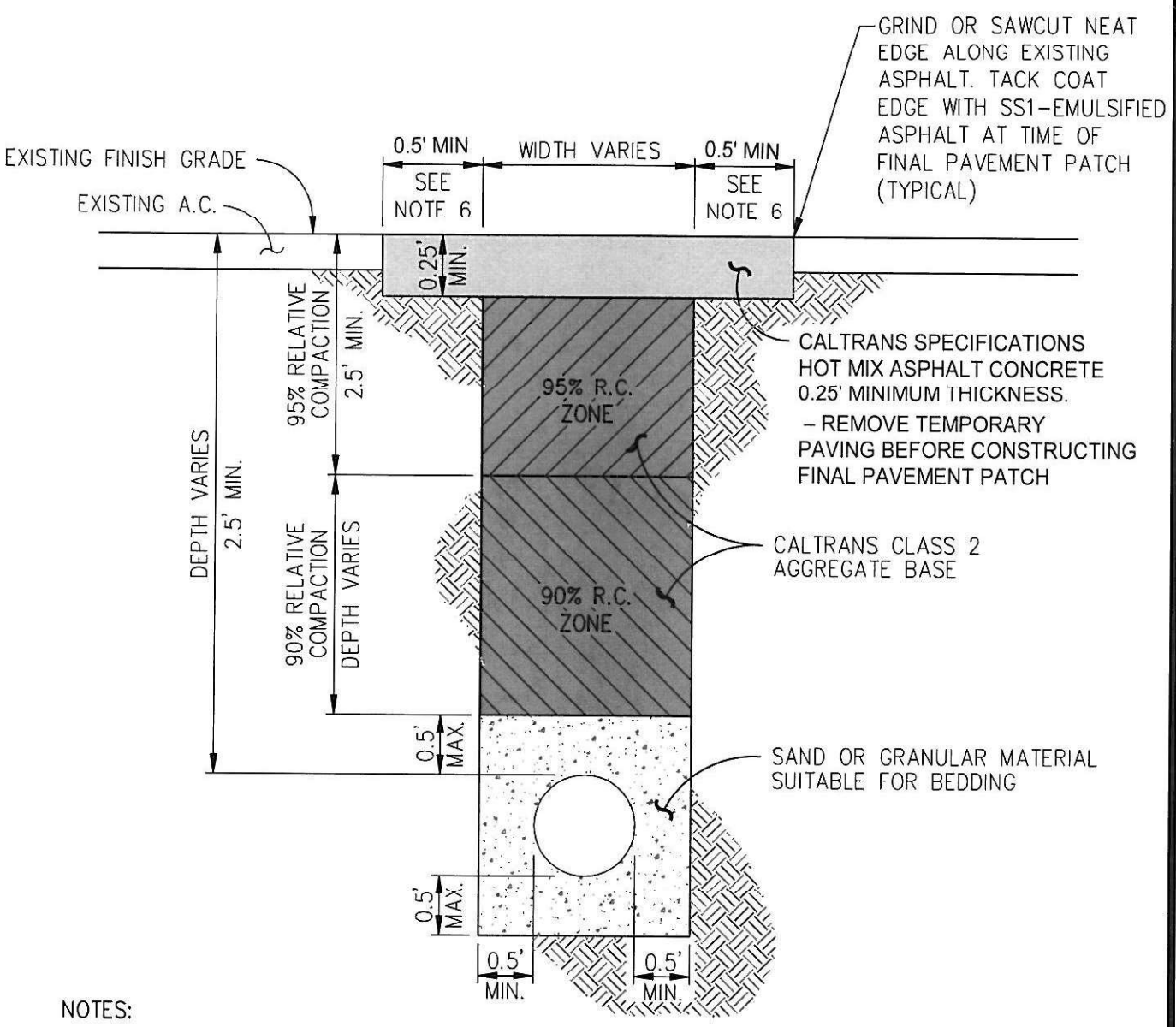
58	6" Pressure Reducing Valve and Box *Section 01 11 90 / 33 11 16*	EA	1		
59	Residential Water Meter *Section 01 11 90 / 33 12 13*	EA	3		
60	Residential Water Connection *Section 33 12 13*	EA	4		
61	60,000 Gallon Bolted Steel Storage Tank *Section 33 16 20*	LS	1		
62	Slow Sand Filter Media *Section 33 19 00*	LS	1		
63	Slow Sand Filter Basins *Section 03 30 00*	LS	1		
64	Slow Sand Filter Vault *Section 03 30 00*	LS	1		
65	~~500-gallon Propane Tank and Foundation~~ ~~*Section 01 11 90 / 33 51 00*~~	LS	0		
66	Water Monitoring Equipment, Pipe, Tubing, and Controls *Section 44 10 15*	LS	1		
67	Grid-charged Battery Backup System *Section 26 32 43*	LS	1		
68	Vault for DWR Connection, 2/C304 *Section 33 05 17*	LS	1		
69	Stormwater Pollution Prevention Plan and EPA CGP *Section 31 25 13*	LS	1		
70	3-6" Rip Rap *Section 31 37 00*	CY	1.5		
71	Site Clearing *Section 31 37 00*	LS	1		
72	3" Conduit, No Cable *Section 26 05 33*	LF	80		
73	4" Conduit, No Cable *Section 26 05 33*	LF	1430		
74	5" Conduit, No Cable *Section 26 05 33*	LF	480		
75	Tank Site, Conduit and Cable *Section 26 05 33*	LS	1		

