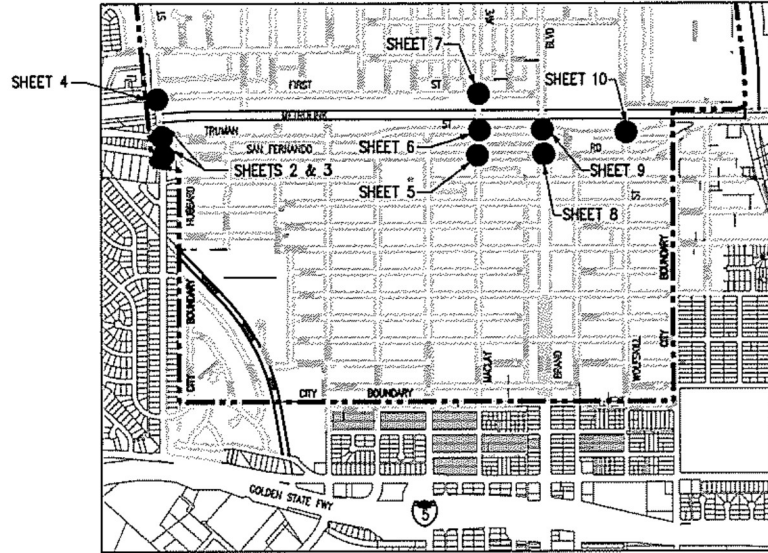




LOCATION MAP
NTS

City of San Fernando

PUBLIC WORKS DEPARTMENT

HIGHWAY SAFETY IMPROVEMENT PROJECT

HSIP CYCLE 8 TRAFFIC SIGNAL IMPROVEMENTS

FEDERAL PROJECT NO. HSIPL-5202(019)

JOB NO. 7598

ABBREVIATIONS

BCR	BEGIN CURB RETURN
CB	CATCH BASIN
C/L	CENTERLINE
CF	CURB FACE
DWG	DRAWING
ECR	END CURB RETURN
EX/EXIST.	EXISTING
L	LENGTH
LF	LINEAR FEET
NO	NUMBER
NTS	NOT TO SCALE
OH	OVERHEAD
PP	POWER POLE
PROP.	PROPOSED
R/W	RIGHT-OF-WAY
SC	SOUTHERN CALIFORNIA EDISON
SDWK	SIDEWALK
ST	STREET
STA	STATION
STD	STANDARD
TC	TOP OF CURB
TELE	TELEPHONE
VAR	VARIES

PUBLIC UTILITIES CONTACTS

WATER:
CITY OF SAN FERNANDO
120 MACNEIL STREET
SAN FERNANDO, CA 91340
TONY SALAZAR OR DANNY GARCIA
818 898 1293

WASTEWATER:
CITY OF SAN FERNANDO
120 MACNEIL STREET
SAN FERNANDO, CA 91340
DALE WARREN
818 898 1293

ELECTRICITY:
SOUTHERN CALIFORNIA EDISON COMPANY
EMERGENCY CALLS
800 611 1911

GAS:
SOUTHERN CALIFORNIA GAS COMPANY
EMERGENCY CALLS
818 701 3342

TELEPHONE:
VERIZON/GTE
EMERGENCY CALLS
818 365 3128

CABLE:
TIME WARNER
EMERGENCY CALLS
818 700 6100

POLICE:
CITY OF SAN FERNANDO POLICE DEPT.
NON-EMERGENCY NUMBER
818 898 1267, EXT. 0

FIRE:
CITY OF LOS ANGELES FIRE DEPT. STATION 91
14430 POLK STREET
LOS ANGELES, CA 91342
NON-EMERGENCY NUMBER
818 756 8691

LANDFILLS

BRADLEY LANDFILL & RECYCLING CENTER/
WASTE MANAGEMENT, INC.
9081 TUJUNGA AVE.
SUN VALLEY, CA 91352
(818) 767-6180
(818) 767-5867

STRATHERN INERT LANDFILL
8230 TUJUNGA AVE.
SUN VALLEY, CA 91352

CALMART INERT LANDFILL
9436 GLENDALE BLVD.
SUN VALLEY, CA 91352



SHEET INDEX

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SHEET NO. 1	TITLE SHEET
SHEET NO. 2	TRAFFIC SIGNAL MODIFICATION PLAN HUBBARD STREET AT SAN FERNANDO ROAD / AT TRUMAN STREET
SHEET NO. 3	TRAFFIC SIGNAL MODIFICATION PLAN HUBBARD STREET AT SAN FERNANDO ROAD / AT TRUMAN STREET
SHEET NO. 4	TRAFFIC SIGNAL MODIFICATION PLAN HUBBARD STREET AT FIRST STREET
SHEET NO. 5	TRAFFIC SIGNAL MODIFICATION PLAN MACLAY AVENUE AT SAN FERNANDO ROAD
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SHEET NO. 7	TRAFFIC SIGNAL MODIFICATION PLAN MACLAY AVENUE AT FIRST STREET
SHEET NO. 8	TRAFFIC SIGNAL MODIFICATION PLAN BRAND BOULEVARD AT SAN FERNANDO ROAD
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SHEET NO. 10	TRAFFIC SIGNAL MODIFICATION PLAN WOLFSKILL STREET AT TRUMAN STREET

