PROJECT PLANS FOR CONSTRUCTION ON STATE HIGHWAY 132 (YOSEMITE BOULEVARD)

IN STANISLAUS COUNTY IN WATERFORD AT THE INTERSECTION OF PASADENA AVENUE

To be supplemented by the 2023 Caltrans Standard Plans, Specifications, and all Revisions.

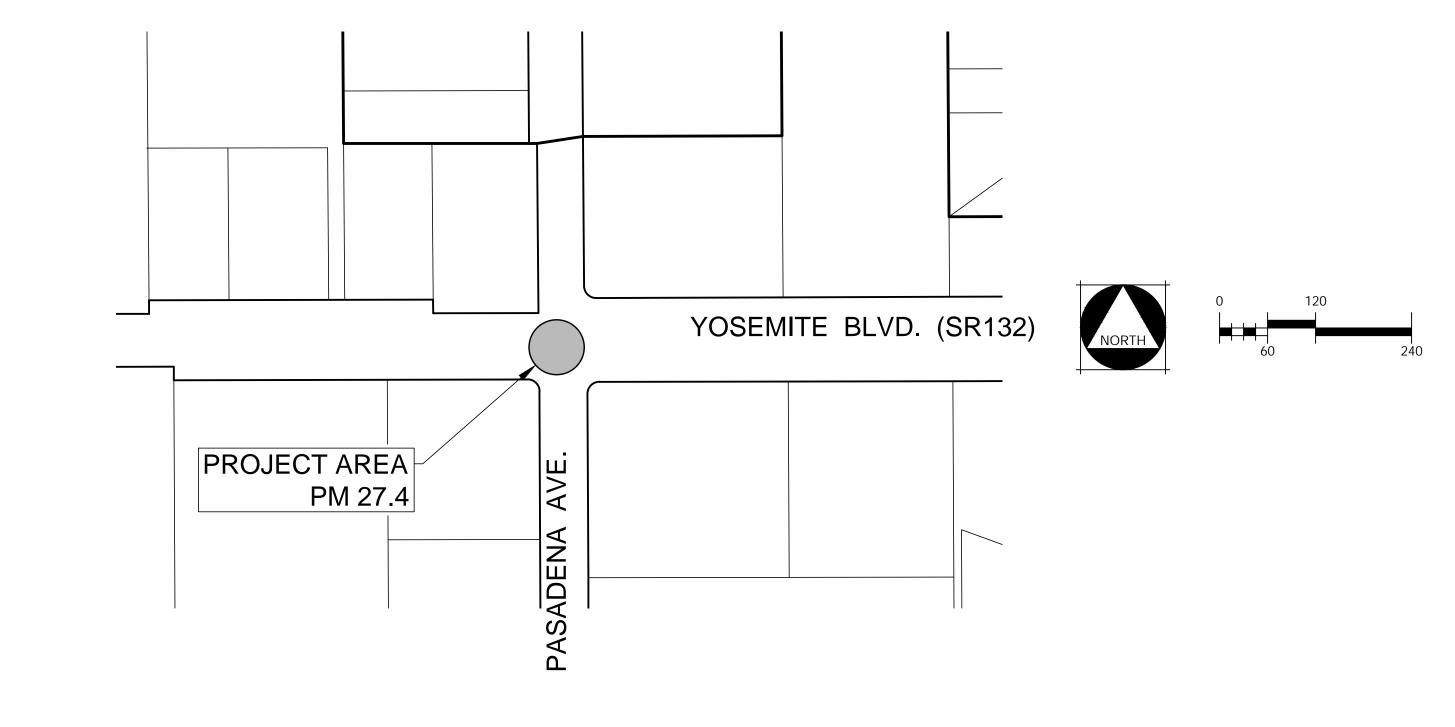
INDEX OF SHEETS

SHEET

×— — —

NO. DESCRIPTION

- CV-1 TITLE & LOCATION MAP
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- C-1 TOPOGRAPHY & DEMOLITION PLAN
- SP-1 STRIPING PLAN
- TH-1 TRAFFIC HANDLING PLAN & DETAILS
- E-1 SIGNAL PLAN
- E-2 SIGNAL PLAN



LEGEND

<u>ITEM</u>	EXISTING	PROPOSED
WATER VALVE	— — — —	- ₩ -
AIR RELEASE VALVE		— — —
BLOWOFF		— — →
FIRE HYDRANT		₩
WATER METER	W	W
SEWER MANHOLE	\bigcirc	S
STORM MANHOLE	SD	SD
DRAIN INLET		
CURB INLET	<u> </u>	₩
CLEANOUT	(co)	
SEWER MANHOLE NUMBER	€x≯	1
STORM MANHOLE NUMBER	€X>	\Diamond
WATER LINE	—— EX W ———	
SANITARY SEWER	— — EX S — —	6"SS
STORM DRAIN	— — EX SD — —	12"SD
TYPICAL ELECTROLIER	<u>5</u> —	□
TYPICAL LUMINAIRE	X	×
ELECTRICAL VAULT	Е	E

<u>ITEM</u>	EXISTING	PROPOSED
UTILITY POLE	-	-
SIGNAGE		- o -
ELEVATION	40.50TC 40.00P	40.50TC 40.00P
DIRECTION OF FLOW	2.00 %	2.00 %
ORIGINAL GROUND	× Wo'ig	N/A
BARBED WIRE FENCE	,,	
WOOD FENCE		
RETAINING WALL		
MASONRY WALL		••••••
CURB, GUTTER & SIDEWALK		
TYPICAL RETURN WITH HANDICAP RAMP		

POST MILE TOTAL PROJECT STA 132 27.401 LOCATION MAP SAN BERNARDINO RIVERSIDE SAN DIEGO MCR ENGINEERING, INC. 1242 DUPONT COURT

MANTECA, CA 95336

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ABBREVIATIONS

@	AT	MIN	MINIMUM
AB	AGGREGATE BASE	N	NORTH
AC	ASPHALT CONCRETE	NTS	NOT TO SCALE
BC	BEGIN CURVE	OG	ORIGINAL GROUND / GRADE
BDRY	BOUNDARY	P	PAVEMENT
BFV	BUTTERFLY VALVE	PP	POWER POLE
BVC	BEGIN VERTICAL CURVE	PL	PROPERTY LINE
C & G	CURB AND GUTTER	PRC	POINT OF REVERSE CURVATURE
CIP	CAST IN PLACE	PT	POINT
Ç	CENTER LINE	PUE	PUBLIC UTILITY EASEMENT
CO	CLEAN OUT	PVC	POLYVINYL CHLORIDE PIPE
CONC	CONCRETE	RGRCP	RUBBER GASKETED REINFORCED CONCRETE PIPE
C.O.W.	CITY OF WATERFORD	RET	RETURN
CB	CATCH BASIN	R	RADIUS
DIA	DIAMETER	SHT	SHEET
DIP	DUCTILE IRON PIPE	SNS	STREET NAME SIGN
DW	DRIVEWAY	STA	STATION
D OR SD	DRAIN OR STORM DRAIN	STD	STANDARD
EC	END OF CURVE	S/W	SIDEWALK
ELEV	ELEVATION	SS	SANITARY SEWER
EP	EDGE OF PAVEMENT	S	SEWER
ESMT	EASEMENT	TC	TOP OF CURB
EVC	END OF VERTICAL CURVE	TEMP	TEMPORARY
EX OR EXIST	EXISTING	TG	TOP OF GRATE
FH	FIRE HYDRANT	THRU	THROUGH
FL	FLOW LINE	TI	TRAFFIC INDEX
GB	GRADE BREAK	TOW	TOP OF WALL
HORIZ	HORIZONTAL	TYP.	TYPICAL
HP	HIGH POINT	VERT	VERTICAL
INV	INVERT	VCP	VITRIFIED CLAY PIPE
IRR	IRRIGATION	W	WATER
LF	LINEAL FEET OR LINEAR FEET	WS	WATER SERVICE
LP	LOW POINT	<u>W</u> V	WATER VALVE
MAX	MAXIMUM	<u>+</u>	PLUS OR MINUS (NOT EXACT)

Plans Approval Date

TITLE & LOCATION MAP

Contract No.