76	Utility Pad and Bollards *Section 31 00 00*	LS	1		
			SUBTOTAL:		
	TERO Fee [5.0% of Subtotal]	LS	1		
			Total of All Unit Price Bid Items		$

Respectfully Submitted:

_____	_____
Signature	Address
_____	_____
Title	Date
_____	_____
License No.	Expiration Date

The following 11 pages are an excerpt of the Tulley Creek Encroachment Permit for Indian Health Service Project 21-F05. They have been included for reference of County expectations for work to be conducted on Tulley Creek Road.



NOTES:

1. THE TRENCH SHALL HAVE AT LEAST 0.25 FEET OF TEMPORARY COLD MIX ASPHALT BEFORE OPENING ROAD TO TRAFFIC.
2. FOR ITEMS NOT SHOWN, SEE ISSUED HUMBOLDT COUNTY ENCROACHMENT PERMIT.
3. ALL MATERIALS SHALL COMPLY WITH CALTRANS STANDARD SPECIFICATIONS, CURRENT EDITION.
4. IF GROUNDWATER IS ENCOUNTERED DURING TRENCH EXCAVATION, ENGINEER AND THE COUNTY DEPARTMENT OF PUBLIC WORKS SHALL BE CONSULTED FOR SITE SPECIFIC CORRECTIVE MEASURES.
5. **THE PERMITEE, OR ITS DESIGNEE, SHALL BE RESPONSIBLE FOR PERFORMING COMPACTION TESTS.** THE DEPARTMENT OF PUBLIC WORKS RESERVES THE RIGHT TO MAKE AS MANY COMPACTION TESTS AS IT DEEMS REASONABLE TO ENSURE THAT THE COMPACTION REQUIREMENTS ARE MET. PERMITTEE SHALL REIMBURSE THE DEPARTMENT OF PUBLIC WORKS FOR ALL COSTS ASSOCIATED WITH SUCH TESTS. SAID COSTS SHALL BE IN CONFORMANCE WITH THE HUMBOLDT COUNTY SCHEDULE OF FEES AND CHARGES FOR PERMITS AND SERVICES, AS ADOPTED BY THE BOARD OF SUPERVISORS.
6. WHEN EXISTING AC PAVEMENT IS LESS THAN 5 YEARS OLD, USE 9' MINIMUM.
   WHEN EXISTING AC PAVEMENT IS MORE THAN 5 YEARS OLD, USE 0.5' MINIMUM

NOTE: FIGURES HEREON ARE NOT DRAWN TO SCALE, UNLESS OTHERWISE NOTED.

COUNTY OF HUMBOLDT
DEPARTMENT OF PUBLIC WORKS
1106 SECOND STREET * EUREKA * CA * 95501
TEL (707) 445-7377 * FAX (707) 445-7409