GENERAL NOTES:

- THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY OR SUBSTRUCTURE SHOWN ON THESE PLANS WAS OBTAINED BY A SEARCH OF AVAILABLE RECORDS. APPROVAL OF THESE PLANS BY THE CITY DOES NOT CONSTITUTE A REPRESENTATION AS TO THE ACCURACY OR COMPLETENESS OF THE LOCATION OR THE EXISTENCE OR NONEXISTENCE OF ANY UNDERGROUND UTILITY OR SUBSTRUCTURE WITHIN THE LIMITS OF THE PROJECT.
- THE CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OR THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND THE CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD THE DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE DESIGN PROFESSIONAL.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING CONSTRUCTION SURVEY IF IT IS DEEMED NECESSARY.
- CONTACT SCRRRA'S CONTRACTOR, MR. DARRIN POCK WITH RAILPROS AT (809) 706-5280 TO ARRANGE FOR FLAGGING SERVICES. FLAGGING SERVICE IS DEPENDENT ON THE ROADWAY WORKER IN CHARGE (RWIC) AVAILABILITY AND MAY REQUIRE A MINIMUM OF FIFTEEN WORKING DAYS PRIOR TO BEGINNING WORK. PRIOR NOTIFICATION OF FLAGGING SERVICES DOES NOT GUARANTEE THE AVAILABILITY OF THE FLAGGING FOR THE PROPOSED DATE OF WORK.
- CONTACT MR. CHRIS NUNEZ WITH RAILPROS TO SCHEDULE SCRRRA SAFETY TRAINING AT (809) 816-0552 OR VIA E-MAIL AT, CHRISTOPHER.NUNEZ@RAILPROS.COM. ALLOW 24 TO 72 HOURS FROM THE REQUEST FOR SAFETY TRAINING TO ARRANGE THE TRAINING. NO WORK MAY COMMENCE ON THE RAILROAD RIGHT OF WAY UNTIL THIS TRAINING HAS BEEN COMPLETED.
- THE CONTRACTOR SHALL FOLLOW SCRRRA RULES AND REGULATIONS, ADDRESSED IN "RULES AND REQUIREMENTS FOR CONSTRUCTION ON RAILWAY PROPERTY" (SCRRRA FORM 37). FORM 37 CAN BE FOUND ON OUR WEBSITE AT: [HTTPS://WWW.METROINKTRAINS.COM/GLOBALASSETS/ABOUT/ENGINEERING/SCRRRA_FORM_NO_37.PDF](https://www.metroinktrains.com/globalassets/about/engineering/scrrra_form_no_37.pdf)
- IF THERE WILL BE ANY EXCAVATION ON RAILROAD PROPERTY AND/OR WITHIN SCRRRA RAILROAD RIGHT-OF-WAY, THE CONTRACTOR SHALL CALL SCRRRA'S SIGNAL DEPARTMENT AT (809) 592-1346 A MINIMUM OF FIVE DAYS PRIOR TO BEGINNING CONSTRUCTION TO MARK SIGNAL AND COMMUNICATION CABLES AND CONDUITS. TO ASSURE CABLES AND CONDUITS HAVE BEEN MARKED, NO WORK MAY PROCEED UNTIL YOU HAVE BEEN PROVIDED WITH AN SCRRRA DIG NUMBER. IN CASE OF SIGNAL EMERGENCIES OR GRADE CROSSING PROBLEMS, THE CONTRACTOR SHALL CALL SCRRRA'S 24-HOUR SIGNAL EMERGENCY NUMBER 1-888-446-8721. SCRRRA IS NOT A MEMBER OF DIGALERT.
- THE CONTRACTOR WILL ADHERE TO SCRRRA'S EXCAVATION SUPPORT CRITERIA. SCRRRA'S EXCAVATION SUPPORT CRITERIA CAN BE FOUND IN OUR DESIGN CRITERIA MANUAL (DCM), CHAPTER 15, WHICH IS ON OUR WEBSITE AT: [HTTPS://METROINKTRAINS.COM/GLOBALASSETS/ABOUT/ENGINEERING/SCRRRA_DESIGN_CRITERIA_MANUAL.PDF](https://metroinktrains.com/globalassets/about/engineering/scrrra_design_criteria_manual.pdf). ANY TEMPORARY SHORING WITHIN THE RAILROAD INFLUENCE ZONE WILL NEED TO BE SUBMITTED TO SCRRRA FOR REVIEW AND APPROVAL.
- NO EQUIPMENT, TRUCKS OR MATERIALS ARE ALLOWED TO BE STORED ON THE RAILROAD RIGHT-OF-WAY.
- BEFORE ANY TRAFFIC SIGNAL UPGRADES AND/OR MODIFICATIONS ARE CONDUCTED AND TO ENSURE THERE IS NO NEGATIVE IMPACT TO SCRRRA FACILITIES, THE CONTRACTOR WILL NEED TO COORDINATE THEIR WORK WITH SCRRRA'S ASSISTANT DIRECTOR OF SIGNAL SYSTEMS, MR. SCOTT WESTLAND, MR. SCOTT WESTLAND, ASSISTANT DIRECTOR, SIGNAL SYSTEMS, CAN BE CONTACTED DIRECTLY AT 213-507-2304 (CELL), WESTLANDS@SCRRRA.NET.

