

TRANSPORTATION MANAGEMENT PLAN

PROJECT: **Zayo 395 - Oversight**

1.0 PROJECT INFORMATION

1.1 SCOPE OF WORK & BACKGROUND

BACKGROUND/LOCATION/SCOPE: This project in Sierra, Lassen, and Modoc County from the Nevada State line to the Oregon State Line on Highway 395 will install broadband along the highway to improve telecommunications between Reno, Nevada and Umatilla, Oregon.

PERSONNEL: Clint Burkenpas is the PM; Brandon Rather is the PE; Sergio Mendoza is the CE; the RE and the Contractor are TBD.

SCHEDULE: There are an estimated 273 working days (WDAYs) for this project. All working days will require traffic control. Construction is scheduled to occur between April 2023 and April 2024.

1.2 EXISTING HIGHWAY FACILITY

ROADWAY: State Route 395 is a 2-lane conventional highway that serves as the primary route between Lassen 395 Susanville to Nevada State Line, Lassen 395 Susanville to Alturas and Modoc 395 Alturas to the Oregon State Line. Alignment is tangent on a flat profile. One 12-ft paved lane with 1 to 10-ft paved shoulders is provided for each direction of travel. The regulatory speed limit is 55 MPH.

STRUCTURES: There are 30 structures within the project limits. Structure work is anticipated for this project.

Location	Structure Number	Name	Length (ft)	Width (ft)
Las-395-R0.10	07-0072L	Evans Canyon UC	59.7	41.7
Las-395-R0.10	07-0072R	Evans Canyon UC	66.9	41.7
Las-395-R1.09	07-0075L	Scott UC	56.1	50.0
Las-395-R1.09	07-0075R	Scott UC	63.0	42.3
Las-395-R4.60	07-0076L	Route 395/70 Separation	140.1	41.0
Las-395-R4.60	07-0076R	Route 395/70 Separation	127.0	41.0
Las-395-15.87	07-0023	Long Valley Creek	76.8	42.3
Las-395-R17.51	07-0068	Galeppi UC	67.9	50.0
Las-395-R21.34	07-0052	Long Valley Creek Overflow	113.8	50.0
Las-395-R22.97	07-0025	Doyle Overhead	180.1	50.0
Las-395-R24.69	07-0053	Willow Ranch Creek	64.0	50.0
Las-395-26.19	07-0057	Long Valley Creek	40.0	0.0
Las-395-28.00	07-0056	Long Valley Creek	40.0	0.0
Las-395-62.19	07-0030	Standish Irrigation Canal	27.9	51.5
Las-395-R71.17	07-0080	Dill Slough	300.0	43.6
Las-395-R71.92	07-0081	Susan River Overflow	300.0	43.6
Las-395-72.29	07-0034	Susan River	120.1	34.4
Las-395-R114.25	07-0074	South Termo Ditch	25.9	0.0
Mod-395-R1.93	03-0058	Flournoy Equipment UC	15.1	0.0
Mod-395-3.73	03-0019	South Fork Pit River	91.9	32.5

Mod-395-R15.06	03-0055	Juniper OH	157.2	50.0
Mod-395-R16.52	03-0052	South Fork Pit River	170	50.0
Mod-395-R19.64	03-0053	South Fork Pit River	162.1	50.0
Mod-395-R20.77	03-0054	Alturas OH	165.0	50.0
Mod-395-21.88	03-0023	North Fork Pit River	62.0	76.1
Mod-395-26.23	03-0009	North Fork Pit River	137.1	44.3
Mod-395-26.71	03-0010	Parker Creek	35.1	44.9
Mod-395-32.62	03-0013	Toms Creek	14.1	0.0
Mod-395-34.08	03-0014	Joseph Creek	19.4	44.0
Mod-395-54.46	03-0016	Willow Creek	17.1	0.0

* Zero width is shown for non-grade-top culverts or structures not carrying vehicular traffic, such as underpasses or pedestrian overcrossings.

TRAFFIC VOLUMES:

2019 AADT Volumes			
Description	Co-Rte-Reference PM (Leg)	Vehicle AADT Total*	Truck % Total Vehicles
Jct. Rte. 70 West	Las-395-R4.615 (B)	10,100	6.94
Jct. Rte. 70 West	Las-395-R4.615 (A)	6,300	17.89
Garnier Road	Las-395-29.84 (A)	4,700	46.96
Jct. Rte. 36 West	Las-395-R61.094 (B)	9,100	3.26
Jct. Rte. 36 West	Las-395-R61.094 (A)	9,300	10.86
Lassen/Modoc County line	Las-395-138.979 (O)	880	27.29
Alturas, Jct. Rte. 299 West	Mod-395-22.764 (B)	6,300	4.60
Alturas, Jct. Rte. 299 West	Mod-395-22.764 (A)	5,500	3.18
Jct. Rte. 299 East	Mod-395-29.295 (B)	1,650	11.76
Jct. Rte. 299 East	Mod-395-29.295 (A)	1,200	7.83
Oregon State Line	Mod-395-91.593 (B)	760	12.11

*Annual Average Daily Traffic (AADT) is for both directions.

TMS Volumes For Project Traffic Delay			
Description	Peak VPH** (1 Direction)		Data Source for Peak VPH TMS #; Co-Rte-Reference PM (Leg) Count Date
	WD	WE	
Jct. Rte. 70 West	406	346	TMS #198; Las-395-R4.615 (A) September 2019
Jct. Rte. 70 West	667	767	TMS #215; Las-395-R4.615 (B) August 2019
Garnier Road	327	350	TMS #289; Las-395-R29.840 (A) August 2019
Alturas, Jct. Rte. 299 West	316	241	TMS #365; Mod-395-22.764 (A) May 2019
Alturas, Jct. Rte. 299 West	360	239	TMS #364; Mod-395-22.764 (B) May 2019

**Peak Vehicle Per Hour (VPH) volumes; WD = Weekday; WE=Weekend

CENSUS LOOPS: There are 26 existing traffic monitoring stations within the project limits that must be protected in place or replaced if damaged during construction. See TMP Attachment "A" - TMS Elements. **SSP 15-1.03A for existing loop detectors is included.** For further information contact Traffic Census, Griffin Lemoine at 530-949-7311.

ITS FIELD ELEMENTS: There are 15 existing ITS Field Elements within the project limits that must be protected in place or replaced if damaged during construction. See TMP Attachment "B" - ITS Elements. **Therefore, sections 10-1.02B, "Traffic Elements", and 87-21.03B(2), "Maintaining Existing Traffic Management System Elements During Construction", of the Standard Specifications apply. Include bid item 870009 for "Maintaining Existing Traffic Management System Elements During Construction" and the ITS Field Elements Pre-Bid Cert List.** For further information contact Jeremiah Pearce, Chief, Office of ITS Engineering & Support at 530-225-3320.

2.0 TRAFFIC IMPACTS

2.1 GENERAL TRAFFIC IMPACTS

TRAFFIC CONTROL: Construction will be conducted under Standard Plan T10 Lane and Shoulder Closures with T18 for speed reduction at Sie-395-PM 0.00 to Las-395-PM R5.217 . Most operations can be conducted during typical 12-hour work shifts. Based on traffic volumes, lane and shoulder closures will be allowed anytime except after 3:00 p.m. Fridays, on weekends, and "designated holidays".

Construction will be conducted under Standard Plan T13 and T13B for reversing traffic control with T22 for speed reduction at Las-395-PM R5.217 to Mod-395-PM R20.975 and Mod-395-PM 22.930 to PM 61.560. Most operations can be conducted during typical 12-hour work shifts. Based on traffic volumes, lane closures will be allowed anytime except after 3:00 p.m. Fridays, on weekends, on "designated holidays" and on special days.

Construction will be conducted under Standard Plan T11 or T12 Lane and Shoulder Closures with T19 for speed reduction at Mod-395-PM R20.975 to PM 21.920. Most operations can be conducted during typical 12-hour work shifts. Based on traffic volumes, lane and shoulder closures will be allowed anytime except after 3:00 p.m. Fridays, on weekends, and "designated holidays".

Only one lane or shoulder closure will be allowed at any one time. Use of temporary barrier is not anticipated.

PROJECT TRAFFIC DELAYS: Based on a 2.0-mile long lane closure, delays are expected to be 17 minutes from LAS-395-PM R5.217 to R29.39; 17 minutes from Las-395-PM R29.39 to Mod-395-39.49; 15 minutes from Mod-395-39.49 to 61.56.

CORRIDOR TRAFFIC DELAYS: This project is in 3 corridors. Lassen State Route 395 is in the Susanville to Nevada border Corridor, for which the D2 DTM has established a maximum corridor delay limit of 30 minutes. Lassen State Route 395 is in the Susanville to Alturas Corridor, for which the D2 DTM has established a maximum corridor delay limit of 30 minutes. Modoc State Route 395 is in the Alturas to Oregon border Corridor, for which the D2 DTM has established a maximum corridor delay limit of 15 minutes. There is three other projects scheduled in these corridors that would create a conflict with this project during the 2023 Constr. Yr. (known as of the date of this TMP). There is no other project scheduled in these corridors that would create a conflict with this project during the 2024 Constr. Yr. (known as of the date of this TMP).

2023 SCHEDULED CONSTRUCTION																	
EA	LOCATION			MONTHS CONSTRUCTION IS SCHEDULED (Delay in Minutes)												NICKNAME	TMP COMPLETED
	CO	RTE	PM/PM	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC		
2H330	Las/Mod	395	0.0/138.98 0.0/61.56				17	17	17	17	17	17	17	17	17	THIS PROJECT Zayo 395 Oversight	N
2J890	Las	395	0.10, 15.87, R21.34				X	X	X	X	X	X	X			Bridge Maintenance in Las, Plu, & Teh	N
Total Corridor Delay							17	17	17	17	17	17	17	17	17	Susanville to Nevada border Corridor Maximum Delay 30 Minutes	
2H330	Las/Mod	395	0.0/138.98 0.0/61.56				17	17	17	17	17	17	17	17	17	THIS PROJECT Zayo 395 Oversight	N
3J470	Las	395	92.00/98.50				X	X	X	X	X	X				Secret Valley Overlay	N
4H740	Las	395	96.50				X	X	X	X	X	X				Secret Valley SRRA	N
Total Corridor Delay							17	17	17	17	17	17	17	17	17	Susanville to Alturas Corridor Maximum Delay 30 Minutes	
2H330	Las/Mod	395	0.0/138.98 0.0/61.56				15	15	15	15	15	15	15	15	15	THIS PROJECT Zayo 395 Oversight	N
Total Corridor Delay							15	15	15	15	15	15	15	15	15	Alturas to Oregon border Corridor Maximum Delay 15 Minutes	

PUBLIC DELAY COSTS: Delay costs are those costs borne by the traveling public when they are subject to detours and one-way traffic control, such as increased fuel usage and time lost when stopped at lane closures. The following public delay costs are calculated for this project:

Work Location Co-Rte-PM	Work Shift	Delay Cost / Work Shift*	No. of Days	Delay Cost
Las-395- R5.217/R29.38	12-hr	\$17,213.34	120	\$2,065,601.26
Las-395-R29.38/ Mod-395-20.975	12-hr	\$18,614.51	120	\$2,233,741.23
Mod-395- 22.79/61.56	12-hr	\$10,091.97	120	\$1,211,036.51
Total Public Delay Cost =				\$5,510,379

*Based on \$0.25/min car, \$0.34/min bus/rv and \$0.56/min truck delay cost.

The Road User Cost (RUC) for this project is zero, unless authorization is obtained from Chief, North Region Construction, per NR Memo dated 3/3/16.

2.2 ADVERSE EFFECTS ON SPECIFIC TYPES OF TRAFFIC

BICYCLES & PEDESTRIANS: Bicyclists and pedestrians are allowed within the project limits. During operations, the work zone shoulder will be closed to public use. Bicyclists and pedestrians will use the opposing paved shoulder to travel past the work zone. No significant impacts to either user group is anticipated, since few of these users are expected to be present due to the rural location

TRUCKS: State Route 395 is designated as Terminal Access (STAA) for trucks. It is not anticipated that traffic control for this project will alter the requirement for STAA truck routes; therefore, no truck impacts are anticipated. Annual permits are issued for trucks 8.5-ft to 12-ft in width. Occasionally under special approval, single trip permits are issued for trucks over 12-ft in width. This project does not include the use of temporary barrier or other hard devices; no changes in roadway width available to trucks will occur. A 16-ft horizontal clearance must be provided to traffic at all locations.

ROAD CONNECTIONS: There are public road connections within the project and traffic control limits. During traffic control, motorists on local roads waiting to join the queue will be subject to the same 17-min delay, from Las-395-PM R5.217 to R29.39; 17-min delay, from Las-395-PM R29.39 to Mod-395-39.49; 15-min delay, from Mod-395-39.49 to 61.56, as mainline traffic. Due to the low traffic volumes on these roads, no significant impacts are expected.

SPECIAL DAYS: The following table shows a listing of some annual community events found that may increase traffic through the work zone:

Event	Date	Location
Hot August Nights	First Tuesday thru Sunday in August	Reno

3.0 MITIGATION TO TRAFFIC IMPACTS

3.1 TRANSPORTATION MANAGEMENT PLANS

Transportation Management Plans (TMPs) present a program of operational and demand management strategies designed to maintain acceptable levels of traffic flow during periods of construction activities. TMPs utilize traditional traffic handling techniques such as detours and stage construction, in concert with public awareness campaigns to provide congestion relief during the life of the construction project. For more information regarding TMP Deputy Directive DD-60-R2 see <https://admin.onramp.dot.ca.gov/deputy-directives>

3.2 TMP GOALS:

- Minimize traffic delays while maximizing public and worker safety during construction
- Provide instructional information regarding traffic management to the RE
- Provide project-specific traffic SSPs to be included in the project contract
- Ensure that maximum corridor delay criteria is not exceeded on the subject corridors

3.3 TMP ELEMENT SUMMARY

The following TMP elements are **required** to mitigate the expected traffic impacts associated with this project:

SECTION	TMP ELEMENT	PE	RE	SPECS/ CONTRACTOR	COMMENTS
3.4.1	TRAFFIC ANALYSIS				
	Lane Closures	X	X	X	Max length = 2.0 miles Max stop time = 14 minutes; Max delay time = 17 minutes No more than one lane closure at any one time
	Lane Closure Charts	X	X	X	Required
	Special Days	X	X	X	Required
	Lane Closure Schedule		X	X	Required
	Coordination	X	X	X	2J980 (Bridge Maintenance) 3J740 (Secret Valley Overlay) 4H740 (Secret Valley SRRA)
3.4.2	PUBLIC AWARENESS				
	Public Information Campaign	X	X		\$20,000
	Worker Safety Media Campaign	X			\$10,000
	CHIN		X		
	RIB		X		
3.4.3	TRAFFIC CONTROL SYSTEMS				
	Traffic Control Plans	X	X	X	Required: <ul style="list-style-type: none"> • Std Plan T9 (TCS element spacing tables) • Std Plan T10 (Lane and shoulder closure on freeways and expressways) • Std Plan T11 (Lane closure on multilane conventional highway) • Std Plan T11A Traffic Control System for Changeable Lane Closure on Multilane Conventional Highways and Expressways • Std Plan T13 (Reversing Traffic Control on 2-lane conventional roadway) • Std Plan T13B (Additional Flaggers) • Std Plan T18 (Speed Reduction on Freeways and Expressways) • Std Plan T19 (Speed Reduction on multilane conventional highways) • Std Plan T22 (Speed Reduction on two-lane conventional highways) • Std Plan T30 thru T34 (Temporary pedestrian access routes) as needed
	Work Zone Speed Limit Reduction	X	X	X	Required per California Manual for Setting Speed Limits and NR Construction Requirements, documented by Project Engineer on Construction Work Zone Speed Limit Reduction Determination Form (CEM 1301)
	Advance/Additional Flaggers				Requirements: <ul style="list-style-type: none"> • Advance flaggers are not required

MINOR TMP

EA:
 EFIS:
 CO-RTE-PM:

 PREPARER:

02-0J890
 0219000172
 Sie-395-0.0/3.18
 Las-395-0.0/138.98
 Mod-395-0.8/61.56
 Khoi Nguyen

					• Additional flaggers are required, see below
	Pilot Car	X	X	X	Required
	Impact Attenuator Vehicle	X	X	X	Required for lane closures on multilane facilities.
	PCMSs	X	X	X	Required • 1 for each direction of travel
3.4.4	CHP				
	General Support		X		
	COZEEP				Not required
3.4.5	CONTINGENCY PLANS				
	Backup Equipment Available			X	
	Contact Local Maintenance		X		
	Contact Local Contractors		X		
	24-Hour Traffic Control				Not required
	Incident Response		X		
	Contact TMT		X		
	Contact CHP		X		
	Emergency Evacuation Plan	X	X	X	Use if project is within Elevated Fire Danger Zone on Cal Fire map. See below.