TYPE I TRENCH DETAIL -AGGREGATE BASE BACKFILL-

STD DWG

ISSUED: 08/26/2009 REVISED 04/22/2013

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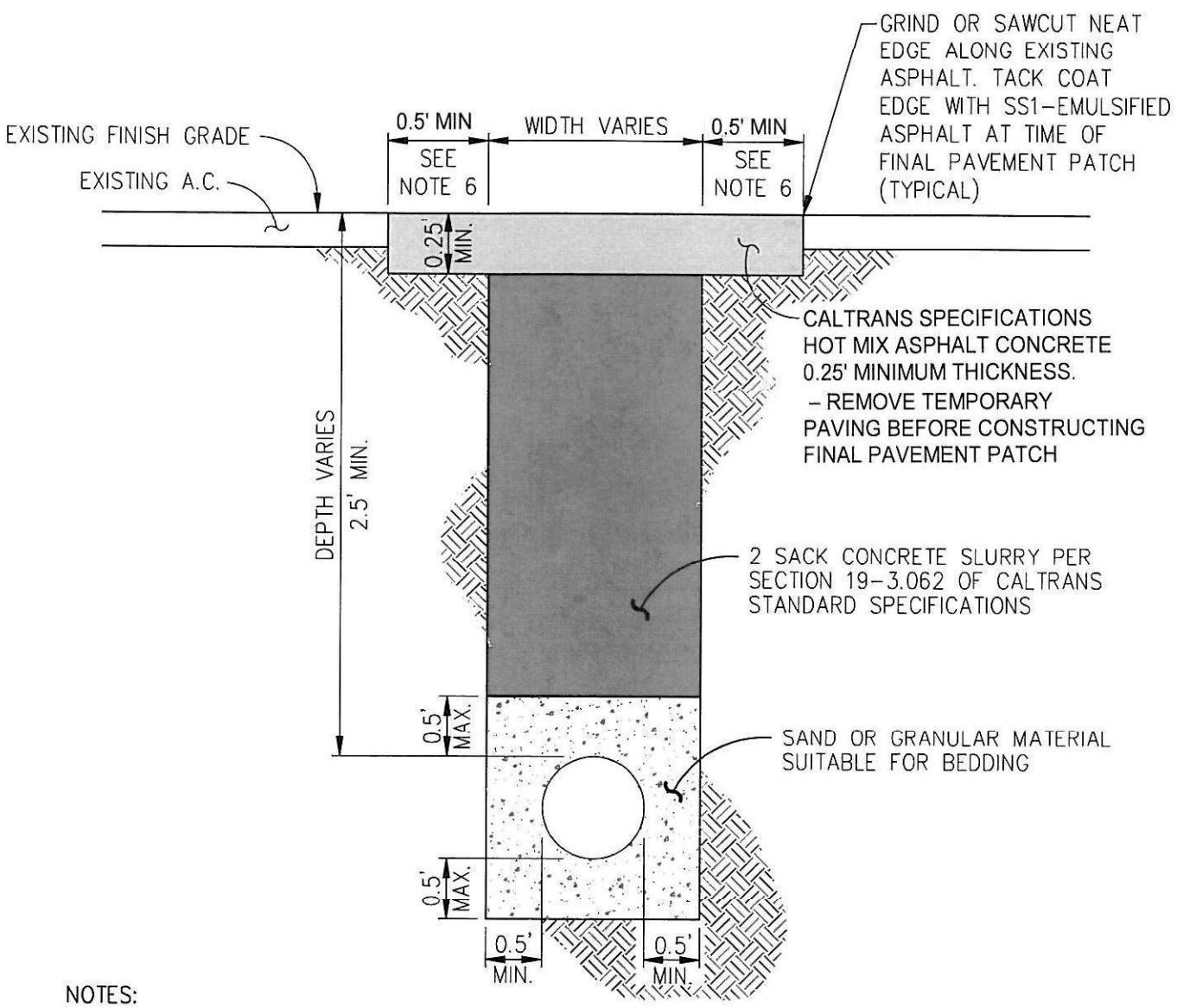
SHT 1 OF 1



NOTES:

1. THE TRENCH SHALL HAVE AT LEAST 0.25 FEET OF TEMPORARY COLD MIX ASPHALT BEFORE OPENING ROAD TO TRAFFIC.
2. FOR ITEMS NOT SHOWN, SEE ISSUED HUMBOLDT COUNTY ENCROACHMENT PERMIT.
3. ALL MATERIALS SHALL COMPLY WITH CALTRANS STANDARD SPECIFICATIONS, CURRENT EDITION.
4. IF GROUNDWATER IS ENCOUNTERED DURING TRENCH EXCAVATION, ENGINEER AND THE COUNTY DEPARTMENT OF PUBLIC WORKS SHALL BE CONSULTED FOR SITE SPECIFIC CORRECTIVE MEASURES.
5. **THE PERMITEE, OR ITS DESIGNEE, SHALL BE RESPONSIBLE FOR PROVIDING CERTIFICATION OF MATERIALS TO THE COUNTY.** THE DEPARTMENT OF PUBLIC WORKS RESERVES THE RIGHT TO MAKE AS MANY MATERIAL ASSURANCE TESTS AS IT DEEMS REASONABLE TO ENSURE THAT THE CONSTRUCTION MATERIAL REQUIREMENTS ARE MET. PERMITTEE SHALL REIMBURSE THE DEPARTMENT OF PUBLIC WORKS FOR ALL COSTS ASSOCIATED WITH SUCH TESTS. SAID COSTS SHALL BE IN CONFORMANCE WITH THE HUMBOLDT COUNTY SCHEDULE OF FEES AND CHARGES FOR PERMITS AND SERVICES, AS ADOPTED BY THE BOARD OF SUPERVISORS.
6. WHEN EXISTING AC PAVEMENT IS LESS THAN 5 YEARS OLD, USE 9' MINIMUM.
   WHEN EXISTING AC PAVEMENT IS MORE THAN 5 YEARS OLD, USE 0.5' MINIMUM

NOTE: FIGURES HEREON ARE NOT DRAWN TO SCALE, UNLESS OTHERWISE NOTED.