The Contractor shall possess the Class (or Classes) of license as specified in the ''Notice to Contractors''.

DWG FILE: C:\Dropbox (MCR Engineering)\2 Waterford\088 - Yosemite and Pasadena Signalization

CU 00000

FORM DC-OE-93-PF (REV. 3/88)

SURVEY MONUMENT

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES

EA 000000

			GE	NERAL NOTES:
			1.	ALL IMPROVEMENT THE CITY OF WAT WORK SHALL BE WATERFORD.
×			2.	IT IS INTENDED THA AND MATERIALS N AND THAT THE WO INTENT AND PURP IMMEDIATELY REGA EXIST IN THE PLAN DESCRIBE PORTIC COMPLETE DETAIL PRACTICE IS TO PE THE FIRST QUALITY
			3.	CONSTRUCTION S' SANITARY SEWER CONTRACTOR SHA
	ı	_		ADVANCE OF HIS CONTRACTOR OR NORMAL STAKING ITHE CONTRACTOR.
	SED BY	REVISED	4.	THE CONTRACTOR PRESERVE BENCH I SHALL BEAR ALL E THEIR UNNECESSA SURVEY MONUMEN CONSTRUCTION.
	REVI	DATE	5.	CONTRACTOR AGE RESPONSIBILITY F CONSTRUCTION OF
×	NBS DATE	RM 11/23		PROPERTY; THAT T BE LIMITED TO NOR DEFEND, INDEMNIF HARMLESS FROM A WITH THE PERFOR LIABILITY ARISING ENGINEER.
	7ED/ 0 BY	ВУ	6.	UNLESS OTHERWIS PLANS ARE REFERE OFF CENTER ARE
	LCULATEI SIGNED 1	CHECKED	7.	STATIONS, UNLESS THE CONTRACTOR MADE WITHOUT WR
	CALO	CHE	8.	THE CONTRACTOR MAN OR OTHER DE WITH THE CURREN SIGNS, LIGHTS AN HIGHWAY" PUBLIS
			9.	TRANSPORTATION AT THE OFFICE OF THE ADVANCE OF ANY V
×— —	ENGINEER		10.	THE CITY OF WARESIDENCES TO BIUTILITY SERVICE IMPROVEMENT PLAPLANNED DISRUPTI
	JECT E		11.	STREET SIGNS, TR BE PROVIDED AN ESTABLISHED BY TH
	PROJ		12.	ASPHALT CONCRE TEMPERATURE IS A
			13.	CONTRACTOR IS F RELOCATION OF COMPANIES.
			14.	DRAWING NUMBERS IN THE CITY OF WA 330).
×			15.	PRIOR TO COMMERESPONSIBILITY TO THEIR MAIN AND SEOF THE UNDERGROUS PERFORMING ANY (800) 227-2600. THE AND FURNISH ORD SHALL BE THE CEXISTING UTILITIES PERFORMANCE OF UTILITIES SHALL BE BE REQUIRED TO COMPANIES INSTAUDEVELOPMENT.
			16.	THE TYPES, LOCAT UTILITIES AS SHOW SOURCES OF VARY ONLY ACTUAL EX LOCATIONS AND DE ACCORDINGLY.
			17.	THE CONTRACTOR IMPROVEMENTS IN IMPROVEMENTS SIREQUIRING REMOVEMENTS

ALL IMPROVEMENTS SHALL BE CONSTRUCTED IN STRICT ACCORDANCE W	,/ı⊤⊔ 18.
ALL INFROVEMENTS SHALL BE CONSTRUCTED IN STRICT ACCORDANCE V	/1111
THE CITY OF WATERFORD STANDARD SPECIFICATIONS AND DETAILS.	ALL
WORK SHALL BE PERFORMED UNDER THE INSPECTION OF THE CITY	OF
WATERFORD.	

- IT IS INTENDED THAT THESE PLANS AND SPECIFICATIONS REQUIRE ALL LABOR AND MATERIALS NECESSARY AND PROPER FOR THE WORK CONTEMPLATED AND THAT THE WORK BE COMPLETED IN ACCORDANCE WITH THEIR TRUE INTENT AND PURPOSE. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY REGARDING ANY DISCREPANCIES AND AMBIGUITIES WHICH MAY EXIST IN THE PLANS AND SPECIFICATIONS. IF THE PLANS OR SPECIFICATIONS DESCRIBE PORTIONS OF THE WORK IN GENERAL TERMS BUT NOT IN COMPLETE DETAIL, IT IS UNDERSTOOD THAT ONLY THE BEST GENERAL PRACTICE IS TO PREVAIL AND THAT ONLY MATERIALS AND WORKMANSHIP OF THE FIRST QUALITY ARE TO BE USED.
- CONSTRUCTION STAKING FOR GRADING, CURB, GUTTER, SIDEWALK, AND SANITARY SEWER SHALL BE PERFORMED BY MCR ENGINEERING, INC. THE CONTRACTOR SHALL NOTIFY THE ENGINEER SEVENTY-TWO (72) HOURS IN ADVANCE OF HIS NEED FOR STAKING. ANY STAKING REQUESTED BY THE CONTRACTOR OR HIS SUB-CONTRACTORS, THAT IS ABOVE AND BEYOND NORMAL STAKING NEEDS, WILL BE SUBJECT TO AN EXTRA BACK CHARGE TO THE CONTRACTOR.
- THE CONTRACTOR SHALL EXERCISE DUE CAUTION AND SHALL CAREFULLY PRESERVE BENCH MARKS, REFERENCE POINTS AND ALL SURVEY STAKES, AND SHALL BEAR ALL EXPENSE FOR REPLACEMENT AND/OR ERRORS CAUSED BY THEIR UNNECESSARY LOSS OR DISTURBANCE. ALL CENTERLINE AND/OR SURVEY MONUMENTS SHALL BE PRESERVED OR RESET AT THE END OF CONSTRUCTION.
- CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER, ENGINEER AND THE CITY HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.
- UNLESS OTHERWISE STATED, ALL STATIONS INDICATED ON THE IMPROVEMENT PLANS ARE REFERENCED TO THE CENTERLINE OF THE STREET. ALL STATIONS OFF CENTER ARE PERPENDICULAR TO OR RADIALLY OPPOSITE CENTERLINE STATIONS, UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY FIELD CHANGES MADE WITHOUT WRITTEN AUTHORIZATION FROM THE CITY ENGINEER.
- THE CONTRACTOR SHALL PROVIDE ALL LIGHTS, SIGNS, BARRICADES, FLAG MAN OR OTHER DEVICES NECESSARY FOR PUBLIC SAFETY IN ACCORDANCE WITH THE CURRENT ISSUE OF "MANUAL OF TRAFFIC CONTROLS, WARNING SIGNS, LIGHTS AND DEVICES FOR USE IN PERFORMANCE OF WORK UPON HIGHWAY" PUBLISHED BY THE STATE OF CALIFORNIA BUSINESS AND TRANSPORTATION AGENCY.
- ADVANCE OF ANY WORK.
- THE CITY OF WATERFORD AND ASSOCIATED UTILITY COMPANIES AND RESIDENCES TO BE AFFECTED SHALL BE NOTIFIED IMMEDIATELY UPON ANY UTILITY SERVICE DISRUPTION OTHER THAN SPECIFIED ON THESE IMPROVEMENT PLANS AND A 24 HOUR NOTICE SHALL BE GIVEN FOR ANY PLANNED DISRUPTION.
- 11. STREET SIGNS, TRAFFIC CONTROL SIGNS, AND PAVEMENT MARKINGS SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR AT LOCATIONS ESTABLISHED BY THE ENGINEER.
- ASPHALT CONCRETE SHALL BE PLACED ONLY WHEN THE ATMOSPHERIC TEMPERATURE IS ABOVE 50°F.
- 3. CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF THE REMOVAL OR RELOCATION OF ALL EXISTING UTILITIES WITH RESPECTIVE UTILITY
- 14. DRAWING NUMBERS SHOWN ON THE PLANS REFER TO DRAWINGS CONTAINED IN THE CITY OF WATERFORD STANDARD SPECIFICATIONS, THUS: (I.E. DETAIL
- 15. PRIOR TO COMMENCING ANY WORK, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO HAVE EACH UTILITY COMPANY LOCATE, IN THE FIELD, THEIR MAIN AND SERVICE LINES. THE CONTRACTOR SHALL NOTIFY MEMBERS OF THE UNDERGROUND SERVICE ALERT (U.S.A.) 48 HOURS IN ADVANCE OF PERFORMING ANY EXCAVATION WORK BY CALLING THE TOLL-FREE NUMBER (800) 227-2600. THE CONTRACTOR SHALL RECORD THE U.S.A. ORDER NUMBER AND FURNISH ORDER NUMBER TO OWNER PRIOR TO ANY EXCAVATION. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO PROTECT ALL EXISTING UTILITIES SO THAT NO DAMAGE RESULTS TO THEM DURING THE PERFORMANCE OF THIS CONTRACT. ANY REPAIRS NECESSARY TO DAMAGED UTILITIES SHALL BE PAID FOR BY THE CONTRACTOR. THE CONTRACTOR SHALL BE REQUIRED TO COOPERATE WITH OTHER CONTRACTORS AND UTILITY COMPANIES INSTALLING NEW STRUCTURES, UTILITIES AND SERVICE TO THE DEVELOPMENT.
- THE TYPES, LOCATIONS, SIZES, AND/OR DEPTHS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE IMPROVEMENT PLANS WERE OBTAINED FROM SOURCES OF VARYING RELIABILITY, THE CONTRACTOR IS CAUTIONED THAT ONLY ACTUAL EXCAVATION WILL REVEAL THE TYPES, EXTENT, SIZES, LOCATIONS AND DEPTHS OF SUCH UNDERGROUND UTILITIES, AND SHALL PLAN ACCORDINGLY.
- 17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXISTING IMPROVEMENTS FROM DAMAGE. COST OF REPLACING EXISTING IMPROVEMENTS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEMS REQUIRING REMOVAL AND REPLACEMENT OF EXISTING IMPROVEMENTS.