3.4 TMP ELEMENT DETAILED DESCRIPTION

The following sections contain project-specific information corresponding to the **required TMP elements** in the summary table above:

3.4.1 TRAFFIC ANALYSIS

LANE CLOSURES: Lane closures on 2-lane conventional highways are not allowed during times when the traffic volumes are high enough to create queues too large to clear in a standard traffic control cycle. Based upon the low traffic volumes for this work location, lane closures will be allowed anytime except after 3:00 p.m. on Fridays, weekends, "designated holidays" and special days. During operations, one 12-ft wide paved traffic lane with adjacent shoulder must be provided at all times. To minimize cumulative delays that result from several closures on a Corridor, only one lane closure is allowed at any one time. During Standard Plan T13 lane closures, public traffic may be held; a maximum of 14 minutes, with the maximum delay required to travel through the lane closure not to exceed 17 minutes from Las-395-PM R5.217 to R29.39; a maximum of 14 minutes, with the maximum delay required to travel through the lane closure not to exceed 17 minutes from Las-395-PM R29.39 to Mod-395-39.49; a maximum of 11 minutes, with the maximum delay required to travel through the lane closure not to exceed 15 minutes from Mod-395-39.49 to 61.56.

SSP12-4.02C(7), "Traffic Control System Requirements", is edited to include these restrictions.

LANE CLOSURE CHARTS: Required for T13 closures. Include **SSP 12-4.02C(3)(f), "Lane Closure Restrictions for Designated Holidays and Special Days",** and **SSP 12-4.02C(3)(k), "Conventional Lane Closure Requirements".**

SPECIAL DAYS: There is one special local event identified to occur during weekdays when operations will be active. Include **SSP 12-4.02A(2) to define special days.** The RE is responsible to contact the Encroachment Permit Office, local chambers of commerce, visitor guides, city/county websites, newspapers, etc. to identify other special events that may become scheduled after PS&E. An awareness of these events will allow the RE to be more sensitive to traffic control needs during these events and allow adjustments to the scheduled work and closures as necessary.

DRIVEWAYS: Standard Spec. 7-1.03 "Public Convenience" always applies. It directs the Contractor to "Maintain convenient access to driveways, houses, and buildings..." Existing access cannot be closed if alternate access is not available. Similar to road connections, base material must be placed to provide a temporary ramp when the profile difference between the mainline and driveway is excessive.

TRUCKS: This project only includes standard plan lane closures; thus, no truck restrictions will occur. **Standard Spec. 12-4.02A(3)(b) "Closure Schedules" always applies** and requires the Contractor to notify the RE not less than 25 days prior to reducing the horizontal and vertical clearance on the traveled way, inclusive of shoulders to 2 lanes or less. (NOTE: Notification does not apply if the change in width is only due to a single-day standard plan lane or shoulder closure with cones, where the full width of existing traveled way and/or shoulders will be provided to public traffic at the end of the working day). For further information contact Armando Perez, North Region Transportation Permits liaison for District 2 at 916-917-3722.

LANE CLOSURE SCHEDULE: Lane closures are requested by the Contractor using the electronic Lane Closure System (LCS). The RE submits approved scheduled lane closures via LCS online. Scheduled lane closures must be submitted by 5:00 p.m. Monday of the week preceding the planned closure. **Standard Spec 12-4.02A(3)(b) "Closure Schedules" always applies.**

COORDINATION: During the 2023 Constr. Yr there are three other projects scheduled within close proximity that would require coordination. **SSP 5-1.20A for coordination with other entities is included.**

3.4.2 PUBLIC AWARENESS

TMP PUBLIC INFORMATION CAMPAIGN: The PE will include \$20,000 in the Engineer's Estimate for Dept-Furnished Item # 066063, "Transportation Management Plan - Public Information" for TMP Public Information Campaign to cover public outreach throughout the duration of the project. The RE, working with the D2 PIO, will collaborate to prepare information. The D2 PIO, Denise Yergenson, is the primary contact for news media interactions (530-338-5429). The RE is required to maintain communication with the D2 PIO and D2 DTM regarding the progress of the project and its effect on traffic. To supplement these efforts, the RE will coordinate with the D2 DTM to activate Highway Advisory Radio (HAR) messages and Changeable Message Signs (CMSs) when corridor delays are significant.

WORKER SAFETY MEDIA CAMPAIGN: Worker Safety Media campaigns have been shown to reduce work zone vehicle collisions, increase public and worker safety and reduce incident related congestion. With safety and reliability being the Department's number 1 and 2 goals respectively; it is appropriate for construction funding to be set aside for worker safety media advertisements. To assist in fulfilling these goals, the PE will add an additional \$10,000 to the Engineer's Estimate Dept-Furnished Item # 066063.

The combined total for TMP Public Information Campaign and Worker Safety Media Campaign for this project under Dept-Furnished Item # 066063 is \$30,000.

CHIN (CALIFORNIA HIGHWAY INFORMATION NETWORK): The information from LCS electronic submittals is entered into CHIN, an information network used by motorists to obtain lane closure information that may result in delays along specified routes. The information is accessed via phone at 1-800-GAS-ROAD (427-7623) within California, 916-445-7623 from outside California, or via the Internet at: <https://roads.dot.ca.gov/>. The RE will immediately report any deviations from the submitted LCS so that the CHIN can be updated. If this occurs during regular working hours (Monday through Friday, 7:00 a.m. to 5:00 p.m.) the RE will make a report to the D2 Dispatch office. During evening hours, the RE will make a report to the appropriate CHP dispatch. The RE will periodically dial the public number to the CHIN and verify the system has correct and current information related to the project.

RIB (ROAD INFORMATION BULLETIN): The D2 PIO incorporates current LCS information into the weekly RIB, which is distributed on Fridays. The RIB is faxed or e-mailed to over 100 locations including, but not limited to, local agencies, law-enforcement offices, newspapers, radio stations, TV stations, truck stops, CalFire offices, Forest Service offices and hospitals within the District as well as HQ transportation permits office.

3.4.3 TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE

TRAFFIC CONTROL PLANS:

- Std Plan T9 (TCS element spacing tables)
- Std Plan T10 (Lane and shoulder closure on freeways and expressways)
- Std Plan T10A (Lane closure with partial shoulder use or complete closure on freeways and expressways)
- Std Plan T11 (Lane closure on multilane conventional highway)
- Std Plan T11A Traffic Control System for Changeable Lane Closure on Multilane Conventional Highways and Expressways
- Std Plan T13 (Reversing Traffic Control on 2-lane conventional roadway)
- Std Plan T18 (Speed Reduction on Freeways and Expressways)
- Std Plan T19 (Speed Reduction on multilane conventional highways)
- Std Plan T22 (Speed Reduction on two-lane conventional highways)
- Std Plan T30 thru T34 (Temporary pedestrian access routes) as needed

WORK ZONE SPEED LIMIT REDUCTION: Per 2020 California Manual for Setting Speed Limits, for construction work zones on the State highway system, the speed limit shall be reduced by 10 mph from the posted speed limit unless an exception is granted. Authorized exceptions to the Work Zone Speed Limit Reduction are listed in Section 2.3.2. The decisions regarding speed reduction should be discussed at the PDT meeting and documented on the Decision Log. The PE must have team

concurrence for un-authorized exceptions and obtain approval from the Deputy District Directors for Traffic Operations and Construction.

Per Construction Work Zone Speed Limit Reduction Determination Form (CEM 1301) submitted by the Project Engineer with the TMP Request this project will require a speed zone reduction. **SSP 12-4.02C(12) for construction work zone speed limit reduction and 12-3.37 for portable vehicle speed feedback signs are included.**

POSITIVE PROTECTION DEVICES: Positive protection devices should be considered in work zone situations that place workers on foot at increased risk from motorized traffic traveling over 45 mph. When the protection is only needed during the work hours and the situation is expected to last only a few days a Stationary Impact Attenuator Vehicle or Mobile Barrier could be used. Contact Construction and Traffic Safety Acting Chief, Dan Norris regarding the most appropriate device for this project.

ADVANCE/ADDITIONAL FLAGGERS: Based on traffic volumes, mainline queues are not anticipated to back-up beyond traffic control signage. Advance flaggers are not required on the mainline. Additional flaggers are required at the following locations:

- Mod-395-PM 28.29 (Junction SR299/SR395)
- Las-395-PM 51.86, 70.21 (Standish Rd/A-3)
- Las-395-PM 115.32 (Termo Grasshopper Rd)

PILOT CAR: Pilot cars are required on this project whenever flaggers cannot maintain visual contact.

IMPACT ATTENUATOR VEHICLE (IAV): Required for lane closures on multilane highways. **SSP 12-4.02C(7) for Traffic Control System Requirements is included and edited for these restrictions.**

PORTABLE CHANGEABLE MESSAGE SIGNS (PCMSs): PCMSs are required for this project. One PCMS must be placed in advance of the first warning sign for each closure. **SSP 12-3.32C for portable changeable message signs is included.**

3.4.4 CALIFORNIA HIGHWAY PATROL (CHP)

The CHP requests the **RE** and/or Construction Inspector be available for contact during all hours that traffic control restrictions are in place. The **RE** will provide a Resident Engineer Report of Assignment to the CHP to clearly define a Caltrans point of contact. The **RE** Report of Assignment contains a callout list for Caltrans as well as the Contractor. It includes names, radio call numbers, phone numbers, cell-phone numbers, pager numbers, and fax numbers. This information is shared among agencies to allow the CHP to quickly resolve any traffic related concerns they encounter:

Dispatch Area	Office Phone	Dispatch Phone	Area Commander
Susanville	530-252-1803	530-252-1900	Captain Ian Troxell

3.4.5 CONTINGENCY PLANS:

It is the responsibility of the **RE** to request a contractor-produced contingency plan for reopening closed lanes to public traffic in the event of equipment breakdown, shortage of materials, lack of production of materials, or other failures. The **RE** will request, review, and approve the contractor contingency plan prior to commencement of work. Such a plan should include on-site (or readily available) appropriate backup equipment, and identification of potential suppliers of additional material for ready availability. If a road closure cannot be reopened, the contractor is required to provide 24-hour traffic control. **SSP 12-4.02A(3)(c) is included in projects with a Traffic Incident Response Plan (TIRP), Emergency Evacuation Plan (EEP) or complex traffic handling and schedule constraints.**

EMERGENCY EVACUATION PLAN: It is the responsibility of the **RE** to request a Contractor-produced Emergency Evacuation Plan (EEP) for any project that is within the Elevated Fire Danger Zone on the

Cal Fire map at: <https://osfm.fire.ca.gov/fire-hazard-severity-zones-maps-2022/> This project does meet that criteria. **SSP 12-4.02A(3)(c), edited for EEP, is included.**

INCIDENTS: Incident management requires actions are taken thoughtfully and swiftly to restore or minimize effects on traffic when delay occurs. The major components of incident management incorporate early detection of events (such as collisions, material spills, and vehicle breakdowns) that can cause significant traffic delay and quick response time to those events. Following is a list of key personnel in the event an incident occurs:

Name	Phone Number	Cell
Caltrans Dispatch	530-225-3273	--
William Sutherland, D2 DTM	530-225-3245	530-949-0922
Travis Heath, TMC Liaison	530-225-3206	530-604-3784
Kristen Begrin, LCS Coordinator	530-225-3379	530-410-1506
Denise Yergenson, D2 PIO Office	530-225-3260	530-209-4419
MTCE Superintendent (Ben Mc Daniel – Susanville)	530-257-5102	530-945-4941
MTCE Supervisor (Brenden Raymond – Susanville East)	530-257-0543	530-941-2625
MTCE Supervisor (Preston Romesha – Alturas)	530-233-4263	530-260-0320

4.0 TMP IMPLEMENTATION, REVIEW, AND APPROVALS

4.1 TMP IMPLEMENTATION

The ultimate responsibility for implementation of a TMP belongs to the Project Manager (PM). The PM for this project is Brandon Rather (Office phone 530-225-3251).

4.2 TMP REVIEWS

This TMP was prepared by Khoi Nguyen, and reviewed by William Sutherland, M.S., P.E., Chief, Office of Traffic Management, Caltrans, District 2 and Jeremiah Pearce, Chief of ITS Engineering and Support.

4.3 TMP APPROVALS

See next page.

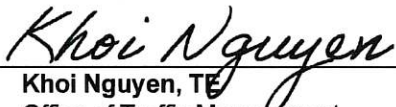
5.0 ATTACHMENTS

- TMP Attachment "A" - TMS Elements
- TMP Attachment "B" - ITS Elements
- TMP Attachment "C" - Actual Traffic Volumes at Project Location
- Project-specific TMP special provisions (2022 Standards)


**TRANSPORTATION MANAGEMENT PLAN
APPROVALS**

TMP APPROVALS: The District Staff recommends approval of this Traffic Management Plan.

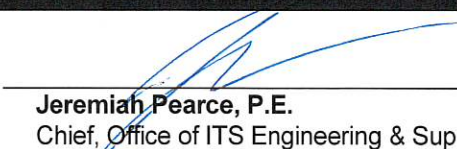
PREPARED BY:

 _____ Khoi Nguyen, TE Office of Traffic Management District 2 530-215-4169	<u>4/4/2023</u> Date
--	-------------------------

APPROVAL RECOMMENDATIONS:

 _____ William Sutherland, M.S., P.E. Chief, Office of Traffic Management District 2 530-225-3245	<u>4/4/2023</u> Date
--	-------------------------

ITS REQUIREMENTS APPROVAL RECOMMENDATIONS:

 _____ Jeremiah Pearce, P.E. Chief, Office of ITS Engineering & Support District 2 530-225-3320	<u>4/10/23</u> Date
--	------------------------

TMP Attachment "A"

DISTRICT 2 TRAFFIC MONITORING STATION ELEMENTS

STATUS OF STATION: E = Existing (Current active collection station NOT needing upgrade), EU = Existing (Current active collection station needing upgrade), D = Design (Currently in Design), P = Proposed

LEG DEFINITION: A Leg = After; census station located after Reference PM (cross street) B Leg = Before; census station located before Reference PM (cross street) O Leg = equal traffic volume for back and ahead legs X Leg = interchange (with counts collected in the middle of the interchange) F Leg = off ramp N Leg = on ramps
LOCATION DEFINITION: Reference Location = Census station location along state route at surface street crossing Actual Location = Census station location along state route at loops (before or after surface street crossing)
CABINET: Asset Management Reference Only: B = represents the census station does not connect to the office via phone 1 = represents the census station does connect to the office via phone

ELEMENT TYPE: Hose = Temporary rubber hose taped onto pavement surface which collects traffic volumes Loops = Permanent sensor in pavement which collects traffic volumes Piezoelectric axle sensor (Piezo) = Permanent sensor in pavement which collects classifications and must be on the surface