COUNTY OF HUMBOLDT
DEPARTMENT OF PUBLIC WORKS
1106 SECOND STREET * EUREKA * CA * 95501
TEL (707) 445-7377 * FAX (707) 445-7409

TYPE II TRENCH DETAIL -CONCRETE SLURRY BACKFILL-

STD DWG

ISSUED: 08/26/2009 REVISED 04/22/2013

F:\AUTOCAD PROJECTS\STANDARD PLANS\DWG\STD PLAN_TRENCH DETAILS.DWG

SHT 1 OF 1

GENERAL PROVISIONS

DEFINITION - This permit is issued in accordance with the Encroachment Permit Ordinance #896 and any amendments thereof. This permit is revocable on notice by the Director of Public Works.

ACCEPTANCE OF PROVISIONS - It is understood and agreed by the Permittee that the doing of any work under this permit shall constitute an acceptance of the conditions and provisions relative to the permit.

NO PRECEDENT ESTABLISHED - This permit is granted with the understanding that this action is not to be considered as establishing any precedent on the question of the expediency of permitting any certain kind of encroachment to be erected within right of way of County highways.

NOTICE PRIOR TO STARTING WORK - The Department of Public Works shall be notified 24 hours in advance of pouring concrete to permit inspection of subgrade and forms.

KEEP PERMIT ON SITE - This permit shall be kept at the work site and must be shown to any representative of the Grantor or any law enforcement officer on demand.

PROTECTION OF TRAFFIC - Adequate provision shall be made for the protection of the traveling public. Barricades shall be placed with amber lights at night, also flagmen employed, all as may be required by the County for the particular work in progress.

MINIMUM INTERFERENCE WITH TRAFFIC - All work shall be planned and carried out so that there will be the least possible inconvenience to the traveling public.

STORAGE OF MATERIAL - No material shall be stored within 8 feet from the edge of pavement or graveled way or within the shoulder line when the shoulders are wider than 8 feet, unless specifically authorized by this permit.

CLEAN UP - Upon completion of the work, all brush, timber, scraps, and materials shall be entirely removed and the right of way left in as presentable a condition as before work started.

STANDARDS OF CONSTRUCTION - All work shall conform to the State of California Standard Specifications and County standards.

FUTURE MOVING OF INSTALLATION - It is understood by the Permittee that the installation authorized herein shall, upon demand of the Director of Public Works, be relocated by and at the sole expense of the Permittee whenever construction, reconstruction, or maintenance on the highway may require such relocation. The Permittee must complete such relocation within the time specified in said demand.

CARE OF DRAINAGE - Permittee shall undertake such measures to prevent interference with established drainage as may be required by the Director of Public Works.

EXCAVATION - All excavation shall comply with the provisions of Chapter 3, Article 2, Section 320, of the Encroachment Permit Ordinance #896.

BACKFILL - Backfill in all trenches shall comply with the provisions of Chapter 3, Article 2, Section 321, of the Encroachment Permit Ordinance #896.

LOCATION - The shallowest portion of any pipeline or other facility shall be installed not less than 30 inches below the roadway surface, or one foot below the flow line of any drainage structure, pipe, ditch, or creek.

CURB, GUTTERS, AND SIDEWALK - Shall comply with the provisions of Chapter 3, Article 3, of Encroachment Permit Ordinance #896 and any amendments thereof.

DEFAULT OF PERMITTEE - By applying for and obtaining a permit, the Permittee agrees that if the Permittee fails to comply with the terms of the Permit, the County may elect to perform and complete the work by any method the Director deems appropriate. The Permittee shall reimburse the County for the full cost of the work at the then current Associated General Contractor's Cost Schedule for such work. .

PUBLIC SAFETY

1. The Permittee in the conduct of work shall provide, erect, or maintain the lights, barriers, warning signs, and other safeguards necessary to protect the traveling public in accordance with Section 21406 of the California Vehicle Code. If at any time the Director of Public Works finds that suitable safeguards are not being provided, the County shall provide, erect, and/or maintain the safeguards deemed necessary. The Permittee shall reimburse the County for all expenses incurred by County providing, erecting, and maintaining the safeguards deemed necessary by the Director of Public Works.

2. All work shall be planned and carried out so that there will be the least possible inconvenience to the traveling public. Permittee is authorized to place flagmen to stop and warn traffic for necessary protection to public safety, but traffic shall not be unreasonably delayed. Complete closure of the road shall not be permitted unless authorized in writing by the Director of Public Works.