- WHENEVER PAVEMENT IS BROKEN OR CUT IN THE INSTALLATION OF THE WORK COVERED BY THESE SPECIFICATIONS, THE PAVEMENT SHALL BE REPLACED, AFTER PROPER BACKFILLING, WITH PAVEMENT MATERIALS EQUAL TO OR BETTER THAN THE MATERIALS USED IN THE ORIGINAL PAVING. THE FINISHED PAVEMENT SHALL BE SUBJECT TO THE APPROVAL OF THE CITY ENGINEER, OR CALTRANS, WHERE APPLICABLE.
- PAYMENT FOR PAVEMENT WILL BE MADE ONLY FOR AREAS SHOWN ON THE PLANS REPLACEMENT OF PAVEMENT WHICH IS BROKEN OR CUT DURING THE INSTALLATION OF THE WORK COVERED BY THESE SPECIFICATIONS, AND WHICH LIES OUTSIDE OF SAID AREAS, SHALL BE INDICATED IN THE CONTRACTOR'S UNIT PRICE FOR PAVEMENT. AND NO ADDITIONAL PAYMENT 6. SHALL BE MADE FOR SUCH WORK.
- 20. PRIOR TO ANY CORRECTIVE ACTION BY THE CONTRACTOR IS NECESSARY DUE TO ALLEGED STAKING ERROR, THE CONTRACTOR SHALL NOTIFY MCR ENGINEERING, INC. FOR RESTAKING AND VERIFICATION OF PREVIOUS STAKING. SHOULD ANY CORRECTIVE WORK BE DONE PRIOR TO NOTIFICATION THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COSTS INCURRED FOR THIS WORK. WHERE IT HAS BEEN DETERMINED THAT ANY CORRECTIVE ACTION WILL REQUIRE FINANCIAL PARTICIPATION BY MCR ENGINEERING, INC., THAT AMOUNT SHALL BE AGREED TO IN WRITING. FAILURE TO OBTAIN WRITTEN ACCEPTANCE BY MCR ENGINEERING, INC. WILL NEGATE ALL REQUIREMENTS OF THEIR FINANCIAL ASSISTANCE.
- APPROPRIATE DUST CONTROL SHALL BE PROVIDED AT THE CONTRACTOR'S EXPENSE TO MINIMIZE ANY DUST NUISANCE, AND SHALL BE IN ACCORDANCE WITH SECTION 10 OF CALTRANS STANDARD SPECIFICATIONS AND THE REQUIREMENTS OF THE SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT (SJVAPCD). CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING PERMIT PER SJVAPCD REGULATION VII FUGITIVE PM10.
- EXCAVATIONS OF 5 FEET OR MORE IN DEPTH WILL REQUIRE AN EXCAVATION PERMIT FROM THE STATE OF CALIFORNIA DEPARTMENT OF INDUSTRIAL SAFETY. FOR TRENCHES 5 FEET OF MORE IN DEPTH, THE CONTRACTOR SHALL COMPLY WITH SECTION 5-1.02A OF THE CALTRANS STANDARDS, CHAPTER 9 OF THE STATE OF CALIFORNIA LABOR CODE, AND ANY LOCAL CODES OR ORDINANCES.
- 23. WE CALL YOUR ATTENTION TO TITLE 8 CALIFORNIA ADMINISTRATION CODE SECTION 1540 (A) (1) OF THE CONSTRUCTION SAFETY ORDERS ISSUED BY THE OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD PURSUANT TO THE CALIFORNIA OCCUPATIONS SAFETY AND HEALTH ACT OF 1973 AS AMENDED WHICH STATES: (1) PRIOR TO OPENING AN EXCAVATION EFFORT SHALL BE MADE TO DETERMINE WHETHER UNDERGROUND INSTALLATIONS; I.E. SEWER, WATER, FUEL, ELECTRICAL LINES, ETC., WILL BE ENCOUNTERED AND IF SO, WHERE SUCH UNDERGROUND INSTALLATIONS ARE LOCATED. WHEN THE EXCAVATION APPROACHES THE APPROXIMATE LOCATION OF SUCH INSTALLATION, THE EXACT LOCATION SHALL BE DETERMINED BY CAREFUL PROBING OR HAND DIGGING; AND, WHEN IT IS UNCOVERED, ADEQUATE PROTECTION SHALL BE PROVIDED FOR THE EXISTING INSTALLATION. ALL KNOWN OWNERS OF UNDERGROUND FACILITIES IN THE AREA CONCERNED SHALL BE ADVISED OF PROPOSED WORK AT LEAST 48 HOURS PRIOR TO THE START OF ACTUAL EXCAVATION.
- ALL TRENCHES IN PAVED AREAS SHALL BE PAVED WITH TEMPORARY PAVING THE SAME DAY THE PAVEMENT CUT IS MADE.
- THE OFFICE OF THE CITY ENGINEER SHALL BE NOTIFIED AT LEAST 24 HOURS IN 25. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER, PRIOR TO FINAL ACCEPTANCE, AS-BUILT DRAWINGS OF ALL IMPROVEMENTS REPRESENTED BY THE PROJECT PLANS AND SPECIFICATIONS.
 - REGULATING DISCHARGES OF STORM WATER ASSOCIATED WITH CONSTRUCTION ACTIVITY FROM SOIL DISTURBANCES OF ONE (1) ACRE OR MORE, A NOTICE OF INTENT (NOI) TO COMPLY WITH THE TERMS OF THE CONSTRUCTION ACTIVITY MUST BE FILED AND APPROPRIATE FEE PAID PRIOR TO COMMENCEMENT OF CONSTRUCTION IN ADDITION, AT THE CONCLUSION OF THE PROJECT A NOTICE OF TERMINATION MUST ALSO BE FILED. SUBMIT THE FEE, A NOTICE OF INTENT, AND NOTICE OF TERMINATION TO THE STATE RESOURCES CONTROL BOARD AT THE FOLLOWING ADDRESS:
 - STATE WATER RESOURCES CONTROL BOARD P.O. BOX 100
 - SACRAMENTO, CA 95812-0100 ATTN. STORM WATER PERMITTING SECTION
 - 27. IF YOU HAVE ANY QUESTIONS CALL WATER QUALITY CONTROL ENGINEER. CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, CENTRAL VALLEY REGION AT (916) 464-3291.
 - THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE STATE WATER RESOURCES CONTROL BOARD (SWCRB) ORDER NO. 2009-0009-DWQ. THE CONTRACTOR SHALL IMPLEMENT AND MONITOR A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IN ACCORDANCE WITH THE SWRCB REGULATIONS.
 - CONTRACTOR SHALL COMPLY WITH BUSINESS AND PROFESSIONS CODE, SECTION 8771 (b) REGARDING REFERENCING, PRESERVING, AND RECONSTRUCTING MONUMENTS, WHETHER OR NOT THE MONUMENTS ARE SHOWN ON THE PLANS.