LAST UPDATED = 2021-11-01 KL LIGHT GREEN CELL = LAST ADDED / UPDATED

Station Number	Co	Rte	Pre	TSN Reference PM ONLY (See Suf Actual)	Reference Location	Leg	Cabinet	Detector Types	No. of Lanes	TMP Actual Location of Loops by PM	TMP Actual Location of Pull Box by PM	General Location	Description	No. of Loops	No. of Piezos/Bending Plates	Status	Potential Impact
125	Las	70		3.889	Jct Rte 395	B	0	Loops	2	3.556	1.761 West Of Jct 395		Pull box and security pad located on N/S 291 East of HAR sign. Installed 1996.	2	0	E	Not likely - Protect in Place
170	Mod	299		40.630	Jct Rte 395, Alturas	B	0	Loops	2	40.378	641 West of Railroad track, Alturas		Pull box on S/S by 35 MPH sign. Installed 1999.	2	0	E	Not likely - Protect in Place
171	Mod	299		40.640	Jct Rte 395, Alturas	A	0	Loops	2	41.181	2.855 East of Jct 395		Pull box located on S/S between 55MPH / 65 MPH signs. Installed 1986.	2	0	E	Not likely - Protect in Place
215	Las	395	R	4.615	Jct Rte 70 W	B	1	Loops / Piezos	4	R2.852	R2.852	Cab. On SB lanes, approx. 45' off of E/P, at PM 2.85, JSD pullout	loop/piezo/loop configuration.	8	4	E	Not likely - Protect in Place
996	Las	395	R	4.416	395 NB off to SR 70	F	0	Loop	1	R4.54	R4.54	385 N/O PM 4.47	PB on R side of ramp, 385' N/O PM 4.47	1	0	E	Not likely - Protect in Place
997	Las	395	R	4.471	395 SB on from SR 70	N	0	Loop	1	R4.50	R4.50	395 SB on from SR 70	PB 167' S/O paved gore on L side of ramp	1	0	E	Not likely - Protect in Place
998	Las	395	R	4.768	395 NB on from SR 70	N	0	Loop	1	R4.75	R4.75	395 NB on from SR 70	PB located on R shoulder, 778' N/O SR 70, 92' S/O paved gore	1	0	E	Not likely - Protect in Place
999	Las	395	R	4.863	395 SB off to SR 70	F	0	Loop	1	R4.863	R4.863	395 SB off to SR 70	PB on R shoulder 478' S/O exit sign, 25' N/O Eq Sta RA.76	1	0	E	Not likely - Protect in Place
198	Las	395	R	4.615	Jct Rte 70 W	A	0	Loops	2	7.668	201' south of "shoe tree" & J754' south of PM 8.0		Pull box located on rt shld 32' South of SOFT SHOULDER sign & 201' south of "shoe tree". 42' ETW	2	0	E	Not likely - Protect in Place
270	Las	395		29.840	Garnier Rd	B	0	Loops	2	29.725	29.725	605' south of Co Rd A26 Cl at the south side of the Helons/A26 double post sign. Old #P86		2	0	E	Not likely - Protect in Place
289	Las	395		29.840	Garnier Rd	A	0	Loops	2	31.31	1.5 mi North of Garnier Road		Pull box located on E/S 39' South of Bird Flat Ranch Driveway. New 2007.	2	0	E	Not likely - Protect in Place
14	Las	395		49.530	Honey Lake Rest Area	O	0	Loop	1				PB on R side of entrance, 155' fro. CL 395, and JWVO light std	1	0	E	Not likely - Protect in Place
987	Las	395		51.870	Standish Rd	B	0	Loops / Bending Plates	2	51.72	946' South of Co.Rd. A3 (Buntingville-Standish Rd)		Pull box located on E/S by G sign SUSANVILLE - ALTURAS across from HAR sign. Installed 1994	2	0	E	Not likely - Protect in Place
150	Las	395		51.680	Standish Rd (WIM)	B	0	Loops / Bending Plates	2	51.68	51.68	South of Co. Rd A-3 (Standish / Buntingville Rd)		4	0	E	Not likely - Protect in Place
158	Las	395		51.870	Standish Rd	A	0	Loops	2	52.45	263' south of PM 52.50 at the Janesville sign. Old #P88			2	0	E	Not likely - Protect in Place
175	Las	395	R	61.094	Jct Rte 36 W	B	0	Loops	2	R60.921	R60.921	926' South of Jct 36	Pull box located W/S by JAVESVILLE MILFORD RENO Mileage sign.	2	0	E	Not likely - Protect in Place
176	Las	395	R	61.094	Jct Rte 36 W	A	0	Loops	2	R61.249	R61.249	824' North of Jct 36	Pull box located on E/S by 25 MPH SCHOOL sign. Installed 1995	2	0	E	Not likely - Protect in Place
307	Las	395		70.120	Standish, Co Rd A-3 (P89)	B	0	Loops	2	69.93	1,011' South of County Road A3, Standish		Pull box located on NB shld by 55 mph sign. (P89)	2	0	E	Not likely - Protect in Place
261	Las	395		70.120	Standish, Co Rd A-3	A	0	Loops	3	70.216	507' North of County Road A-3 (Buntingville)		Pull box located on W/S by 45 MPH sign. Installed 1994	3	0	E	Not likely - Protect in Place
246	Mod	395		3.216	Likely, Jess Valley Rd	B	0	Loops	2	2.674	140' South of County Road A-3 (Buntingville)		Pull box located on NB shld by cattle guard. Installed 1999.	2	0	E	Not likely - Protect in Place
187	Mod	395	R	20.975	Glenn St	B	0	Loops	2	R15.263	R15.263	Opposite Jones Lane behind guardrail. Old #P138		2	0	E	Not likely - Protect in Place
177	Mod	395		22.075	Alturas, First St	A	0	Loops	4	22.079	22.079	48' North of CL First St., Alturas.		4	0	E	Not likely - Protect in Place
364	Mod	395		22.764	Jct Rte 299 W, Alturas	B	0	Loops	4	22.741	22.741	200' south of CL 299/395 intersection Old #P139		4	0	E	Not likely - Protect in Place
365	Mod	395		22.764	Jct Rte 299 W, Alturas	A	0	Loops	3	22.805	22.805	214' north of 299/395 intersection Old #P140		3	0	E	Not likely - Protect in Place
234	Mod	395		23.040	Alturas State Highway Maintenance Station	O	1	Loops	2	23.04	23.04		Pull box located on Lt shld between driveways at Maintenance Station. Power. Phone.	2	0	E	Not likely - Protect in Place
178	Mod	395		28.285	Jct Rte 299, E	A	0	Loops	2	28.366	28.366	428' North of Jct 299	Pull box located on SB shld between CEDARVILLE-GERLACH NEV Sign; MODCO DISTRICT	2	0	E	Not likely - Protect in Place

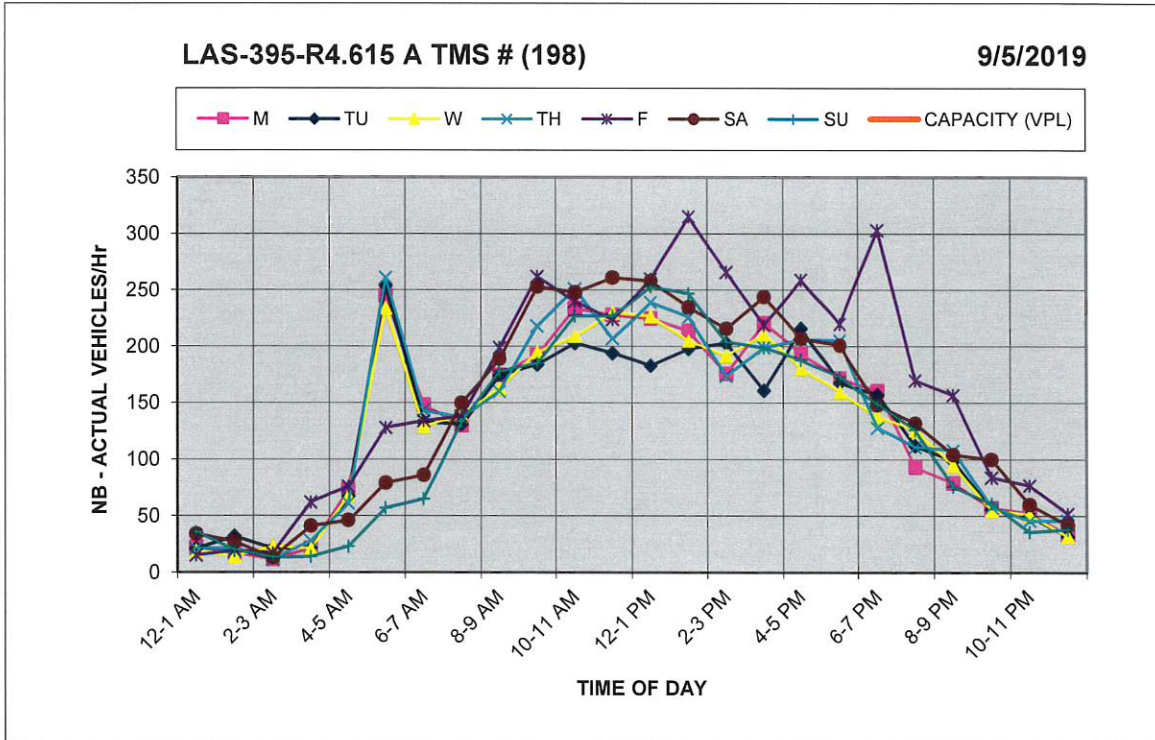
TMP Attachment "B"

DISTRICT 2 ITS ELEMENTS

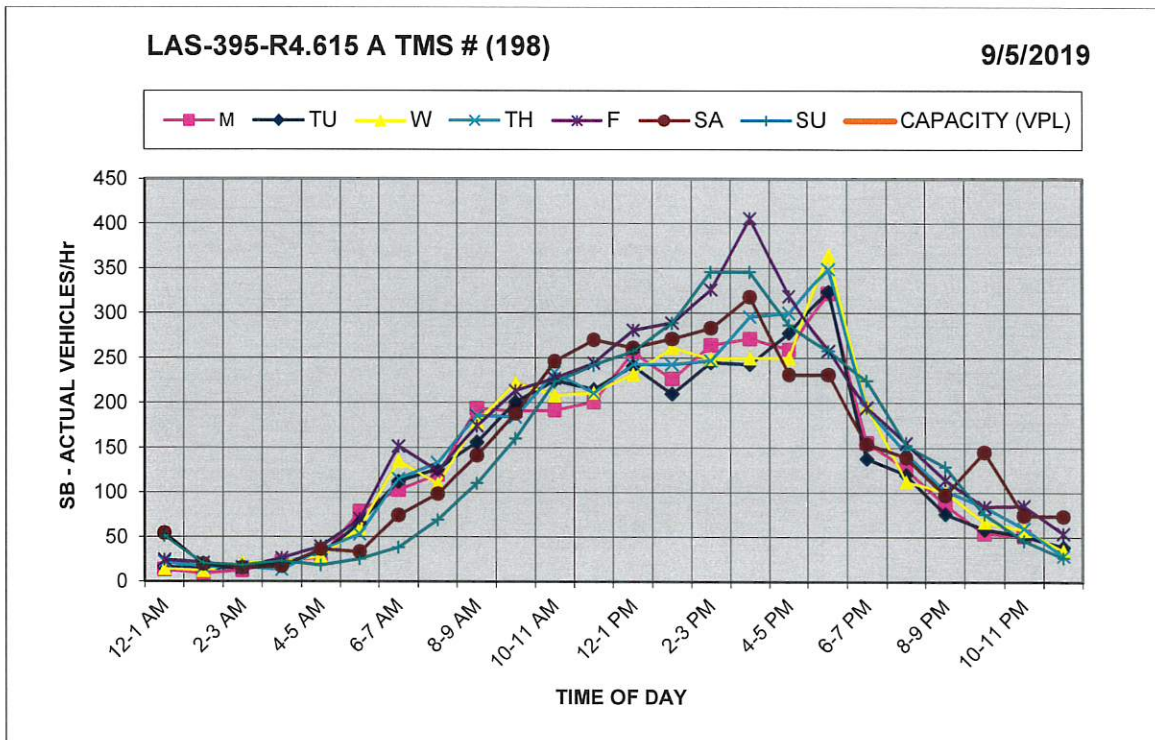
CCTV = Closed Circuit Television
 HAR = Highway Advisory Radio
 LED = Light Emitting Diode
 SRRA = Safety Roadside Rest Area
 RWIS = Roadside Weather Information System
 NIPS = Non Invasive Pavement Sensor
 CMS = Changeable Message Signs
 EMS = Extinguishable Message Sign
 TMS = Traffic Monitoring System
 DS = Data Sheet
 FCS = Flashing Chain Sign

LOCATION	TYPE	CO.	RTE	P	PM	POTENTIAL IMPACTS
Hallelujah Sandhouse	CMS	LAS	70		3.52	Not Likely - Protect in Place
Hallelujah Sandhouse	HAR FLASHER	LAS	70		3.52	Not Likely - Protect in Place
Hallelujah Jct. (US395/SR70)	CMS	LAS	70		3.53	Not Likely - Protect in Place
Bug Station (US395 @ Nevada border)	HAR	LAS	395	R	1.58	Not Likely - Protect in Place
US395 Bug Station N/B Wind Warning	CMS	LAS	395	R	1.7	Not Likely - Protect in Place
North of Bug Station	HAR FLASHER	LAS	395	R	1.7	Not Likely - Protect in Place
SR395/SR70 (Hallelujah Jct.)	CCTV	LAS	395		4.588	Not Likely - Protect in Place
Glenn Street (South of Alturas)	HAR FLASHER	MOD	395	R	20.94	Not Likely - Protect in Place
Doyle (Hall Road)	CCTV	LAS	395	R	21.88	Not Likely - Protect in Place
Doyle (Hall Road) [Wind WS]	RWIS	LAS	395	R	21.88	Not Likely - Protect in Place
Alturas (at Maintenance Station)	HAR	MOD	395		23.07	Not Likely - Protect in Place
Pencil Road (North of Alturas)	HAR FLASHER	MOD	395		23.74	Not Likely - Protect in Place
Buntingville Road	HAR FLASHER	LAS	395		51.7	Not Likely - Protect in Place
Janesville (Sears Road)	CCTV	LAS	395		53.1	Not Likely - Protect in Place
Janesville (Sears Road) [Wind WS]	RWIS	LAS	395		53.1	Not Likely - Protect in Place

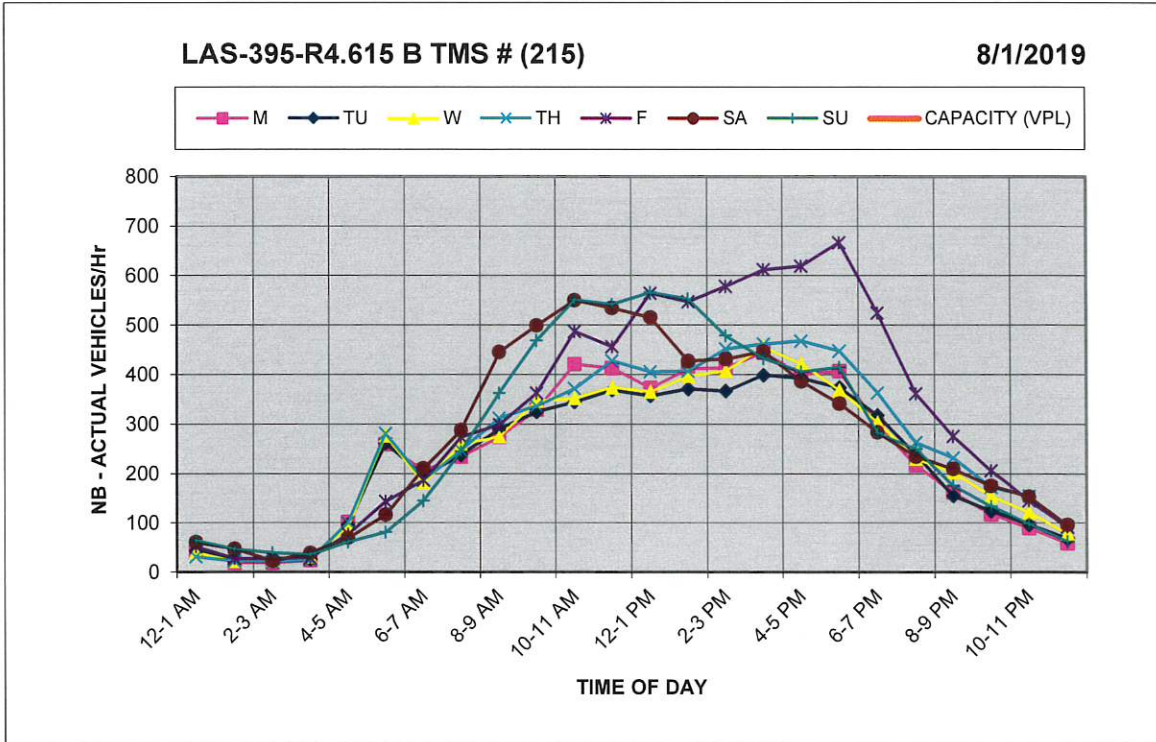
TMP Attachment "C" - Actual Traffic Volumes at Project Location