HOLD HARMLESS/INDEMNIFICATION

The Permittee shall agree to indemnify and hold harmless the County and each of its officers and employees from any liability or responsibility for accident, loss, or damage to persons or property arising by reason of the work done by the Permittee, or its agents, employees, or representatives. The Permittee shall, at its own expense, cost, and risk, defend any and all actions, suits, or other legal proceedings that may be brought or instituted against the County, its officers, or employees and pay or satisfy any judgment that may be rendered against the County and its officers or employees in any such action, suit, or legal proceedings arising by reason of the work done by the Permittee, its agents, employees, or representatives.

Notes for Figure 6H-6—Typical Application 6
Shoulder Work with Minor Encroachment

Guidance:

1. All lanes should be a minimum of 10 feet in width as measured to the near face of the channelizing devices.

2. The treatment shown should be used on a minor road having low speeds. For higher-speed traffic conditions, a lane closure should be used.

Option:

3. For short-term use on low-volume, low-speed roadways with vehicular traffic that does not include longer and wider heavy commercial vehicles, a minimum lane width of 9 feet may be used.
4. Where the opposite shoulder is suitable for carrying vehicular traffic and of adequate width, lanes may be shifted by use of closely spaced channelizing devices, provided that the minimum lane width of 10 feet is maintained.
5. Additional advance warning may be appropriate, such as a ROAD NARROWS sign.
6. Temporary traffic barriers may be used along the work space.
7. The shadow vehicle may be omitted if a taper and channelizing devices are used.
8. A truck-mounted attenuator may be used on the shadow vehicle.
9. For short-duration work, the taper and channelizing devices may be omitted if a shadow vehicle with activated high-intensity rotating, flashing, oscillating, or strobe lights is used.
10. Vehicle hazard warning signals may be used to supplement high intensity rotating, flashing, oscillating, or strobe lights.

Standard:

11. Vehicle-mounted signs shall be mounted in a manner such that they are not obscured by equipment or supplies. Sign legends on vehicle-mounted signs shall be covered or turned from view when work is not in progress.

12. Shadow and work vehicles shall display high intensity rotating, flashing, oscillating, or strobe lights.

13. Vehicle hazard warning signals shall not be used instead of the vehicle's high intensity rotating, flashing, oscillating, or strobe lights.

Guidance:

14. All advance warning signs should be placed so that the path of travel for bicycles is not blocked, while maintaining visibility for road users.

15. When existing accommodations for bicycle travel are disrupted or closed in a long-term duration project (see Section 6G.02) and the roadway width is inadequate for allowing bicyclists and motor vehicles to travel side by side, the Bicycle Warning (W11-1) sign and the SHARE THE ROAD (W16-1P) plaque should be used to advise motorists of the presence of bicyclists in the travel way lanes.

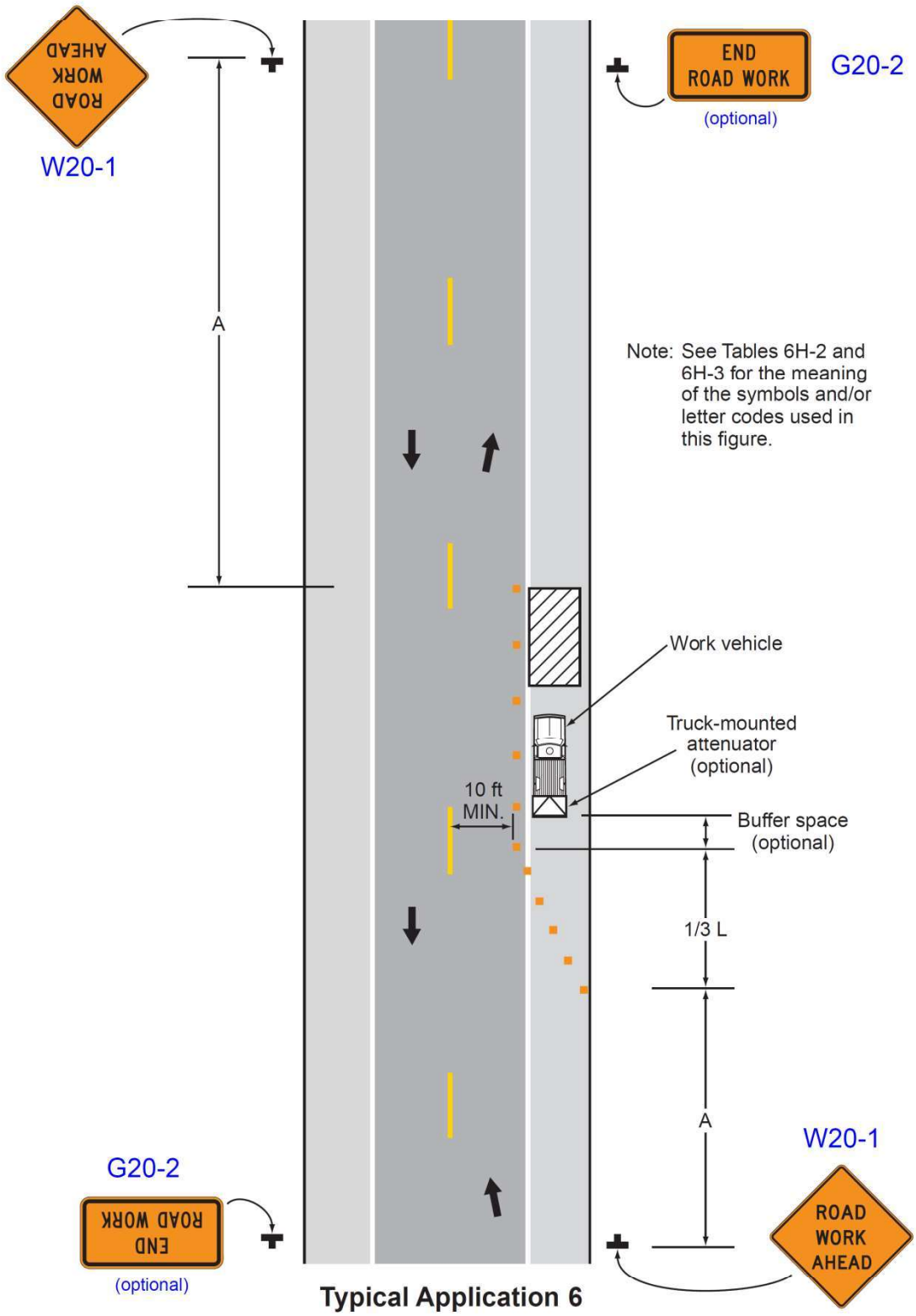
16. Except for short durations and mobile operations, when a highway shoulder is occupied and bicyclists would be sharing a lane with vehicular traffic, as a result of the TTC zone, speed reduction countermeasures should be used to reduce traffic speeds in the TTC zone. Refer to Sections 6C.01 and 6D.03.