GRADING NOTES:

- EARTHWORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF WATERFORD STANDARDS. ALL FILL AREAS SHALL BE TESTED AS REQUIRED BY THE CITY OF WATERFORD AND SHALL BE PAID FOR BY THE CONTRACTOR.
- ALL FILL SOILS SHALL BE PLACED IN 6" LIFTS, MOISTURE CONDITIONED AS NECESSARY, AND COMPACTED TO ACHIEVE 95 PERCENT OF MAXIMUM DENSITY.
- THE CITY SHALL BE RESPONSIBLE FOR COST OF INITIAL TEST FOR MOISTURE DENSITY CURVE. IF THE FIRST TEST FAILS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR COST OF ALL SUBSEQUENT CURVES AND TESTS.

- THE CONTRACTOR SHALL REVIEW SITE PRIOR TO BIDDING. ALL VEGETATION AND DELETERIOUS MATERIALS, INCLUDING ROOTS SHALL BE REMOVED FROM THE SITE AT THE EXPENSE OF THE CONTRACTOR AND SHALL BE INCLUDED IN THE LUMP SUM CLEARING COST.
- THE CONTRACTOR SHALL PRESERVE ALL STAKES AND POINTS SET FOR LINES, GRADES OR MEASUREMENT OF THE WORK IN THEIR PROPER PLACES UNTIL AUTHORIZED TO REMOVE THEM BY THE ENGINEER. ALL EXPENSES INCURRED IN REPLACING STAKES THAT HAVE BEEN REMOVED WITHOUT PROPER AUTHORITY SHALL BE PAID FOR BY THE GENERAL CONTRACTOR.
- MITIGATION MEASURE GEO-4A: STOCKPILE EXCAVATED TOPSOIL FOR ONSITE RE-USE. THE PROPONENT WILL REQUIRE THE CONTRACTORS RETAINED FOR PROJECT CONSTRUCTION TO STOCKPILE EXCAVATED TOPSOIL SO IT CAN BE REUSED FOR REVEGETATION ON THE PROJECT SITE. TOPSOIL WILL BE STOCKPILED SEPARATELY FROM OTHER EXCAVATED MATERIALS TO ENSURE THAT AS MUCH AS POSSIBLE CAN BE EFFECTIVELY SALVAGED.

DIST	COUNTY	ROUTE	POST MILE TOTAL PROJECT	SHEET No	TOTAL SHEETS
10	STA	132	27.401	2	7

FIR

C 91352

REGISTERED CIVIL ENGINEER

PLANS APPROVAL DATE

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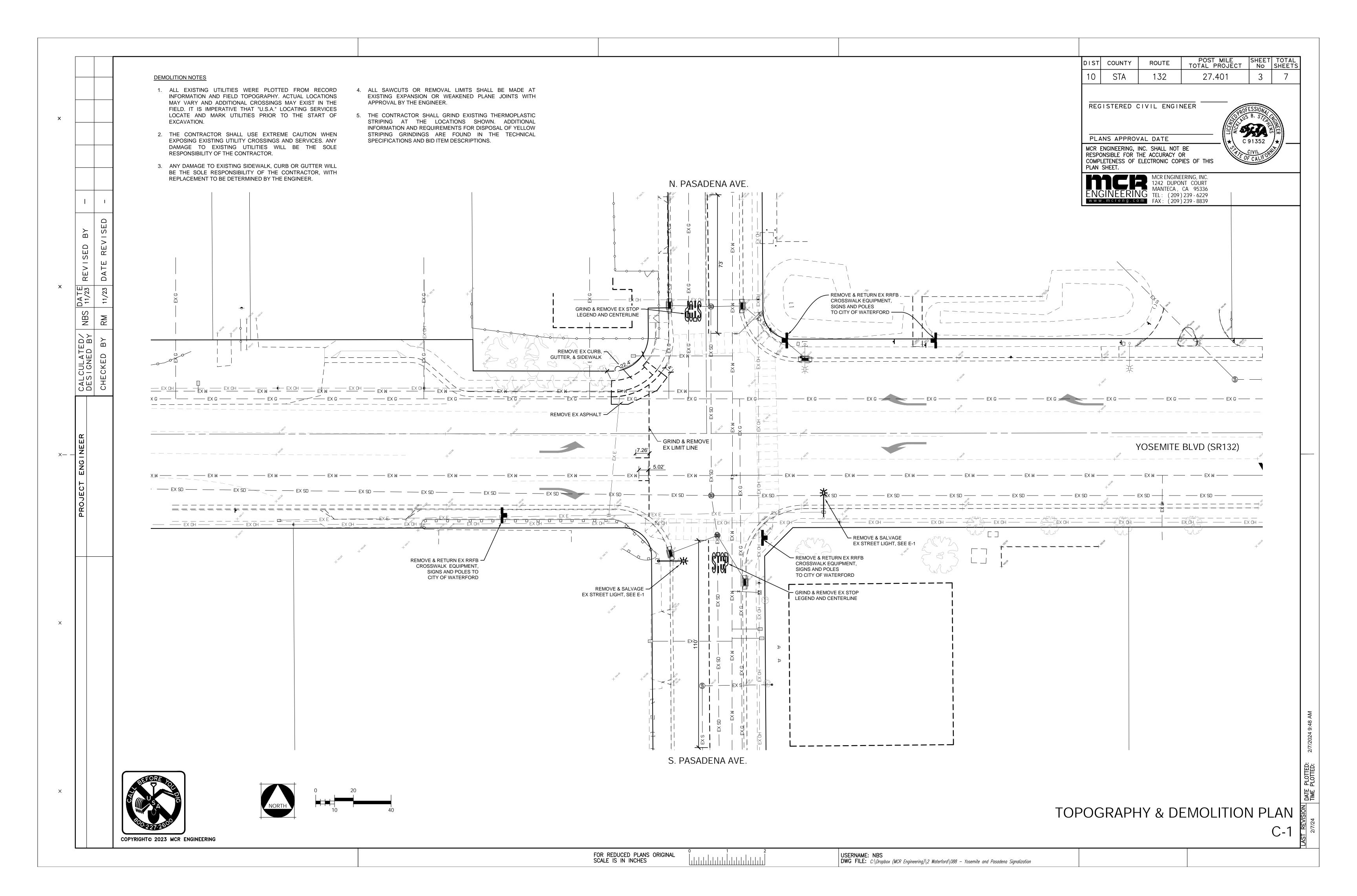