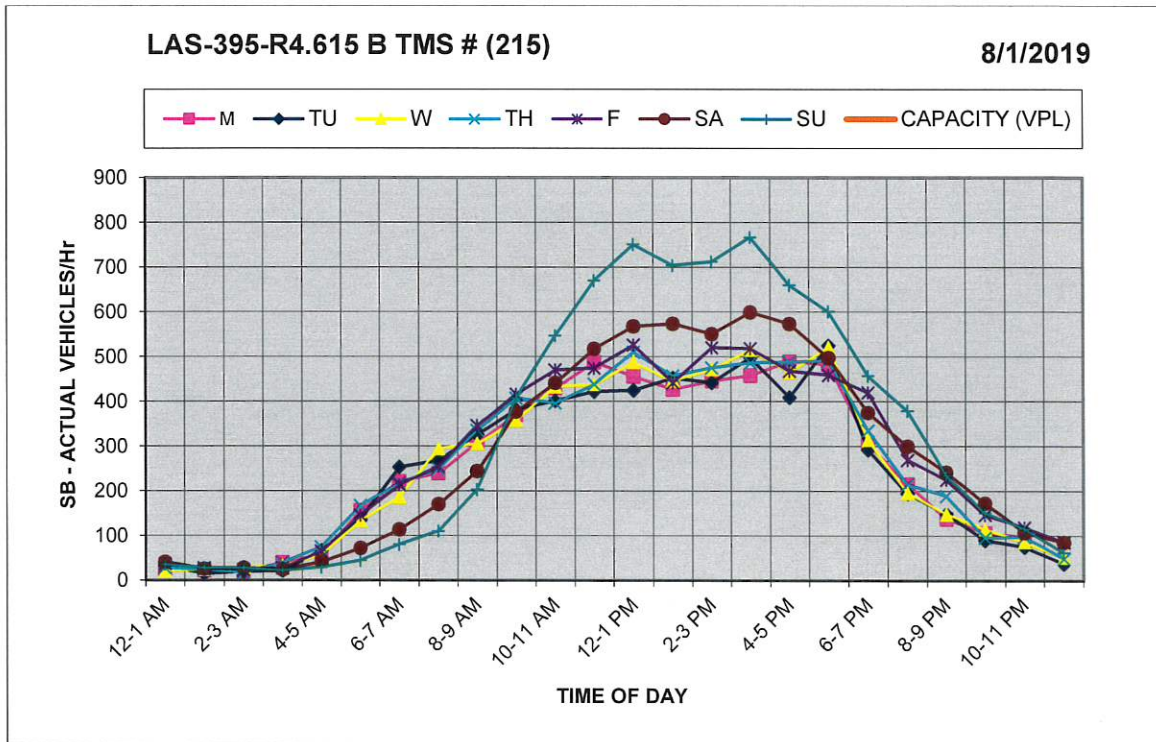
ACTUAL TRAFFIC VOLUMES AT PROJECT LOCATION (NB)



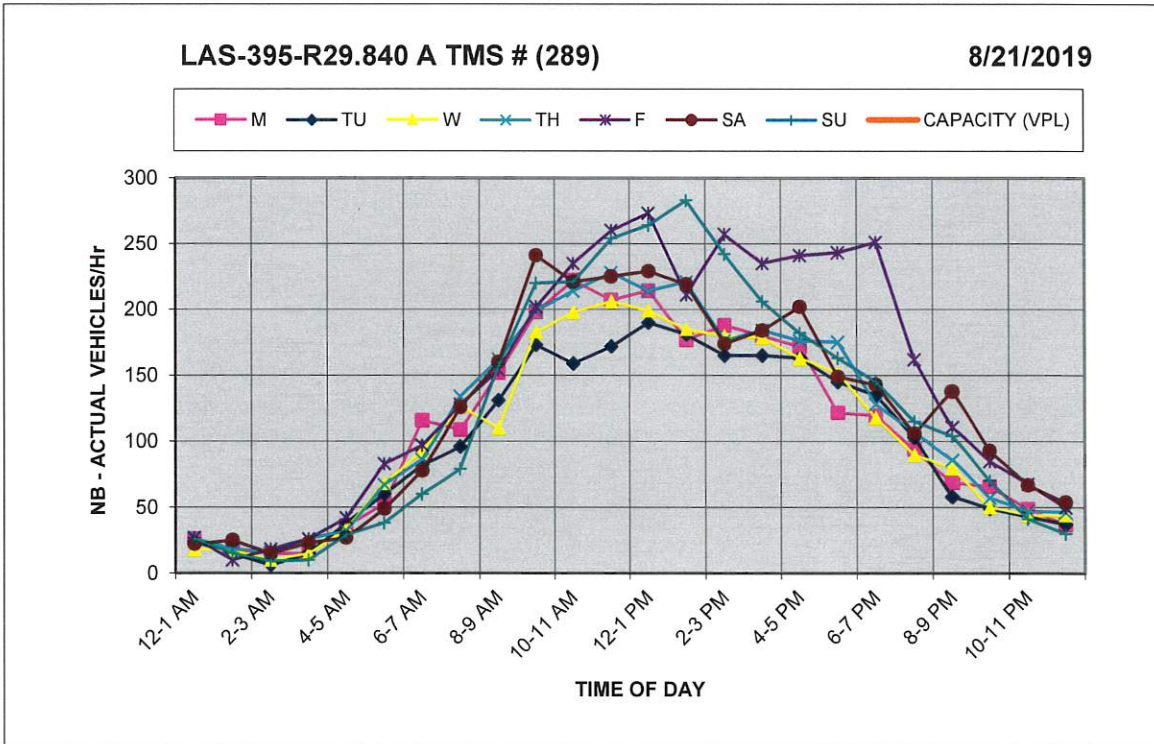
ACTUAL TRAFFIC VOLUMES AT PROJECT LOCATION (SB)



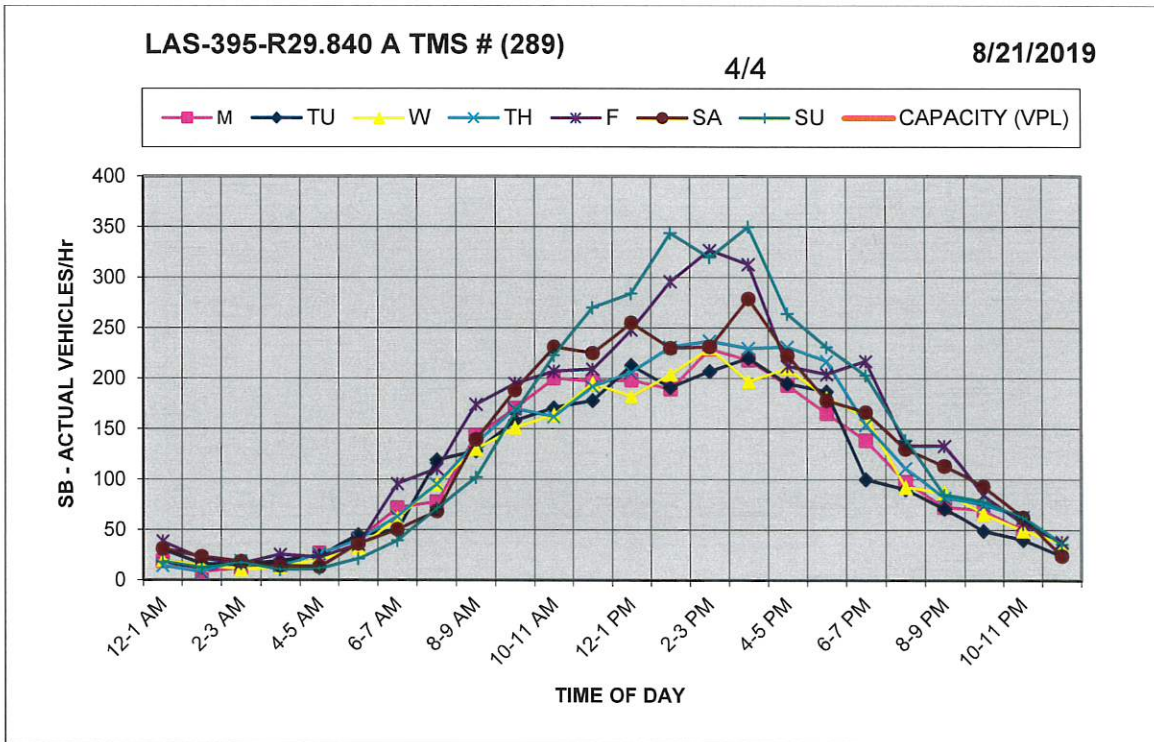
ACTUAL TRAFFIC VOLUMES AT PROJECT LOCATION (NB)



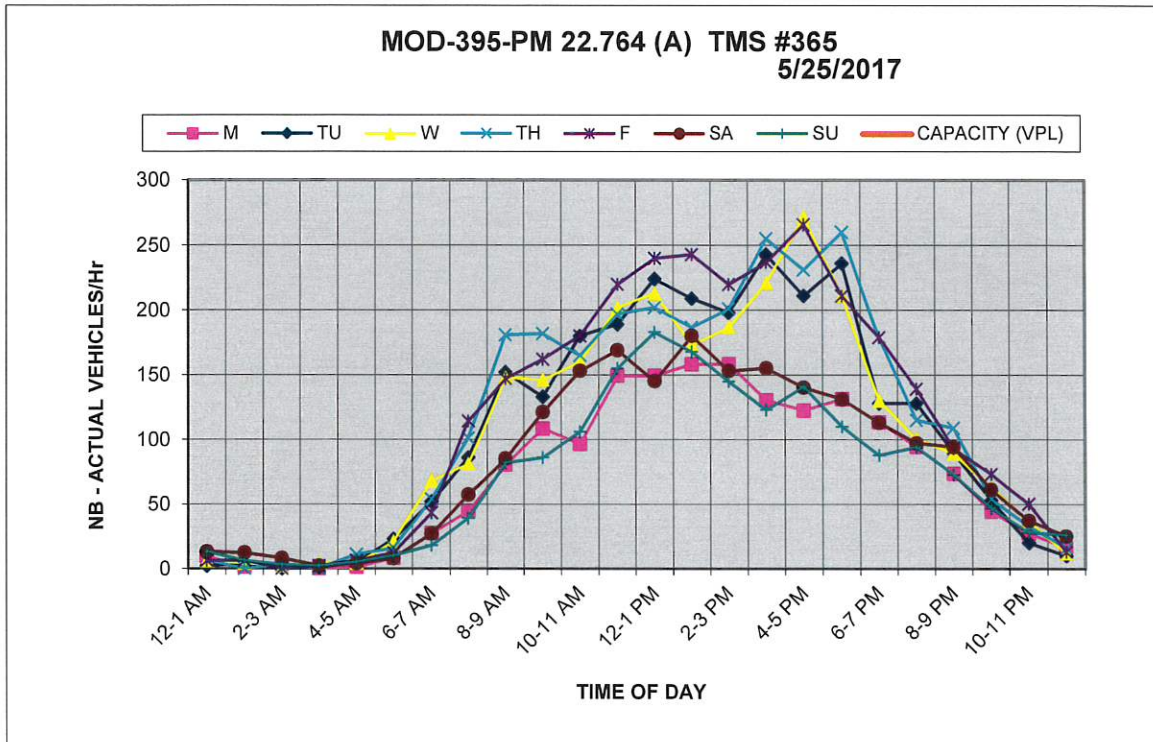
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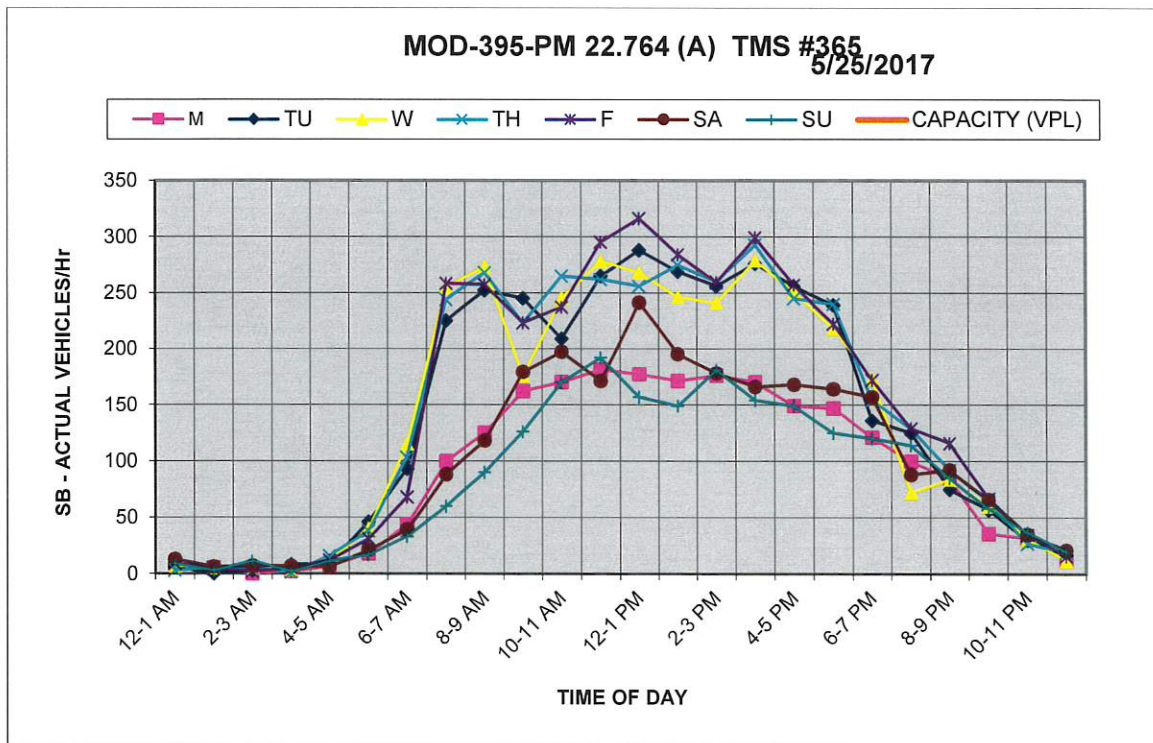
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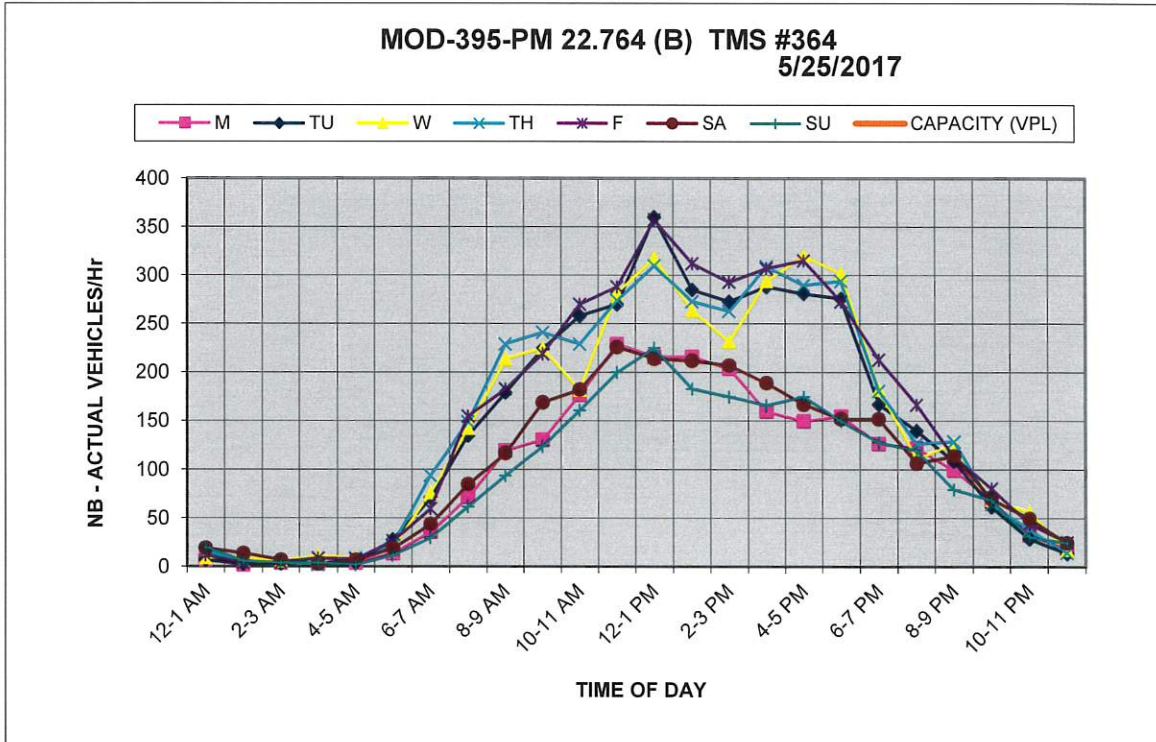
ACTUAL TRAFFIC VOLUMES AT PROJECT LOCATION (SB)