17. Except for short durations and mobile operations, when a highway shoulder is occupied and bicyclists would be sharing a lane with vehicular traffic, as a result of the TTC zone, before narrowing the outside lane other measures such as widening the outside shoulder to allow bicyclists and motor vehicles to travel side by side through the TTC zone should be considered.

18. If traffic volumes make it feasible, the two left lanes should be merged into one lane to avoid using the shoulder as a traveled way lane and allowing continued use for emergency purposes and bicycle travel.

19. When existing accommodations for bicycle travel are disrupted or closed in a long-term duration project (see Section 6G.02) and the roadway width is inadequate for allowing bicyclists and motor vehicles to travel side by side, a separate path should be considered for bicyclists.

Figure 6H-6. Shoulder Work with Minor Encroachment (TA-6)



Typical Application 6

Table 6H-1(CA). Index to Typical Applications

Typical Application Description	Typical Application Number
Work affecting Pedestrian and Bicycle Facilities (see Section 6G.05)	
Shoulder Closure on Urban (Low Speed) Locations to Accommodate Bicyclists	TA-101(CA)
Lane Closure on Freeway, Expressway, Rural and Urban (High Speed) Locations to Accommodate Bicyclists	TA-102(CA)
Detour for Bike Lane on Roads with Closure of One Travel Direction	TA-103(CA)
Right Lane and Bike Lane Closure on Far Side of Intersection	TA-104(CA)
Work Within the Traveled Way of a Two-Lane Highway (see Section 6G.10)	
Lane Shift on Road with Low Traffic Volumes	TA-105(CA)
Work Within the Traveled Way of a Roundabout (see Section 6G.13)	
Partial Closure in a Single-Lane Roundabout	TA-106(CA)
Inside Lane Closure on a Multi-Lane Roundabout	TA-107(CA)