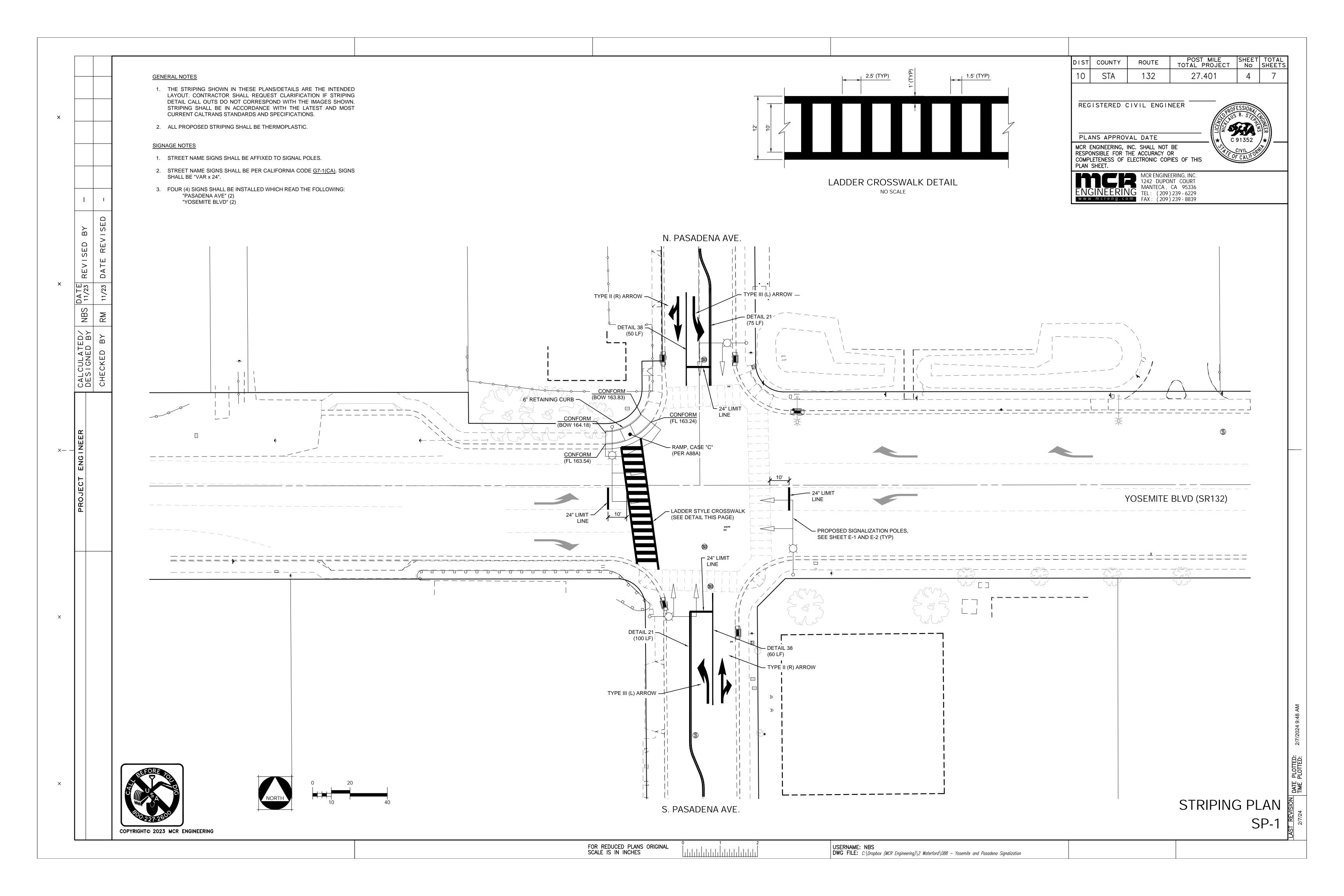
MANTECA, CA 95336

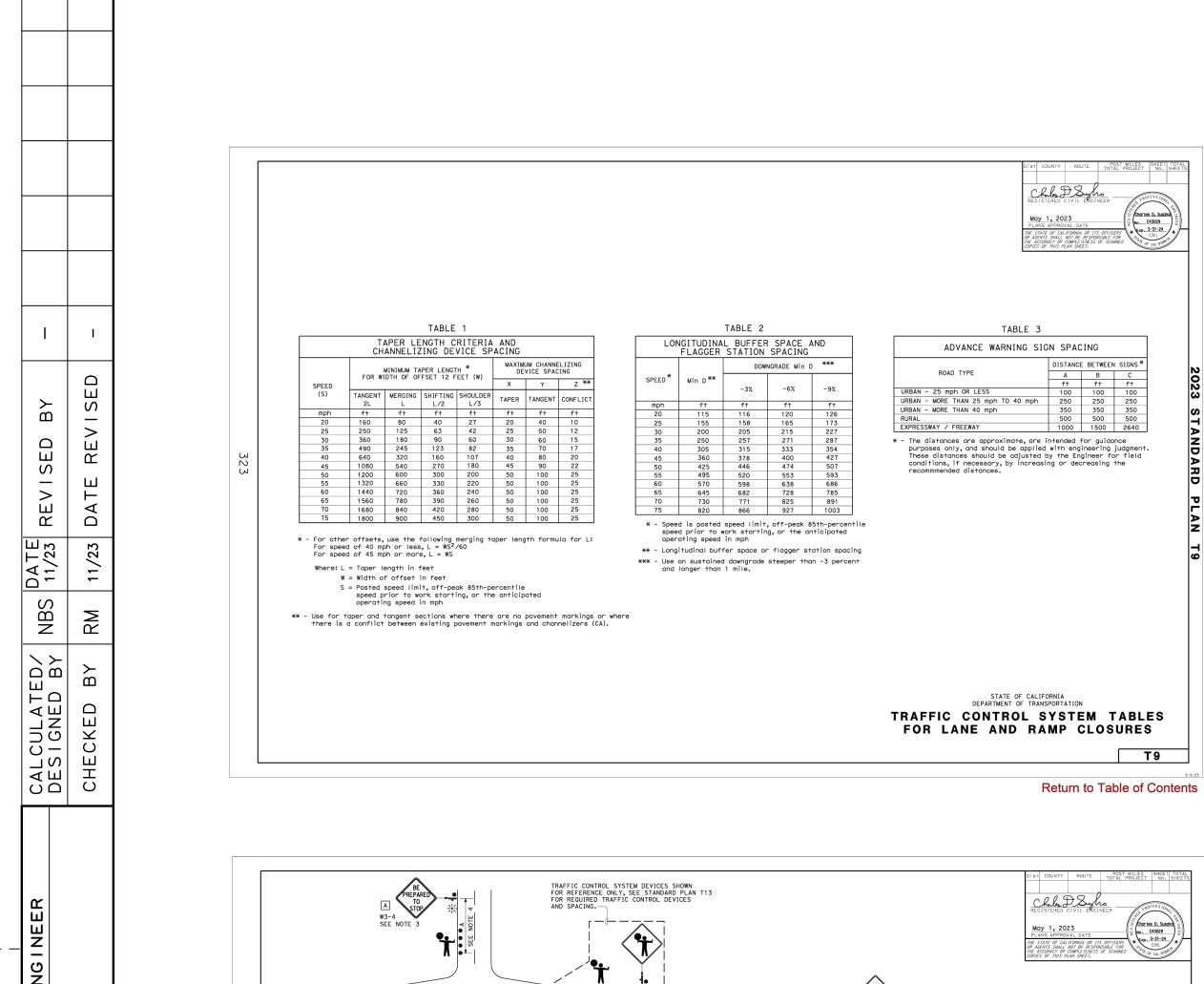
NOTE SHEET & DETAILS

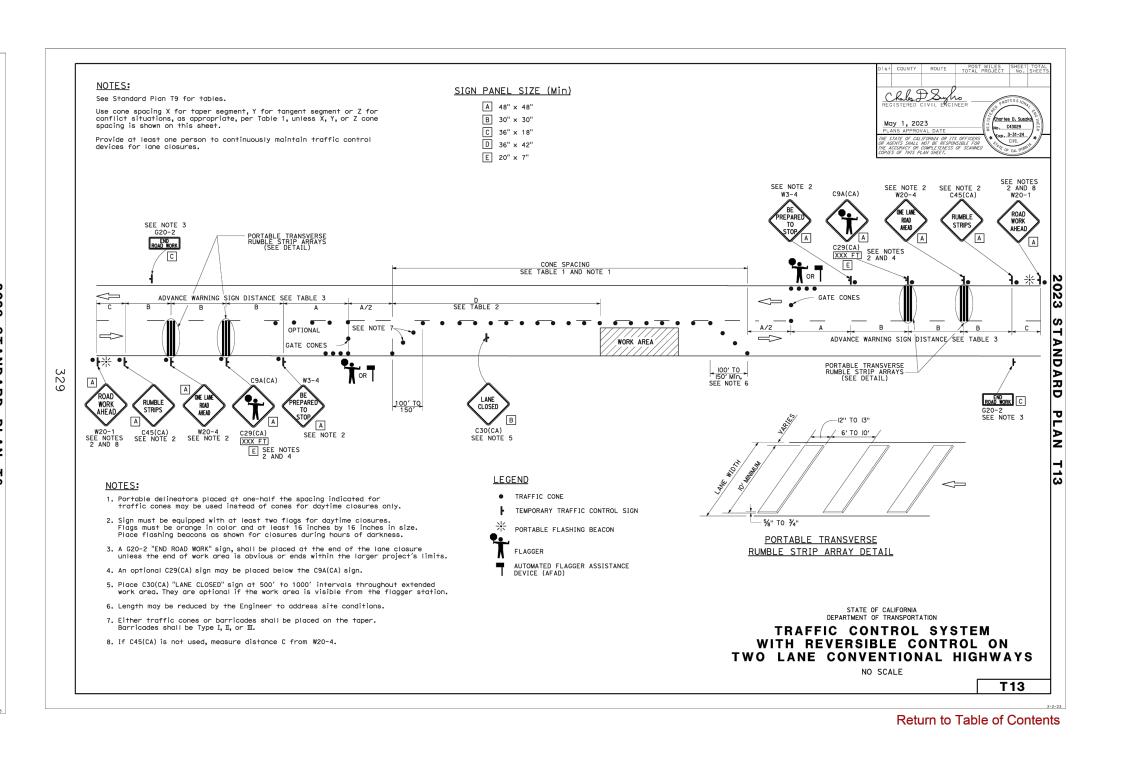
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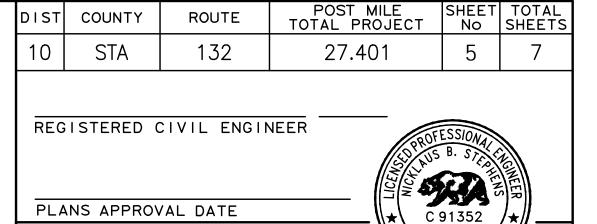
FOR REDUCED PLANS ORIGINAL











PLANS APPROVAL DATE

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MCR ENGINEERING, INC. 1242 DUPONT COURT MANTECA, CA 95336 TEL: (209) 239 - 6229 FAX: (209) 239 - 8839

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WORK AREA FOR SIDE ROADS AND BUSINESS DRIVEWAYS WORK AREA REVERSIBLE TRAFFIC CONTROL WITH ADDITIONAL FLAGGERS AT HIGH VOLUME INTERSECTIONS REVERSIBLE TRAFFIC CONTROL WITH SIGNS FOR RESIDENTIAL DRIVEWAYS