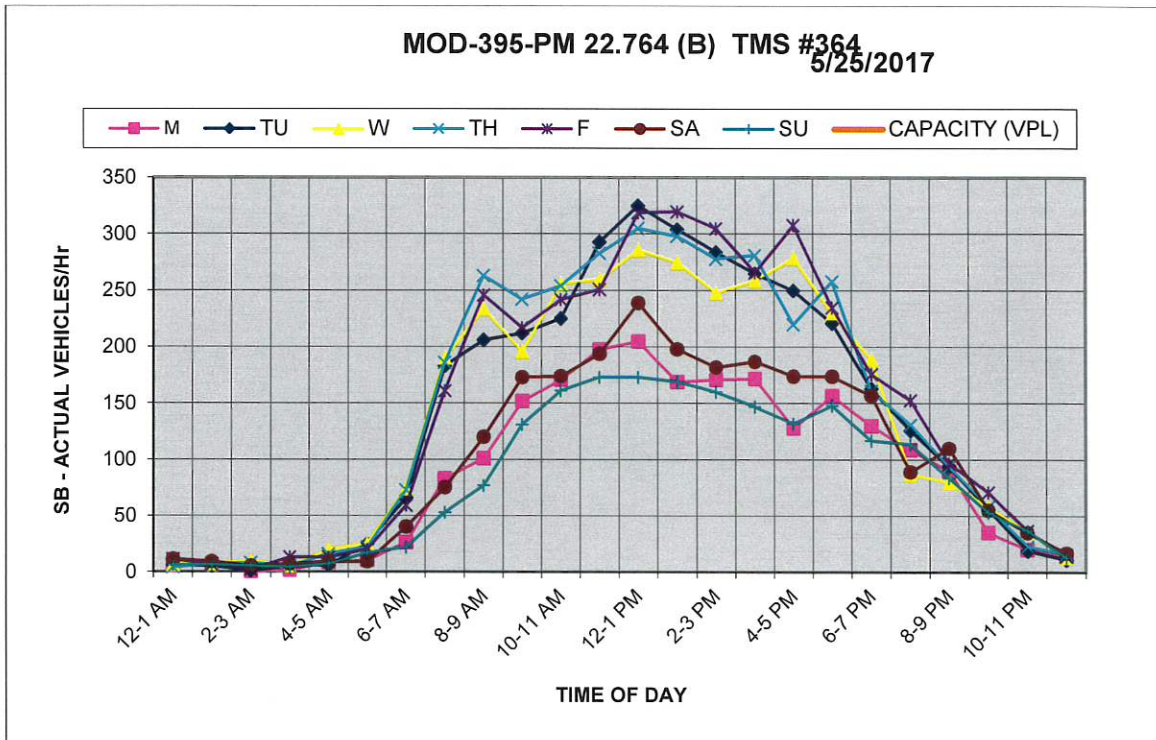
ACTUAL TRAFFIC VOLUMES AT PROJECT LOCATION (NB)



ACTUAL TRAFFIC VOLUMES AT PROJECT LOCATION (SB)



ACTUAL TRAFFIC VOLUMES AT PROJECT LOCATION (NB)



ACTUAL TRAFFIC VOLUMES AT PROJECT LOCATION (SB)

STANDARD PLANS

STATE OF CALIFORNIA
CALIFORNIA STATE TRANSPORTATION AGENCY
DEPARTMENT OF TRANSPORTATION

2022 Edition

PUBLISHED BY
DEPARTMENT OF TRANSPORTATION



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

REGISTERED CIVIL ENGINEER
Chloe P. Sanchez
 No. 44909
 Exp. 3-31-24
 STATE OF CALIFORNIA
 PROFESSIONAL ENGINEER

AUGUST 1, 2022
 DATE OF APPROVAL
 THE ENGINEER'S OFFICE
 OR AGENTS SHALL NOT BE RESPONSIBLE FOR
 THE ACCURACY OR COMPLETENESS OF SCANNED
 COPIES OF THIS PLAN SHEET.

TABLE 3

ROAD TYPE	DISTANCE BETWEEN SIGNS *		
	A	B	C
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 recommended distances.

TABLE 2

SPEED *	Min D **	DOWNGRADE Min D ***		
		-3%	-6%	-9%
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 and longer than 1 mile.

*** - Use on sustained downgrade steeper than -3 percent

TABLE 1

SPEED (S)	TAPER LENGTH CRITERIA AND CHANNELLIZING DEVICE SPACING									
	MINIMUM TAPER LENGTH * FOR WIDTH OF OFFSET 12 FEET (W)					MAXIMUM CHANNELLIZING DEVICE SPACING				
	TANGENT 2L	MERGING L	SHIFTING L/2	SHOULDER L/3	CONFLICT	X	Y	Z	**	**
20	160	80	40	27	20	40	10	10	10	10
25	250	125	63	42	25	50	12	12	12	12
30	360	180	90	60	30	60	15	15	15	15
35	480	240	123	82	35	70	17	17	17	17
40	640	320	160	107	40	80	20	20	20	20
45	1080	540	270	180	45	90	22	22	22	22
50	1200	600	300	200	50	100	25	25	25	25
55	1320	660	330	220	50	100	25	25	25	25
60	1440	720	360	240	50	100	25	25	25	25
65	1560	780	390	260	50	100	25	25	25	25
70	1680	840	420	280	50	100	25	25	25	25
75	1800	900	450	300	50	100	25	25	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).

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

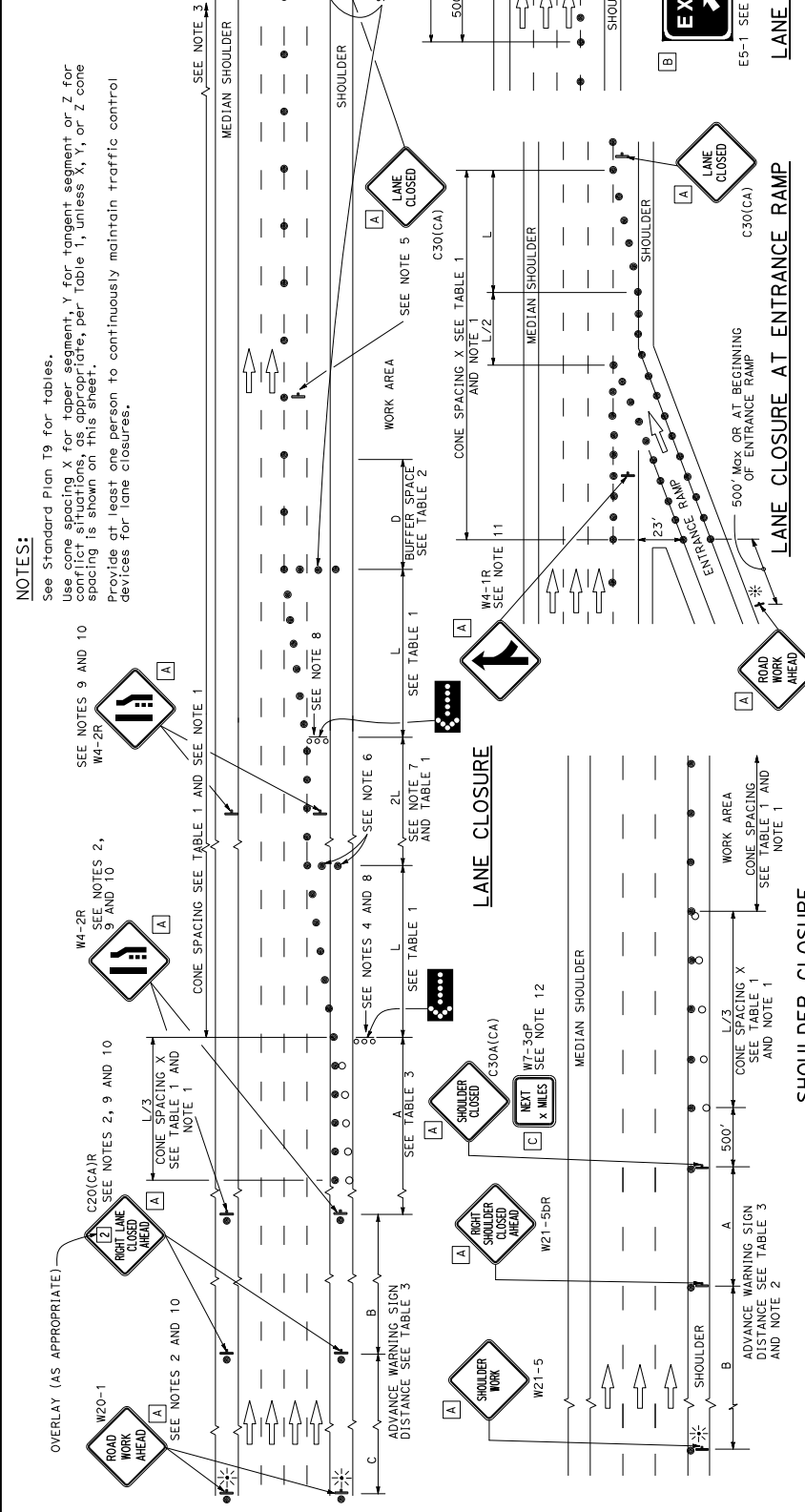
TRAFFIC CONTROL SYSTEM TABLES FOR LANE AND RAMP CLOSURES

T9

DIR# COUNTY ROUTE TOTAL PROJECT SHEET TOTAL
 NO. SHEETS
 REGISTERED CIVIL ENGINEER
 August 1, 2022
 EXPIRES
 THE DATE OF EXPIRATION
 OR REVISED DATE
 OR REVISED DATE
 OR REVISED DATE
 OR REVISED DATE
 OR REVISED DATE

REGISTERED PROFESSIONAL ENGINEER
 No. 44392
 CIVIL
 STATE OF CALIFORNIA

DATE 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.

LANE CLOSURE AT ENTRANCE RAMP
 SEE NOTE 2
 SEE NOTE 3
 SEE NOTE 4 AND 8
 SEE NOTE 6
 SEE NOTE 7
 SEE NOTE 11
 SEE NOTE 12

SHOULDER CLOSURE
 SEE NOTE 1
 SEE NOTE 1
 SEE NOTE 1
 SEE NOTE 1
 SEE NOTE 1

LANE CLOSURE AT EXIT RAMP
 SEE NOTE 13

LEGEND

TRAFFIC CONE	SIGN PANEL SIZE (Min)
●	A 48" x 48"
○	B 72" x 60"
+	C 36" x 30"

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 W7-3GP "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.

- 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 a tapered arrow. Each sign shall be 48" x 24" as appropriate. The 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 for the advance warning sign. Lane closures shall not begin at the top of crest vertical curve or on a horizontal curve.
 - A minimum 1500' sight distance shall be provided for the flashing arrow 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 each closed lane and shoulder at each location where a taper across the lane ends, and every 300' thereafter. The transverse alignment of the cones or barricades may be used instead of the 3 cones. The transverse alignment of the cones or barricades shall be perpendicular 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 closure. The flashing arrow sign shall be Type 1.
 - Median lane closures shall conform to the details as shown except that C20(CAL) and W4-2L signs shall be used.

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

NO SCALE

T10

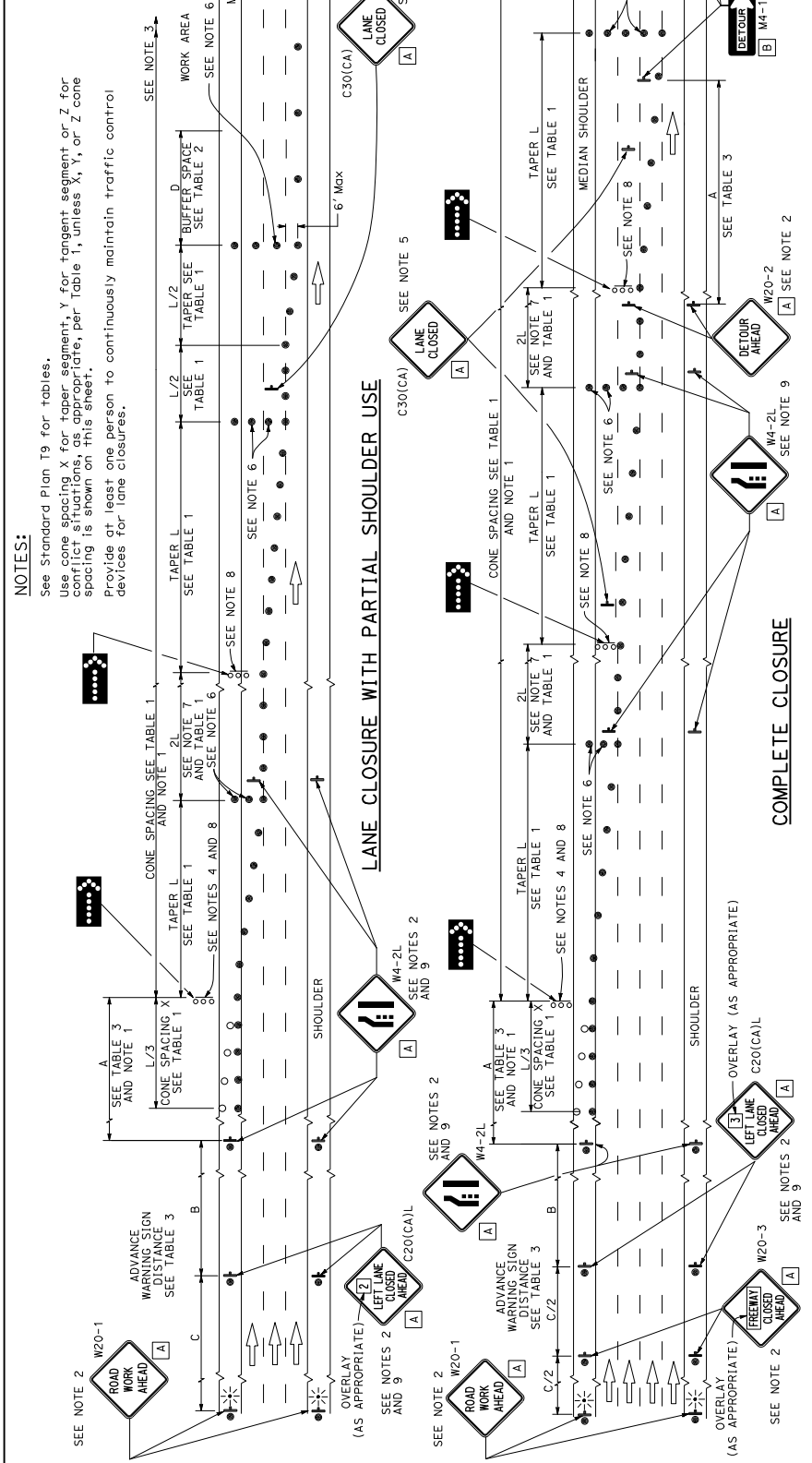
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

Return to Table of Contents

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

REGISTERED CIVIL ENGINEER
 August 1, 2022
 PLEASE PRINT NAME AND DATE
 THE STATE OF CALIFORNIA FOR ITS OFFICERS
 OR AGENTS SHALL NOT BE RESPONSIBLE FOR
 ERRORS OR OMISSIONS OR NEGLIGENCE OF THIS PLAN SHEET.

PROFESSIONAL ENGINEER
 DOUGLAS D. BURTON
 No. C48929
 Exp. 3-31-24
 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. 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 made of reflective material. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
 3. A 620-2 "END ROAD WORK" sign with minimum size of 48" x 24" as appropriate, shall be placed at the end of the work area within a larger project's limits, is obvious or end of project.
 4. A minimum 1500' of sight distance shall be provided for 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 traffic lane ends and every 1000' as shown on the "Lane Closure with Partial Shoulder Use" detail. Two Type I barricades and cones or barricades on the closed shoulder may be shifted from the transverse alignment 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 I.
 9. Lane closures on the right side using partial median shoulder using traffic cone shall conform to the details shown except that C20(CA)R and W4-2R signs shall be used.
 10. A minimum of Two Type II or III barricades shall be placed across each closed lane and shoulder at the location shown and every 2000' within the complete closure. The W4-2R signs shall be placed on the closed shoulder and the transverse alignment of the barricades on the closed shoulder may be shifted from the transverse alignment to provide access to the work.