Table 6H-2. Meaning of Symbols on Typical Application Diagrams

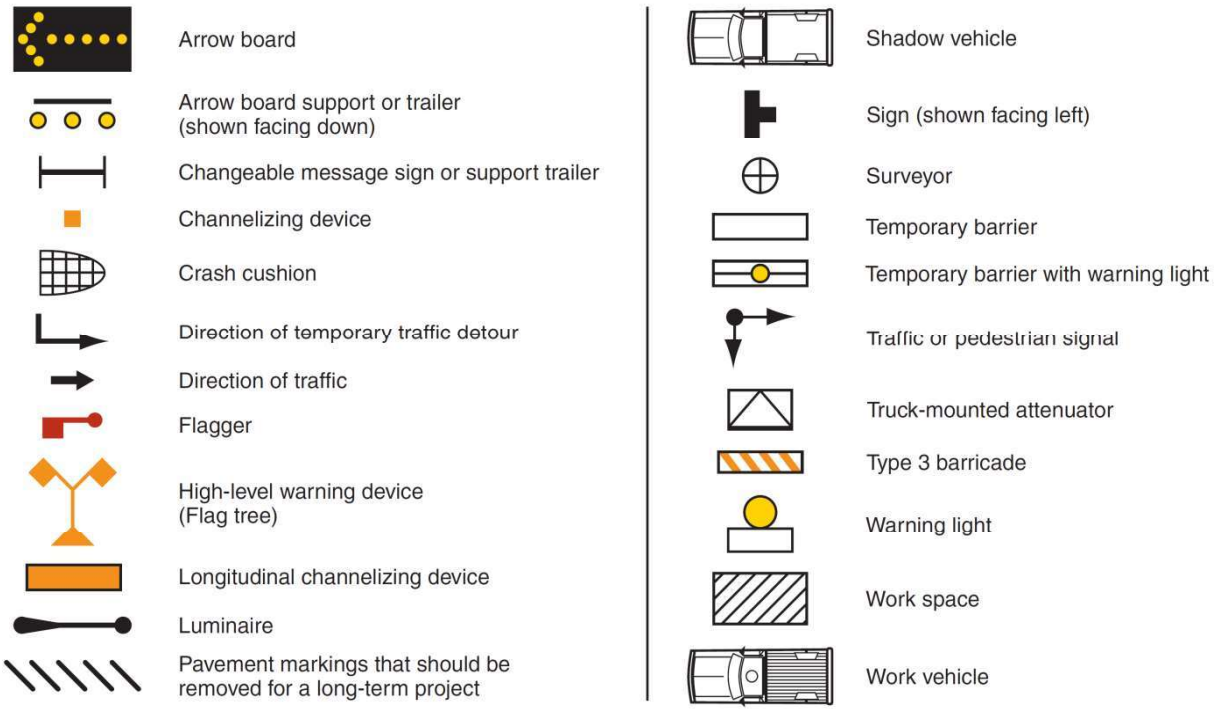


Table 6H-3. Recommended Advance Warning Sign ~~Minimum~~ Spacing

Road Type	Distance Between Signs**		
	A	B	C
Urban ~~(low speed)~~ - 25 mph or less***	100 feet	100 feet	100 feet
Urban - more than 25 mph to 40 mph***	250 feet	250 feet	250 feet
Urban ~~(high speed)~~ - more than 40 mph***	350 feet	350 feet	350 feet
Rural	500 feet	500 feet	500 feet
Expressway / Freeway	1,000 feet	1,500 feet	2,640 feet

* ~~Speed category to be determined by the highway agency.~~

** The column headings A, B, and C are the dimensions shown in Figures 6H-1 through 6H-46. The A dimension is the distance from the transition or point of restriction to the first sign. The B dimension is the distance between the first and second signs. The C dimension is the distance between the second and third signs. (The "first sign" is the sign in a three-sign series that is closest to the TTC zone. The "third sign" is the sign that is furthest upstream from the TTC zone.)

*** Posted speed limit, off-peak 85th-percentile speed prior to work starting, or other anticipated operating speed in mph.

Table 6H-4. Formulas for Determining Taper Length

Speed (S)	Taper Length (L) in feet
40 mph or less	$L = \frac{WS^2}{60}$
45 mph or more	$L = WS$

Where: L = taper length in feet
W = width of offset in feet
S = posted speed limit, or off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph

Table 6H-4(CA). Taper Length Criteria for Temporary Traffic Control Zones (for 12 feet Offset Width)

Speed* S (mph)	Minimum Taper Length** for Width of Offset 12 feet (W)			
	Merging L (feet)	Shifting L/2 (feet)	Shoulder L/3 (feet)	Down Stream (feet)***
20	80	40	27	50
25	125	63	42	50
30	180	90	60	50
35	245	123	82	50
40	320	160	107	50
45	540	270	180	50
50	600	300	200	50
55	660	330	220	50
60	720	360	240	50
65	780	390	260	50
70	840	420	280	50
75	900	450	300	50

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

** - For other offsets use the following merging taper length formula for L:

For speeds of 40 mph or less, $L=WS^2/60$

For speeds 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

*** - Maximum downstream taper length is 100 feet. See Section 6C.08.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