AND LOW VOLUME SIDE ROADS SIGN PANEL SIZE (Min) 1. Place C37(CA) sign when pilot car is used. TRAFFIC CONE A 48" × 48" 2. Place C36(CA) sign when pilot car is not used. TEMPORARY TRAFFIC CONTROL SIGN B 36" x 42" TRAFFIC CONTROL SYSTEM 3. 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. PORTABLE FLASHING BEACON TWO LANE CONVENTIONAL HIGHWAYS 4. See Standard Plan T9, Table 3 for advance warning sign spacing. T13B

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TRAFFIC HANDLING PLAN & DETAILS

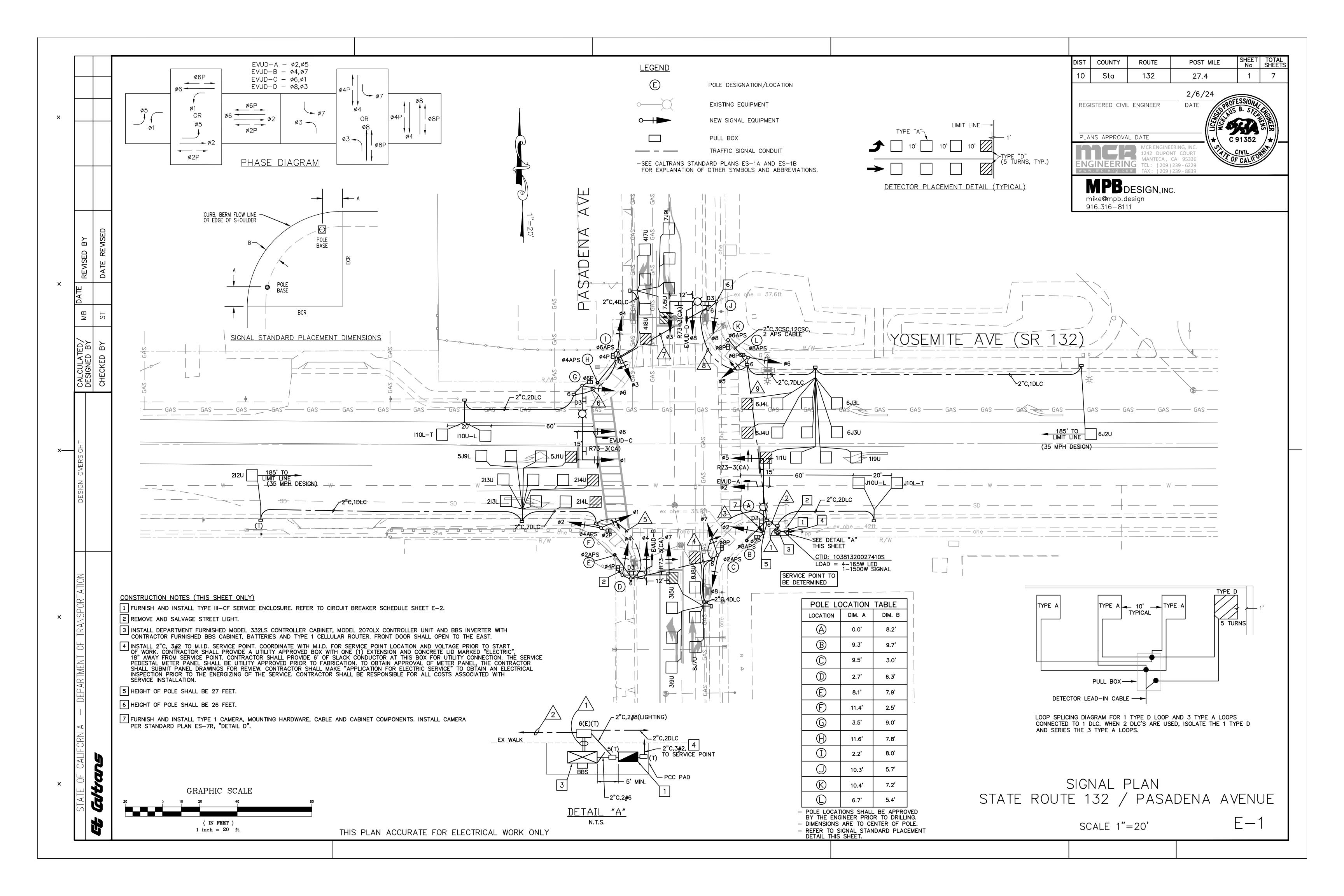
TH-1

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES

USERNAME: NBS
DWG FILE: C:\Dropbox (MCR Engineering)\2 Waterford\088 - Yosemite and Pasadena Signalization