NOTICE TO CONTRACTOR:

IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CALL THE USA UNDERGROUND 811 ALERT FOR LOCATIONS OF EXISTING UNDERGROUND UTILITIES NO LESS THAN TWO DAYS AND NO MORE THAN SEVEN DAYS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR ANY DAMAGE DONE TO EXISTING UTILITIES OR STREET IMPROVEMENTS INCLUDING CONCRETE LANDSCAPING DURING CONSTRUCTION.

SIGNING AND STRIPING GENERAL NOTES:

- TRAFFIC SIGNING AND STRIPING SHALL CONFORM TO THE CALTRANS STANDARD PLANS AND SPECIFICATIONS, THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD), LATEST EDITIONS, THESE PLANS AND THE SPECIAL PROVISIONS.
- THE INSTALLATION AND/OR REPAINTING OF STRIPING DETAILS, PAVEMENT MARKINGS, CROSSWALKS AND CURB MARKINGS CALLED FOR ON THE PLANS SHALL BE PAINT, 2 COATS.
- CONTRACTOR SHALL REPAINT ALL EXISTING CURB MARKINGS WITHIN 100' OF THE CROSSWALK OR LIMIT LINE ON ALL APPROACHES. REPAINTING SHALL NOT ENDOUR INTO SCRRRA RIGHT-OF-WAY.
- CONTRACTOR SHALL REPAINT ALL EXISTING STRIPING DETAILS, PAVEMENT MARKINGS, AND/OR CROSSWALKS WITHIN 100' OF THE CROSSWALK OR LIMIT LINE, AS NOTED ON THE PLANS. REPAINTING LIMITS SHALL NOT ENDOUR INTO SCRRRA RIGHT-OF-WAY, THE NORTH APPROACHES BETWEEN SAN FERNANDO RD AND TRUMAN AVE SHALL BE REPAINTED ENTIRELY, NO UNPAINTED GAPS WILL BE ALLOWED.
- CONTRACTOR SHALL REMOVE AND REPLACE IN KIND ALL REGULATORY AND WARNING SIGNS AND OBJECT MARKERS WITHIN 100' OF THE CROSSWALK OR LIMIT LINE ON ALL APPROACHES, INCLUDING SIGNS WITHIN THE INTERSECTION TO ENSURE ALL SIGNS MEET CURRENT STATE AND FEDERAL GUIDELINES SAFETY REQUIREMENTS FOR RETROREFLECTIVITY. REPLACE IN KIND INCLUDES THE SIGN DIMENSION OR SIZE BEING EQUAL TO THOSE PRESENTLY IN THE FIELD. SIGNS INCLUDE BOTH ROADSIDE SIGNS AND SIGNS INSTALLED ON TRAFFIC SIGNAL POLES. APPROXIMATELY 115 SIGNS TO BE REPLACED ON THIS PROJECT. SEE SPECIAL PROVISIONS.



Know what's below.
Call before you dig.