REGISTERED CIVIL ENGINEER

September 20, 2024
PLANS APPROVAL DATE

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

REGISTERED PROFESSIONAL ENGINEER — Mohan Y. Bonala — No. 083046 — Exp. 6-30-26 — CIVIL — STATE OF CALIFORNIA

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		
					X	Y	Z **
	TANGENT 2L	MERGING L	SHIFTING L/2	SHOULDER L/3	TAPER	TANGENT	CONFLICT
mph	ft	ft	ft	ft	ft	ft	ft
20	160	80	40	27	20	40	10
25	250	125	63	42	25	50	12
30	360	180	90	60	30	60	15
35	490	245	123	82	35	70	17
40	640	320	160	107	40	80	20
45	1080	540	270	180	45	90	22
50	1200	600	300	200	50	100	25
55	1320	660	330	220	50	100	25
60	1440	720	360	240	50	100	25
65	1560	780	390	260	50	100	25
70	1680	840	420	280	50	100	25
75	1800	900	450	300	50	100	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
	ft	ft	ft
URBAN - 25 mph OR LESS	100	100	100
URBAN - MORE THAN 25 mph TO 40 mph	250	250	250
URBAN - MORE THAN 40 mph	350	350	350
RURAL	500	500	500
EXPRESSWAY / FREEWAY	1000	1500	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 recommmended distances.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM TABLES FOR LANE AND RAMP CLOSURES

T9

7-1-24

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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] 30" x 30"
- [C] 36" x 18"
- [D] 36" x 42"
- [E] 20" x 7"

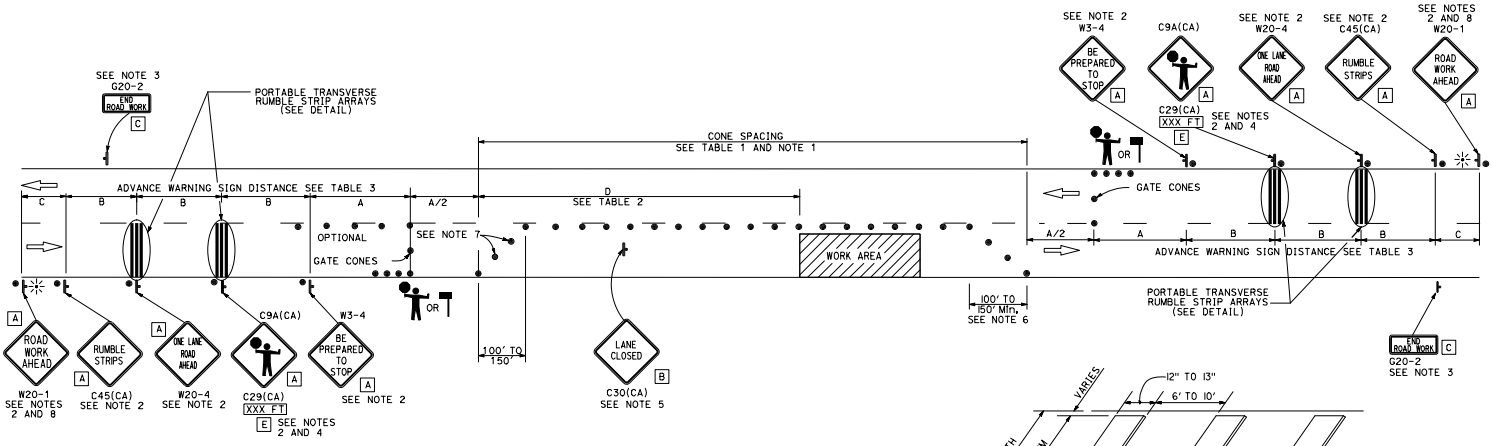
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

REGISTERED CIVIL ENGINEER

September 20, 2024
PLANS APPROVAL DATE

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

REGISTERED PROFESSIONAL ENGINEER — Johan Y. Bonilla — No. C63046 — Exp. 6-30-26 — CIVIL — STATE OF CALIFORNIA

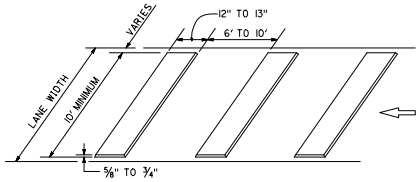


NOTES:

1. Portable delineators placed at one-half the spacing indicated for traffic cones may be used instead of cones for daytime closures only.
2. Sign must be equipped with at least two flags for daytime closures. Flags must be orange in color and at least 16 inches by 16 inches in size. Place flashing beacons as shown for closures 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. An optional C29(CA) sign may be placed below the C9A(CA) sign.
5. 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.
6. Length may be reduced by the Engineer to address site conditions.
7. Either traffic cones or barricades shall be placed on the taper. Barricades shall be Type I, II, or III.
8. If C45(CA) is not used, measure distance C from W20-4.

LEGEND

- TRAFFIC CONE
- TEMPORARY TRAFFIC CONTROL SIGN
- PORTABLE FLASHING BEACON
- FLAGGER
- AUTOMATED FLAGGER ASSISTANCE DEVICE (AFAD)



PORTABLE TRANSVERSE RUMBLE STRIP ARRAY DETAIL

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM WITH REVERSIBLE CONTROL ON TWO LANE CONVENTIONAL HIGHWAYS

NO SCALE

T13

7-1-24

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