ED: 2/2/2024 0:48 A

N DATE PLOTTE



POLE AND EQUIPMENT SCHEDULE										
	STAN	DARD		VEH S	IG MTG	PED.	PED. APS			
LOCATION	TYPE	SIG. M.A.	LUM. ARM	MAST	POLE	SIGNAL MTG	ø	ARROW	LED LUMINAIRE	NOTES
A	26-4-100	40'	15'	MAS MAS	SV-1-T	SP-1-T			INT L-B	INSTALL OPTICAL DETECTOR, R73-3(CA) SIGN AND D3 "Pasadena Ave" SIGN. 5 7
$^{\odot}$	PBA POST						8	LEFT		
©	1-A				TV-2-T	SP-1-T	2	RIGHT		
(D)	19-4-100	25'	12'	MAS MAS	SV-1-T	SP-1-T			INT L-B	INSTALL OPTICAL DETECTOR, R73-3(CA) SIGN AND D3 "Yosemite Ave" SIGN.
E	PBA POST						2	LEFT		
E	1-A				TV-2-T	SP-1-T	4	RIGHT		
G	26-4-100	40'	15'	MAS MAS	SV-1-T	SP-1-T			INT L-B	INSTALL OPTICAL DETECTOR, R73-3(CA) SIGN AND D3 "Pasadena Ave" SIGN.
\oplus	PBA POST						4	LEFT		
(I)	1-A				TV-2-T	SP-1-T	6	RIGHT		
	19-4-100	25'	12'	MAS MAS	SV-1-T				INT L-B	INSTALL OPTICAL DETECTOR, R73-3(CA) SIGN AND D3 "Yosemite Ave" SIGN.
(K)	1-A(7')					TP-1-T	6	LEFT		
	1-A				TV-2-T	SP-1-T	8	RIGHT		

- ALL VEHICLE HEADS SHALL HAVE 12" LENSES. ALL VEHICLE INDICATIONS AND PEDESTRIAN INDICATIONS SHALL BE L.E.D. MODULES.
 PEDESTRIAN PUSH BUTTONS SHALL BE THE ACCESSIBLE PEDESTRIAN SYSTEM (APS) TYPE. APS SHALL BE INSTALLED AND ACTIVATED.
- OPTICAL DETECTORS SHALL BE MOUNTED ON THROUGH LANE VEHICLE HEAD PER ES-4E.
- PEDESTRIAN INDICATIONS SHALL BE THE COUNTDOWN TYPE.

ΒY

REVISED

CALCULATED/ DESIGNED BY CHECKED BY

B

RE

DATE

		CON	IDUC1	OR		SCH	EDUL	<u> </u>			
CONDUCTOR			C	ONDUI	SIZE	AND R	UN NU	MBER			
CABLE TYPE	POLE PHASE	1	2	3	4	5	6	7	8	9	
	(A) 5.2.2P (C) 7,8,8P (D) 7,4,4P	1 1 1	1 1	1	1						
VEH-PED 12 CSC	(F) 1,2,2P (G) 1,6,6P	1 1	1 1	1	1	1	1	1	1	1	
	① 3,4,4P ② 3,8 (K) 8P	1 1 1	1 1					1	1	1 1 1	
TOTAL CABLES	5,6,6P 5 12 CONDUCTORS	1 9	1 9	3	2	1	1	2	3	1 5	
	(B) 8APS (C) 2APS (E) 2APS	1 1 1	1 1 1	1	1						
PBA 3 CSC	(F) 4APS (H) 4APS	1 1	1 1	1	1	1		1	1	1	
	(I) 6APS (K) 6APS (L) 8APS	1 1 1	1 1 1					1	1	1 1 1	
APS CABLE, 9 C	S 3 CONDUCTORS CONDUCTOR, 18 AWG	8	8	3 2	2	1 2	1	2	2	4	
#8 #10	STREET LIGHTING GROUND	1	1	1	1	1	1	1	1	1	
	1 2 3	2 5 2	2 5 2	5 2	5	5				2	
DETECTOR LEAD	5	2 2	2 2	2	2	2		2	2	2	
CABLE	6 7 8	5 2 2	5 2 2	2				2	2	5 2	
TOTAL DI 0'0	EB WB	2 2	2				2	2	2	2	
TOTAL DLC'S PER RUN EV PRE-EMPT CABLE CAT 6 CABLE		26	24	11	7	7	2	6	6	13	
		1	1	1	1		1	1	2	2	
CONDUIT SIZE	CONDUIT SIZE		2-4"	4"	4"	3"	3"	3"	2-3"	2-3"	
APPROX. % F	APPROX. % FILL PER CONDUIT		24%	20%	14%	15%	11%	22%	15%	23%	

 ALL CONDUCTOR CABLES SHALL BE CONTINUOUS WITHOUT SPLICES BETWEEN EQUIPMENT AND CONTROLLER CABINET.

GENERAL NOTES, TRAFFIC SIGNALS:

- 1. ALL IMPROVEMENTS SHALL BE CONSTRUCTED IN STRICT CONFORMANCE WITH GOVERNING AGENCY STANDARDS INCLUDING THE CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD PLANS AND SPECIFICATIONS, 2023 EDITIONS, AND ALL REVISIONS.
- 2. ALL VEHICLE SECTION HOUSINGS, VISORS AND BACKPLATES SHALL BE METAL. ALL VEHICLE INDICATIONS AND PEDESTRIAN INDICATIONS SHALL BE L.E.D. MODULES.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPORTING ALL CONFLICTS, ERRORS, OMISSIONS, ETC. TO THE ENGINEER IMMEDIATELY UPON DISCOVERY. IF SO DIRECTED BY THE ENGINEER, THE CONTRACTOR SHALL STOP WORK UNTIL REMEDIAL ACTION CAN BE TAKEN. ANY COSTS RESULTING FROM THE CONTRACTOR'S FAILURE TO REPORT OR FAILURE TO STOP WORK AS DIRECTED WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 4. THE CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR ENGINEER.
- 5. THE CONTRACTOR SHALL MAKE AN ON-SITE INSPECTION PRIOR TO PROVIDING ANY PROPOSALS TO DETERMINE ANY AND ALL ITEMS NOT SHOWN AS BID ITEMS ON THE PROPOSAL SHEETS, BUT WHICH MAY BE NECESSARY TO PERFORM A COMPLETE AND ACCEPTABLE JOB.
- 6. THE LOCATIONS OF ALL UNDERGROUND FACILITIES ARE APPROXIMATE. A REASONABLE EFFORT HAS BEEN MADE TO LOCATE AND DELINEATE ALL UNDERGROUND FACILITIES; HOWEVER, KD ANDERSON & ASSOCIATES, INC. ASSUMES NO LIABILITY FOR THE ACCURACY OR COMPLETENESS OF THE EXISTING FACILITIES SHOWN OR FOR THE EXISTENCE OF OTHER UNDERGROUND UTILITIES OR OBJECTS WHICH MAY BE DISCOVERED BUT ARE NOT SHOWN ON THESE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING FACILITIES AND IMMEDIATELY NOTIFY THE ENGINEER IF ANY SUCH FACILITIES INTERFERE WITH THE CONSTRUCTION OF IMPROVEMENTS.
- 7. THE CONTRACTOR IS HEREBY NOTIFIED THAT PRIOR TO COMMENCING CONSTRUCTION HE IS RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES FOR VERIFICATION AT THE CONSTRUCTION SITE OF THE LOCATIONS OF ALL UNDERGROUND FACILITIES WHERE SUCH FACILITIES MAY CONFLICT WITH PLACEMENT OF IMPROVEMENTS SHOWN ON THIS PLAN. CALL "UNDERGROUND SERVICE ALERT" AT 800-642-2444, A MINIMUM OF TWO WORKING DAYS PRIOR TO ANY EXCAVATION. CALTRANS IS NOT A MEMBER OF USA UNDERGROUND LOCATING SERVICE. CONTRACTOR SHALL VERIFY LOCATION AND DEPTH OF EXISTING CALTRANS DETECTORS, CONDUITS, PULL BOXES AND OTHER ELECTRICAL FACILITIES BEFORE USING TOOLS OR EQUIPMENT THAT MAY DAMAGE THOSE FACILITIES OR INTERFERE WITH AN ELECTRICAL SYSTEM.