LEGEND

- 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"

TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE ON FREEWAYS AND EXPRESSWAYS

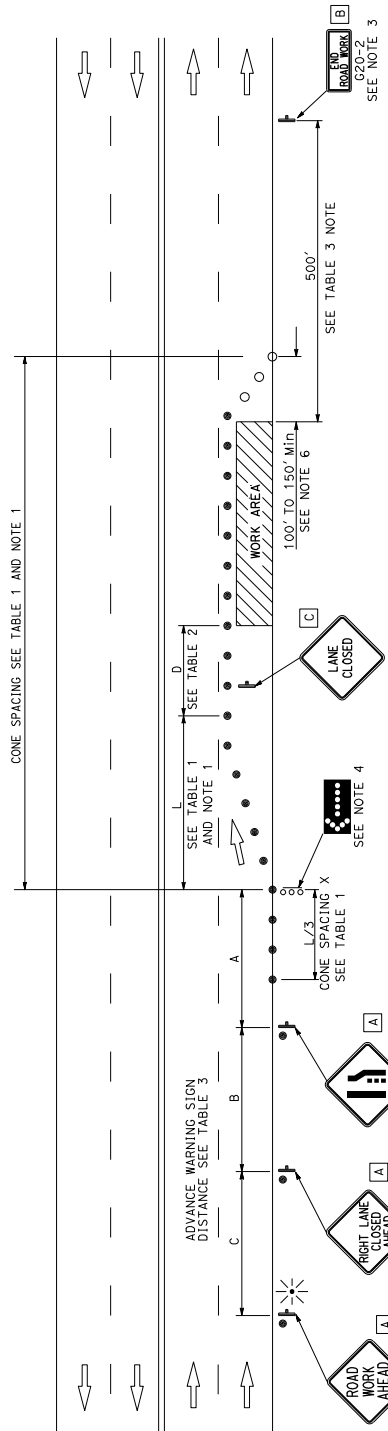
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

NO SCALE

T10A

DIST	COUNTY	ROUTE	FIRST MILE TOTAL PROJECT	SHEET TOTAL SHEETS

REGISTERED CIVIL ENGINEER
 August 1, 2022
 LICENSE EXPIRES: 3-31-24
 No. C43009
 PROFESSIONAL ENGINEER
 STATE OF CALIFORNIA
 THE ENGINEER SHALL BE RESPONSIBLE FOR THE ACCURACY AND COMPLETENESS OF THE INFORMATION, DATA, AND CALCULATIONS PROVIDED FOR THE BASIS 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.

TYPICAL LANE CLOSURE

W20-1 SEE NOTE 2
 W4-2R SEE NOTES 2 AND 7
 C20(CA)R SEE NOTES 2 AND 7
 C30(CA) SEE NOTE 5
 G20-2 SEE NOTE 3

SIGN PANEL SIZE (Min)

- A 48" x 48"
- B 36" x 18"
- C 30" x 30"

LEGEND

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

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 on any closure. Each flag shall be at least 16" x 16" in size and shall be fluorescent 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' 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.

- Place C30(CA) "LANE CLOSED" sign at 500' to 1000' intervals throughout extended work area.
- Length may be reduced by the Engineer to address site conditions.
- Median lane closures shall conform to the details shown except that C20(CA) and W4-2L signs shall be used.
- 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.

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**TRAFFIC CONTROL SYSTEM
 FOR LANE CLOSURE ON
 MULTILANE CONVENTIONAL
 HIGHWAYS**
 NO SCALE

T11

DIST	COUNTY	ROUTE	FIRST MILE TOTAL PROJECT	SHEET TOTAL SHEETS

REGISTERED CIVIL ENGINEER
Charles B. Sanchez
 No. CA9009
 Exp. 3-31-24
 STATE OF CALIFORNIA

AUGUST 1, 2022
 DATE OF APPROVAL
 THE ENGINEER'S OFFICE SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

SIGN PANEL SIZE (Min)

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

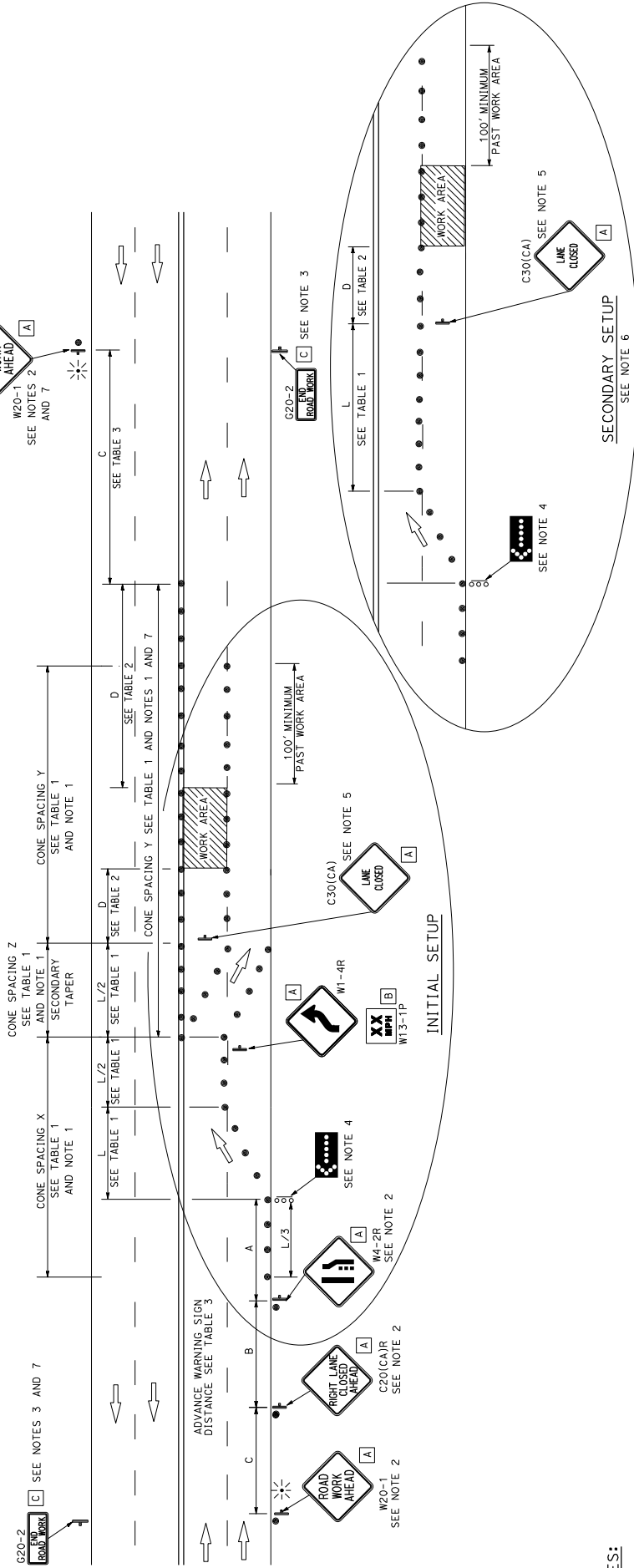
LEGEND

- 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:

- 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 per daytime closure. Each flag shall be at least 16" in size and 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' 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.
- Place C30(CA) "LANE CLOSED" sign at 500' to 1000' intervals throughout extended work area.
- Relocate secondary taper to tangent location and relocate C30(CA) sign.
- 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**

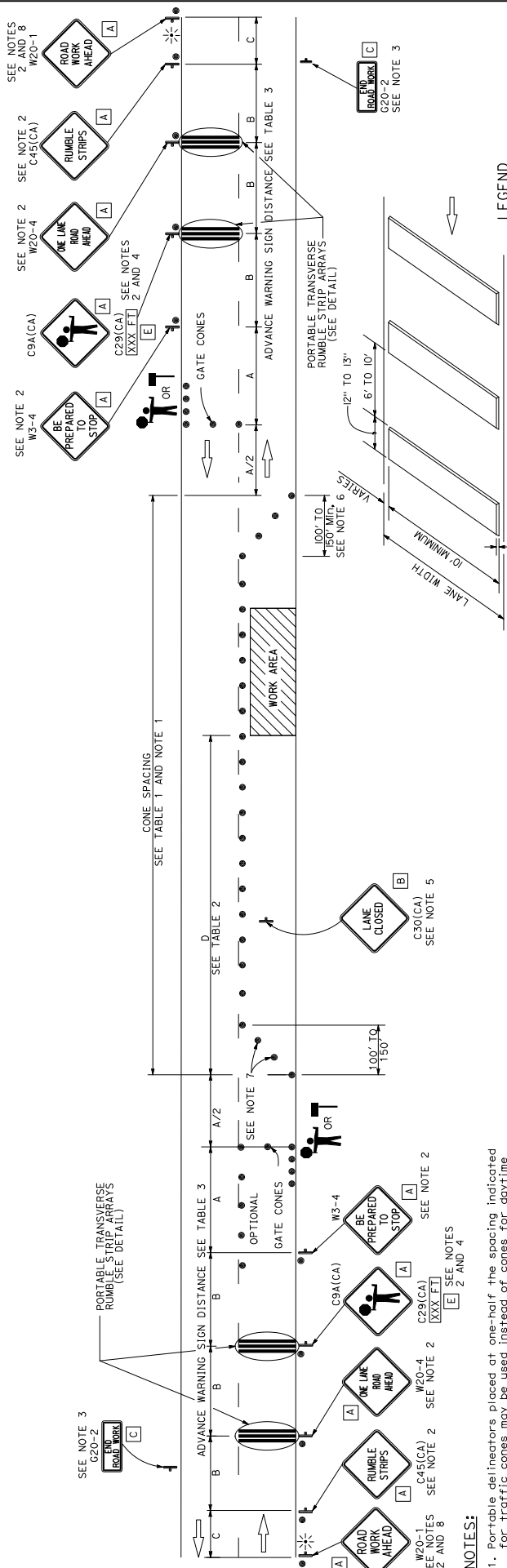
NO SCALE

T11A

DIST	COUNTY	ROUTE	FIRST MILE TOTAL PROJECT	SHEET TOTAL SHEETS

REGISTERED CIVIL ENGINEER
 August 1, 2022
 LICENSE EXPIRES DATE
 PROFESSIONAL ENGINEER
 No. C45029
 Exp. 3-31-24
 STATE OF CALIFORNIA

THE ENGINEER AND ALL ITS OFFICERS
 OR AGENTS SHALL NOT BE RESPONSIBLE FOR
 THE ACCURACY OR COMPLETENESS OF ANY
 PORTION OF THIS PLAN SHEET.



LEGEND

- TRAFFIC CONE
- ⊥ TEMPORARY TRAFFIC CONTROL SIGN
- ✱ PORTABLE FLASHING BEACON
- ⊥ FLAGGER
- ⊥ AUTOMATED FLAGGER ASSISTANCE DEVICE (AF-AD)

TRAFFIC CONTROL SYSTEM WITH REVERSIBLE CONTROL ON TWO LANE CONVENTIONAL HIGHWAYS

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

NO. SCALE

T13

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.

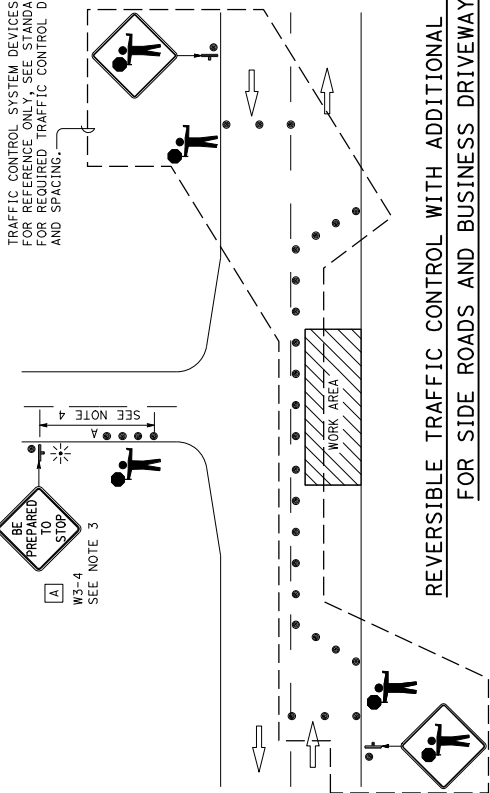
Provide at least one person to continuously maintain traffic control devices for lane closures.

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 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.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL SHEETS

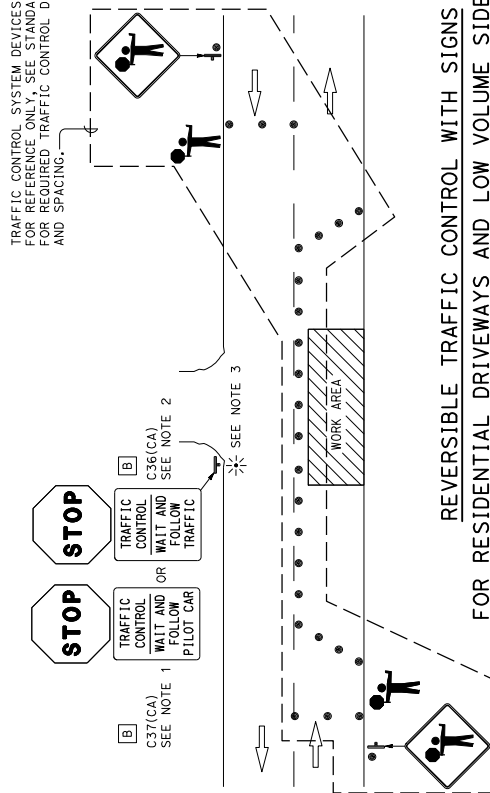
August 1, 2022
 PROJECT DATE
 THE STATE OF CALIFORNIA HAS THE OFFICERS OF THIS BOARD OF PROFESSIONAL ENGINEERS AND ARCHITECTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ANY OF THE CONTENTS OF THIS PLAN SHEET.

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



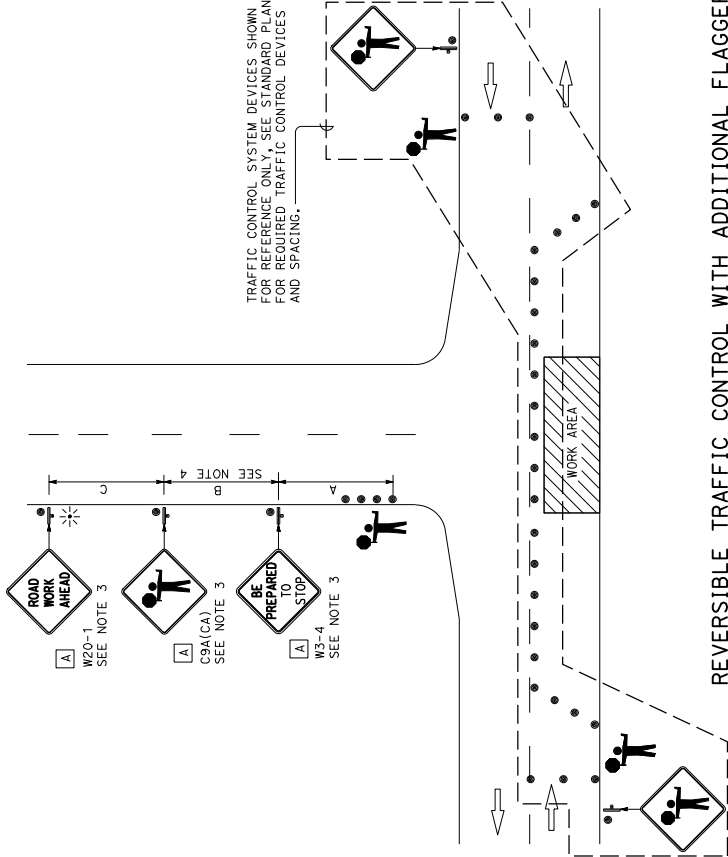
REVERSIBLE TRAFFIC CONTROL WITH ADDITIONAL FLAGGERS FOR SIDE ROADS AND BUSINESS DRIVEWAYS

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

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 AT HIGH VOLUME INTERSECTIONS

SIGN PANEL SIZE (Min)

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

LEGEND:

●	TRAFFIC CONE
†	TEMPORARY TRAFFIC CONTROL SIGN
⚡	PORTABLE FLASHING BEACON
👤	FLAGGER

- 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.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**TRAFFIC CONTROL SYSTEM
TWO LANE CONVENTIONAL HIGHWAYS**
NO SCALE