 8. ALL CHANGES TO THESE PLANS SHALL BE IN WRITING AND MUST BE APPROVED BY THE ENGINEER.
- 9. CONTRACTOR SHALL OBTAIN NECESSARY PERMITS PRIOR TO START OF WORK.
- 10. PUBLIC SAFETY AND TRAFFIC CONTROL SHALL BE PROVIDED IN ACCORDANCE WITH CALTRANS REQUIREMENTS AND AS DIRECTED BY THE ENGINEER. SAFE VEHICULAR AND PEDESTRIAN ACCESS SHALL BE PROVIDED AT ALL TIMES DURING CONSTRUCTION.
- 11. ALL FIELD STAKING SHALL BE DONE BY A REGISTERED CIVIL ENGINEER OR LICENSED LAND SURVEYOR AT THE EXPENSE OF THE CONTRACTOR.
- 12. CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING MONUMENTS AND OTHER SURVEY MARKERS. MONUMENTS AND SURVEY MARKERS DESTROYED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- 13. PERMANENT TRAFFIC SIGNS SHALL CONFORM TO CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD SIGNS SPECIFICATIONS AND THE FHWA'S STANDARD HIGHWAY SIGNS BOOK (2004).
- 14. LOOP DETECTORS SHALL BE CENTERED IN EFFECTIVE TRAVEL LANE WIDTHS UNLESS OTHERWISE NOTED ON PLAN OR DIRECTED BY THE ENGINEER.

 15. CONTRACTOR IS RESPONSIBLE FOR TRAFFIC CONTROL. TRAFFIC CONTROL
- MEASURES SHALL CONFORM TO THE CA MUTCD.

 16. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL EQUIPMENT AND MATERIALS NECESSARY FOR THE SIGNAL TO OPERATE AS SHOWN IN THE PHASE DIAGRAM.
- 17. INSTALL ALL SIGNAL POLES WITH APS EQUIPMENT WITHIN 5 FT OF CROSSWALK.

 18. CONTRACTOR SHALL VERIFY LOCATION AND DEPTH OF CALTRANS DETECTORS, CONDUITS, PULL BOXES AND OTHER ELECTRICAL FACILITIES BEFORE USING TOOLS OR EQUIPMENT THAT MAY DAMAGE THOSE FACILITIES OR INTERFERE WITH AN ELECTRICAL SYSTEM. CALTRANS IS NOT PART OF UNDERGROUND SERVICE ALERT (USA).
- 19. CONTRACTOR SHALL NOTIFY THE CALTRANS ENGINEER PRIOR TO PERFORMING ANY WORK THAT WILL AFFECT THE EXISTING TRAFFIC OPERATION. AN ADVANCE NOTICE OF AT LEAST 3 WORKING DAYS IS REQUIRED.
- 20. ALL LOOPS SHALL BE INSTALLED AND TESTED PRIOR TO FINAL LIFT OF NEW PAVEMENT.
 21. START FUNCTIONAL TESTS ON ANY DAY EXCEPT MONDAY, FRIDAY OR THE DAY BEFORE A HOLIDAY.
 NOTIFY THE ENGINEER 2 WEEKS BEFORE THE START OF FUNCTIONAL TEST. THE TEST FOR SIGNALS
 SHALL START FROM 9:00 a.m. TO 2:00 p.m.
- 22. ALL UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL VERIFY OVERHEAD AND UNDERGROUND CLEARANCE WITH PG&E, AT&T AND OTHER AFFECTED UTILITIES PRIOR TO THE START OF WORK.
- 23. ALL SALVAGED EQUIPMENT AND MATERIALS SHALL BE DELIVERED TO THE CALTRANS MAINTENANCE YARD, WITH A MINIMUM 48 HOUR NOTICE.
- 24. PLACE TYPE D STOP BAR LOOPS ONE FOOT FROM LIMIT LINE WITH 10 FOOT SPACING BETWEEN TYPE A LOOPS.

25. INDUCTIVE LOOP CONDUCTORS MUST BE TYPE 2.

DIST COUNTY ROUTE POST MILE SHEET TOTAL No SHEETS

10 Sta 132 27.4 2

2/6/24 DATE

多山

C 91352

REGISTERED CIVIL ENGINEER

PLANS APPROVAL DATE

MCR ENGINEERING, INC.
1242 DUPONT COURT
MANTECA, CA 95336
TEL: (209) 239 - 6229
FAX: (209) 239 - 8839

MPB DESIGN, INC. mike@mpb.design

916.316-8111

SERVICE FOR SR 132 / PASADENA AVE 120/240V, SINGLE PHASE 3-WIRE TYPE III-CF SERVICE ENCLOSURE WITH THE FOLLOWING CIRCUIT BREAKERS:

METERED 1

SINGLE PHASE

CALTRANS ID NO. (10381320027410S)

AMPERES	VOLTS	POLES	LOAD	METER	PEC TYPE
100	240	2	MAIN BREAKER	YES	
50	120	1	SIGNALS	YES	
20	120	1	SPARE	YES	
15	120	1	SPARE	YES	

METERED 2

SINGLE PHASE

CALTRANS ID NO. (10381320027410L)

AMPERES	VOLTS	POLES	LOAD	METER	PEC TYPE
100	240	2	MAIN BREAKER	YES	
30	240	2	LIGHTING	YES	
15	120	1	LIGHTING CONTROL	YES	V
30	240	2	SPARE	YES	

- 26. IF ADDING NEW CONDUCTORS OR REMOVING EXISTING CONDUCTORS, REMOVE ALL CONDUCTORS, CLEAN THE CONDUIT UNDER SECTION 87-1.03A, AND PULL ALL CONDUCTORS IN THE CONDUIT AS ONE UNIT. EXISTING UNDERGROUND CONDUIT TO BE INCORPORATED INTO A NEW SYSTEM SHALL BE CLEANED WITH A MANDREL OR CYLINDRICAL WIRE BRUSH AND BLOWN OUT.
- 27. LOCATIONS OF CONTROLLER, CONDUIT, PULL BOXES AND OTHER EQUIPMENT SHOWN ON THESE PLANS IS APPROXIMATE AND MAY BE CHANGED TO SUIT FIELD CONDITIONS OR AS DIRECTED BY THE ENGINEER.
- 28. LOOP DETECTOR LEAD-IN CABLE MUST BE TYPE B.
- 29. SLOTS MUST BE FILLED WITH HOT-MELT RUBBERIZED ASPHALT SEALANT.
- 30. THE DEPTH OF THE LOOP SEALANT ABOVE THE TOP OF THE UPPERMOST LOOP CONDUCTOR IN THE SAWED SLOTS MUST BE 2 INCHES, MINIMUM.
- 31. USE METHOD B TO INSULATE A SPLICE.
- 32. ALL CONDUIT IN A FOUNDATION SHALL BE TYPE 1.
- 33. ALL NEW SIGNAL HEADS SHALL BE 12" INDICATIONS WITH BACK PLATES AND TUNNEL VISORS.

SIGNAL PLAN STATE ROUTE 132 / PASADENA AVENUE

E-2