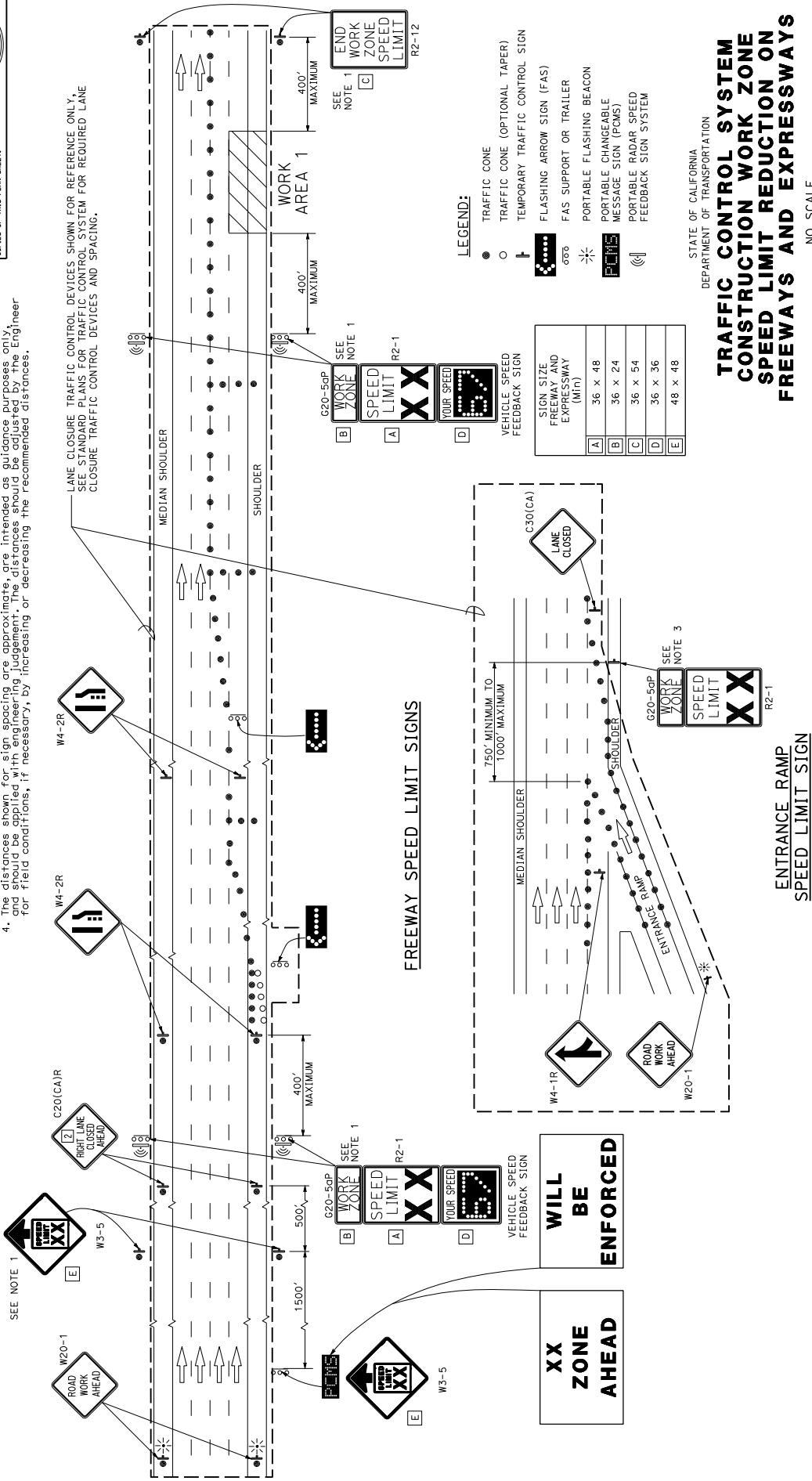
T13B

DIST#	COUNTY	ROUTE	FIRST MILE TOTAL PROJECT NO.	SHEET TOTAL SHEETS

REGISTERED CIVIL ENGINEER
 August 1, 2022
 LICENSE NO. 48009
 EXPIRES 3-31-24
 STATE OF CALIFORNIA
 PROFESSIONAL ENGINEER

DATE: 1/27/2023
 TIME: 10:00 AM
 THE STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
 OFFICE OF THE CHIEF ENGINEER
 1201 N. STREETS
 SACRAMENTO, CA 95834
 THIS DRAWING WAS PREPARED BY THE CONSULTING ENGINEER AND THE CONSULTING ENGINEER IS RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION SHOWN ON THIS DRAWING.

- NOTES:**
- Duplicate sign installations are not required:
 - On opposite shoulder if at least one-half of the available lanes remain open to traffic.
 - In the median if the width of the median shoulder is less than 8' and the outside lanes are to be closed.
 - Where speed limit reduction zones are longer than 3 miles, place intermediate R2-1 sign and G20-5ap plaque at approximate 3-mile spacing throughout the speed limit reduction zone.
 - Place an R2-1 sign and G20-5ap plaque at each entrance ramp within the speed limit reduction zone.
 - The distances shown for sign spacing are approximate, are intended as guidance purposes only, and should be applied with engineering judgment. The distances should be adjusted by the Engineer for field conditions, if necessary, by increasing or decreasing the recommended distances.



LEGEND:

- TRAFFIC CONE
- TRAFFIC CONE (OPTIONAL TAPER)
- ⬇️ TEMPORARY TRAFFIC CONTROL SIGN
- ⬆️ FLASHING ARROW SIGN (FAS)
- ⚡ FAS SUPPORT OR TRAILER
- ⚡ PORTABLE FLASHING BEACON
- ⚡ PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)
- ⚡ PORTABLE RADAR SPEED FEEDBACK SIGN SYSTEM

STATION	VEHICLE SPEED FEEDBACK SIGN
A	36 x 48
B	36 x 24
C	36 x 54
D	36 x 36
E	48 x 48

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**TRAFFIC CONTROL SYSTEM
CONSTRUCTION WORK ZONE
SPEED LIMIT REDUCTION ON
FREEWAYS AND EXPRESSWAYS**

NO SCALE

T18

DIR#	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL SHEETS

REGISTERED CIVIL ENGINEER
 August 1, 2022
 LICENSE NO. 48909
 EXPIRES 3-31-24
 STATE OF CALIFORNIA

PROFESSIONAL ENGINEER
 Charles B. Sanchez
 No. 48909
 Exp. 3-31-24
 CIVIL
 STATE OF CALIFORNIA

THIS STATE OF CALIFORNIA REGISTERED PROFESSIONAL ENGINEER OR ARCHITECT SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF THESE PLANS SHEETS.

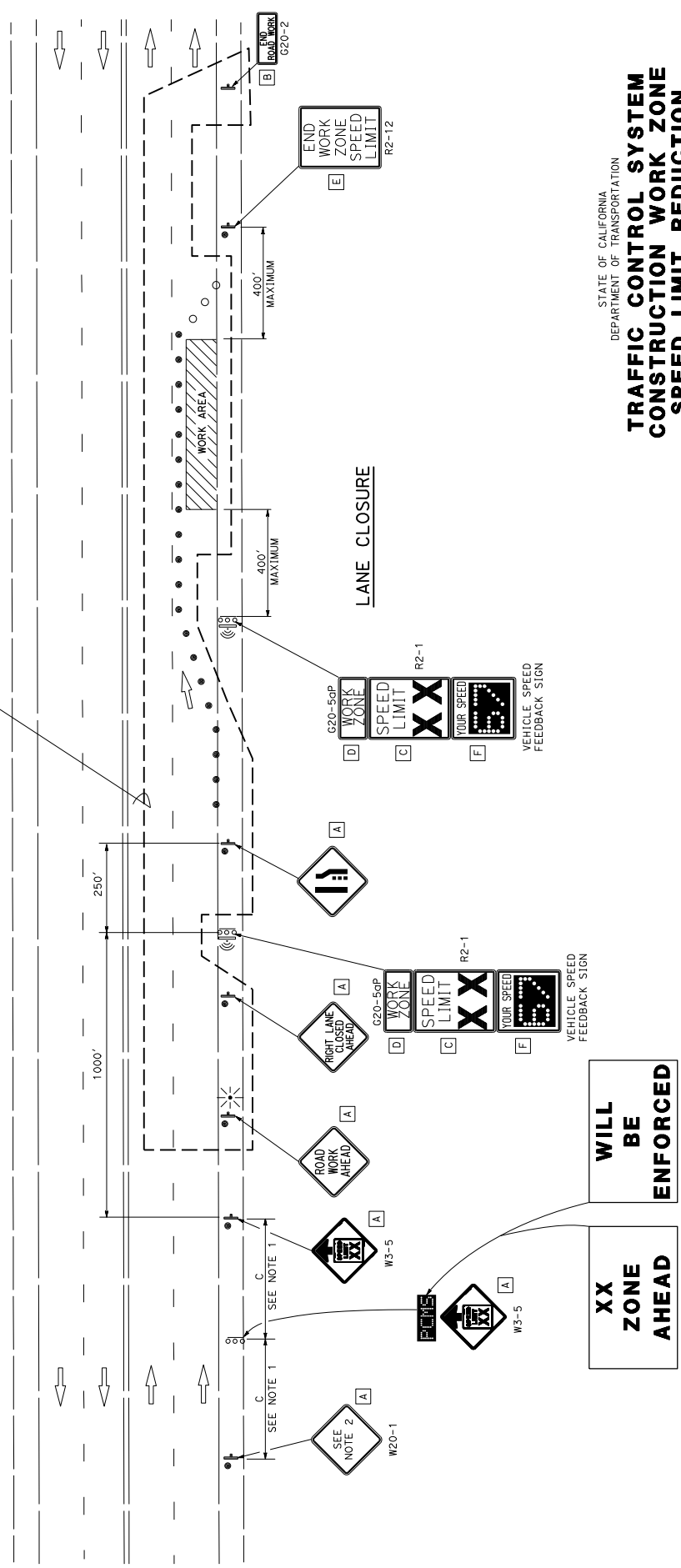
- NOTES:**
- See Standard Plan T9 for Table 3 showing advanced warning sign spacing.
 - If the PCMS is outside the W20-1 construction area sign, place a W20-1 sign in advance of the PCMS.
 - Place additional R2-1 sign and G20-5aP plaque:
 - Where speed limit reduction zones are longer than 3 miles. Place intermediate signs at approximately 3-mile spacing throughout the speed limit reduction zone.
 - Approximately 500 feet downstream from major intersections within the speed limit reduction zone.

SIGN PANEL SIZE (min)

A	48" x 48"
B	36" x 18"
C	24" x 30"
D	24" x 18"
E	24" x 36"
F	24" x 24"

- LEGEND:**
- TRAFFIC CONE
 - TRAFFIC CONE (OPTIONAL TAPER)
 - † TEMPORARY TRAFFIC CONTROL SIGN
 - ⬇️ FLASHING ARROW SIGN (FAS)
 - FAS SUPPORT OR TRAILER
 - ☼ PORTABLE FLASHING BEACON
 - PCMS PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)
 - Ⓜ️ PORTABLE RADAR SPEED FEEDBACK SIGN SYSTEM

LANE CLOSURE TRAFFIC CONTROL DEVICES SHOWN FOR REFERENCE ONLY. SEE STANDARD PLANS FOR TRAFFIC CONTROL SYSTEM FOR REQUIRED LANE CLOSURE TRAFFIC CONTROL DEVICES AND SPACING.



STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**TRAFFIC CONTROL SYSTEM
 CONSTRUCTION WORK ZONE
 SPEED LIMIT REDUCTION
 ON CONVENTIONAL HIGHWAYS**
 NO SCALE

T19

LEGEND:

- TRAFFIC CONE
- ⚠ TEMPORARY TRAFFIC CONTROL SIGN
- ☀ PORTABLE FLASHING BEACON
- 🚧 FLAGGER
- 📡 PORTABLE RADAR SPEED FEEDBACK SIGN SYSTEM (PRSSFS)
- 🚚 PRSSFS SUPPORT OR TRAILER
- 📄 PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)

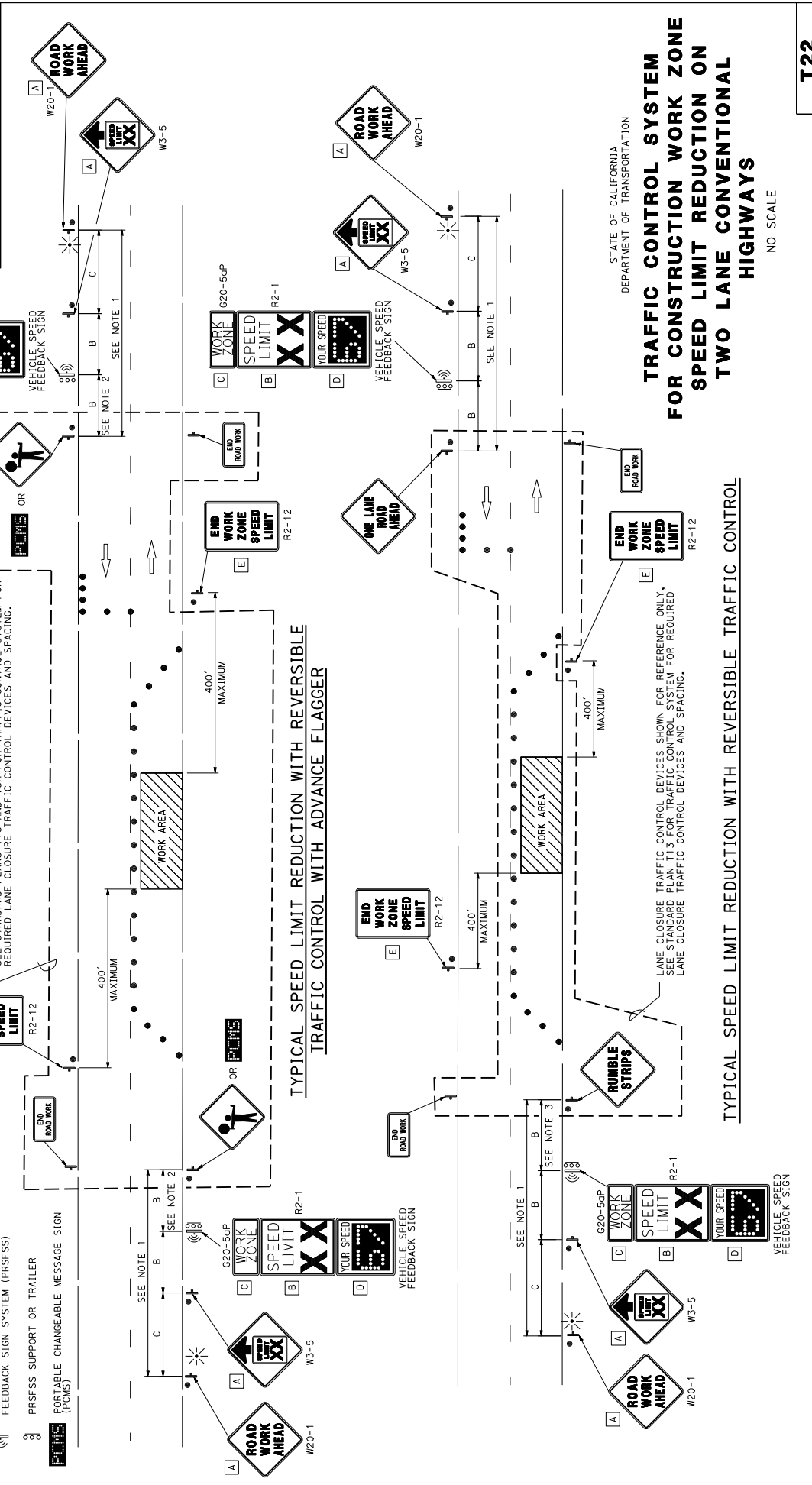
SIGN PANEL SIZE (Min)

A	48" x 48"
B	24" x 30"
C	24" x 18"
D	24" x 24"
E	24" x 36"

NOTES:

- See Standard Plan T9, Table 3 for advanced warning sign spacing.
- The distance B to the PRSSFS is measured from the C29 (CA) sign or the PCMS at the Advance Flagger Station.
- If rumble strips are not used, the distance B to PRSSFS is measured from W20-4.

LANE CLOSURE TRAFFIC CONTROL DEVICES SHOWN FOR REFERENCE ONLY. SEE STANDARD PLANS T13 AND T3A FOR TRAFFIC CONTROL SYSTEM FOR REQUIRED LANE CLOSURE TRAFFIC CONTROL DEVICES AND SPACING.



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM FOR CONSTRUCTION WORK ZONE SPEED LIMIT REDUCTION ON TWO LANE CONVENTIONAL HIGHWAYS

NO SCALE

T22

REGISTERED CIVIL ENGINEER
 August 1, 2022
 PROFESSIONAL ENGINEER No. C4909
 CIVIL STATE OF CALIFORNIA

PROJECT: _____
ROUTE: _____
COUNTY: _____
DIST: _____

DATE: _____
BY: _____

PROFESSIONAL ENGINEER
 No. C4909
 CIVIL
 STATE OF CALIFORNIA

THIS STATE OF CALIFORNIA LICENSE IS NOT VALID UNLESS IT IS USED IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE BOARD OF PROFESSIONAL ENGINEERS AND SURVEYORS. THIS STATE OF CALIFORNIA LICENSE IS NOT VALID UNLESS IT IS USED IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE BOARD OF PROFESSIONAL ENGINEERS AND SURVEYORS.

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

REGISTERED CIVIL ENGINEER
C. P. Sanchez
 No. CA9009
 Exp. 3-31-24
 STATE OF CALIFORNIA

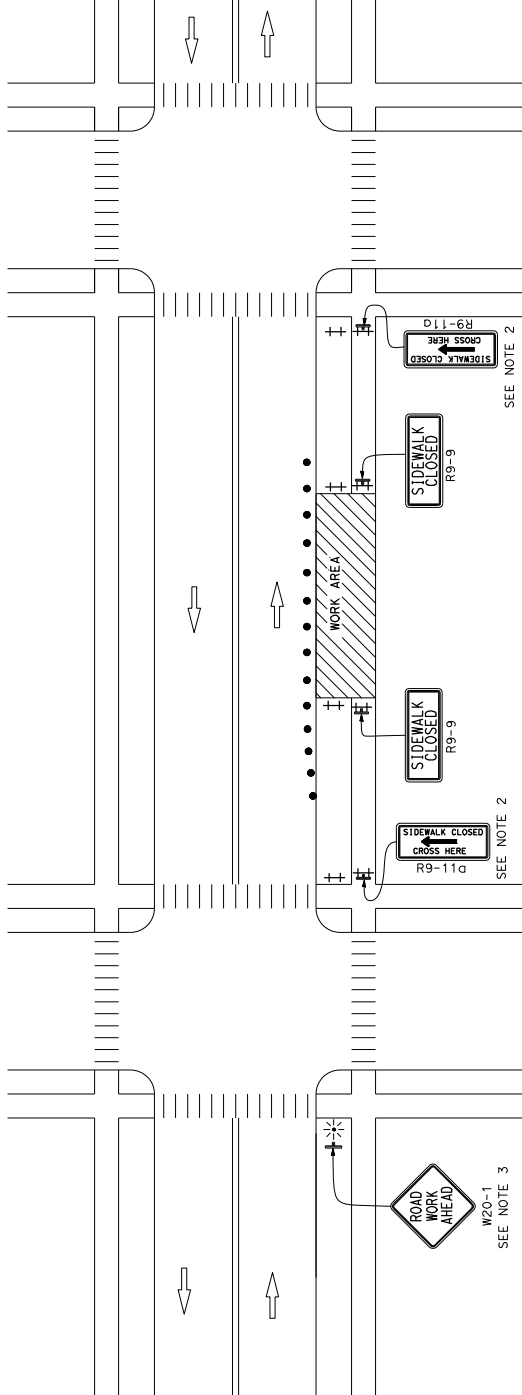
August 1, 2022
 DATE OF EXPIRATION
 THE ENGINEER'S SEAL, SIGNATURE, AND LICENSE NO. ARE REQUIRED FOR ALL WORK. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS OF THIS PLAN SHEET.

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



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	24" x 18"
R9-11a	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

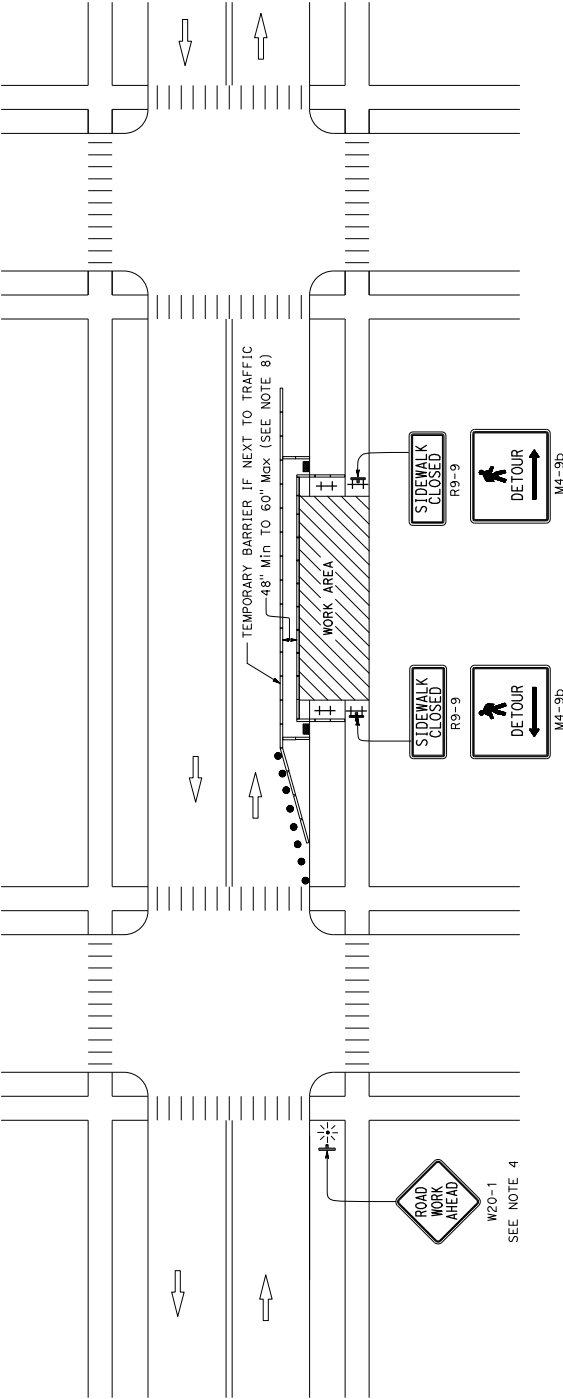
DIST	COUNTY	ROUTE	FIRST MILE TOTAL PROJECT	SHEET TOTAL SHEETS

REGISTERED CIVIL ENGINEER
Charles B. Sanchez
 No. CA909
 Exp. 3-31-24
 STATE OF CALIFORNIA

August 1, 2022
 DATE OF EXPIRATION
 THE ENGINEER ASSUMES ALL RESPONSIBILITY FOR THE ACCURACY 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.



- 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

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

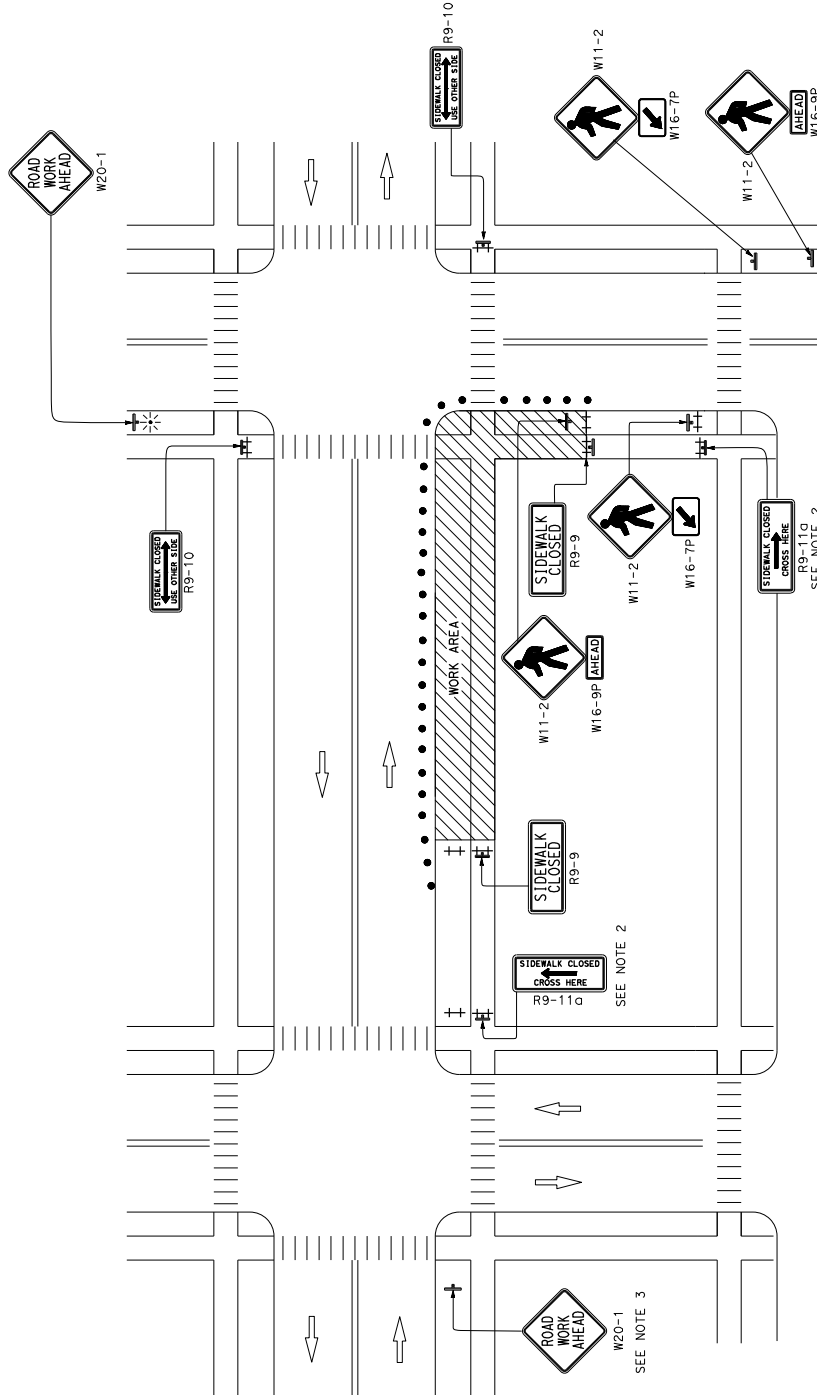
REGISTERED CIVIL ENGINEER
Charles B. Sanchez
 No. C43909
 Exp. 3-31-24
 STATE OF CALIFORNIA

August 1, 2022
 REGISTERED CIVIL ENGINEER
 THE DATE OF THIS DRAWING IS THE DATE OF THIS PLAN SHEET.
 THE ENGINEER SHALL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS 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 collision situations, as appropriate, in 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	SIDEWALK CLOSED 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

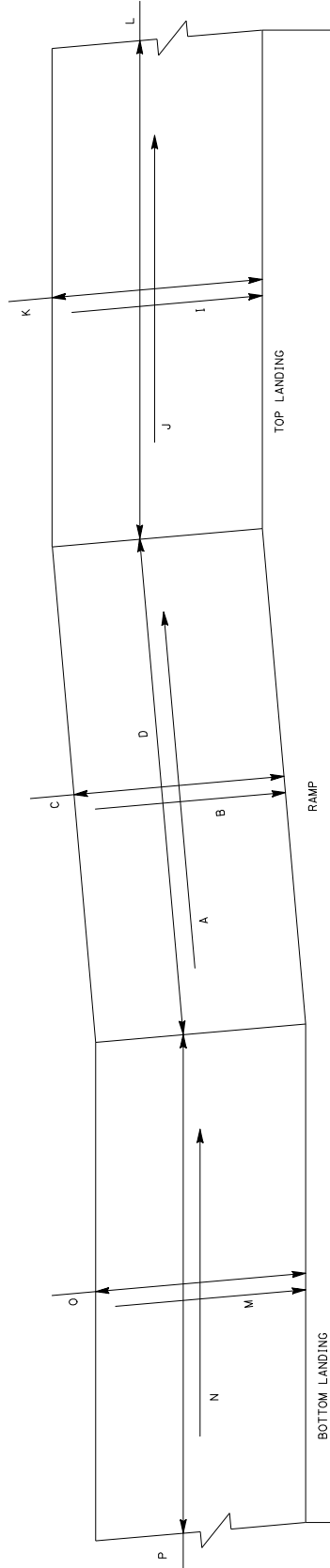
T32

DIST	COUNTY	ROUTE	FIRST MILE TOTAL PROJECT	SHEET TOTAL SHEETS



REGISTERED CIVIL ENGINEER
 August 1, 2022
 THIS DRAWING IS THE PROPERTY OF THE ENGINEER AND SHALL NOT BE REPRODUCED OR COPIED WITHOUT HIS WRITTEN CONSENT.

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	FIRST MILE TOTAL PROJECT NO.	SHEET TOTAL SHEETS

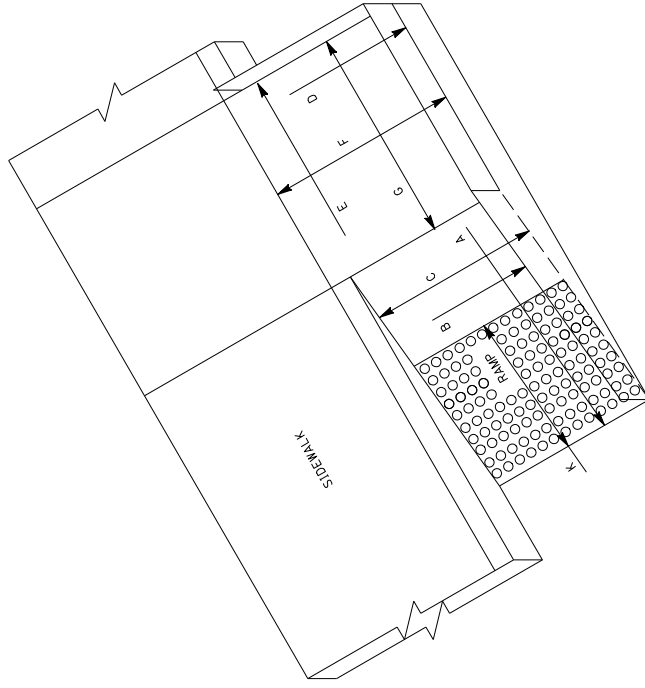
REGISTERED CIVIL ENGINEER
Charles D. Sanchez
 No. CA8009
 Exp. 3-31-24
 STATE OF CALIFORNIA

AUGUST 1, 2022
 DATE OF DRAWING
 DATE OF THIS PLAN SHEET

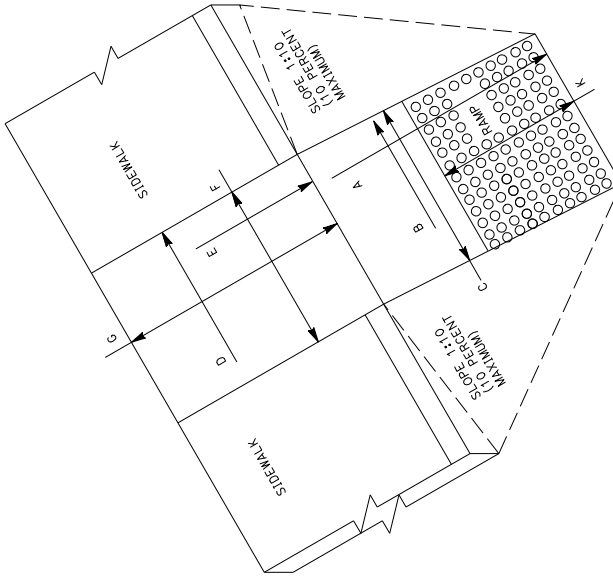
THE CIVIL ENGINEER AND ARCHITECT
 OR AGENTS SHALL NOT BE RESPONSIBLE FOR
 THE ACCURACY OR COMPLETENESS OF ANY
 PORTION OF THIS PLAN SHEET.

CURB RAMP		TOP LANDING			DETECTABLE WARNING SURFACE	
SLOPE	CROSS SLOPE	WIDTH	CROSS SLOPE	SLOPE	WIDTH	DEPTH
A	B	C	D	E	F	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	MINIMUM 36 INCHES

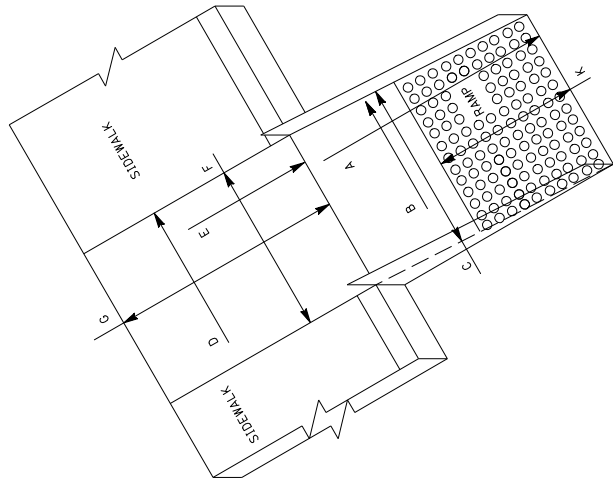
NOTES: If the above requirements cannot be met, on existing sites with space limitations, the following slopes are allowed:
 For a maximum rise of 6 inches a slope between 1:12 to 1:10 is allowed.
 For a maximum rise of 3 inches a slope between 1:10 to 1:8 is allowed.



OPTION C
PARALLEL RAMP
SHOWN WITH SIDE EDGE



OPTION B
SHOWN WITH SIDE APRON



OPTION A
SHOWN WITH SIDE EDGE

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

T34