REVISIONS

REV.	DATE	BY	DESCRIPTION	APP'D
1	5/23/23	DB	SIGNING & STRIPING CHANGES AT R/W CROSSING FOR SCRRRA	JL

PLANS PREPARED BY:
WILLDAN
13191 CROSSROADS PARKWAY NORTH
SUITE 405, INDUSTRY, CA 91746
(562) 908-6200
UNDER THE SUPERVISION OF:

JEFFREY C. LAY
RCE 83887
DESIGNED BY: RG/DB



10/12/22
DATE
DESIGNED BY: RG/DB | CHECKED BY: JL

APPROVED: CITY OF SAN FERNANDO
Kenneth Jones 6/2/23
KENNETH JONES

APPROVED: CITY OF SAN FERNANDO
Emilio M. Jones 6/2/23
EMILIO MURGA, CITY ENGINEER/CONSULT.
R.C.E. NO. 22420



SAN FERNANDO
HISTORIC & VISIONARY

PUBLIC WORKS DEPARTMENT

TITLE SHEET

HIGHWAY SAFETY IMPROVEMENT PROJECT
TRAFFIC SIGNAL IMPROVEMENTS

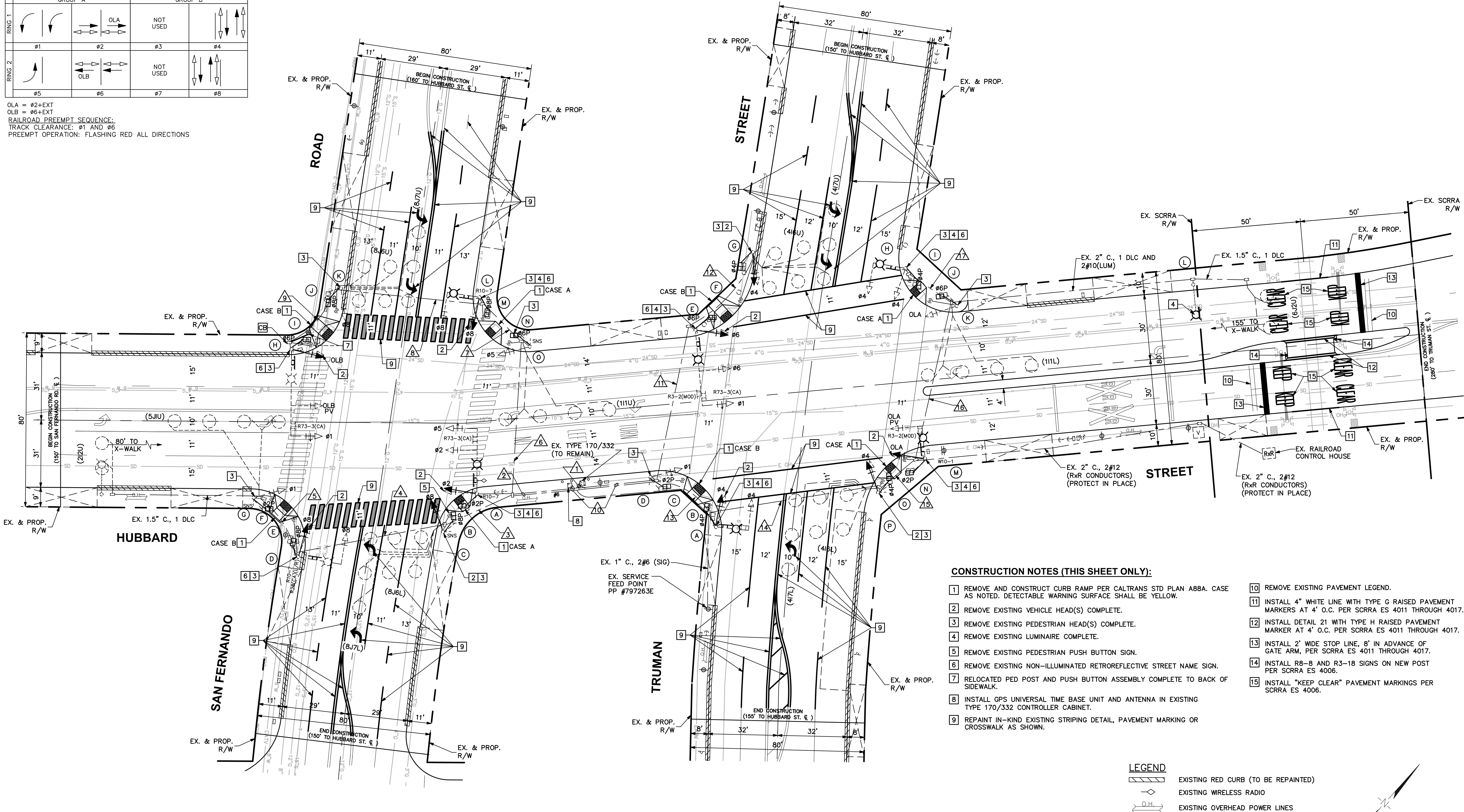
JOB NO. 7598

PLAN NO. P-722

SHEET NO.
1
OF
10

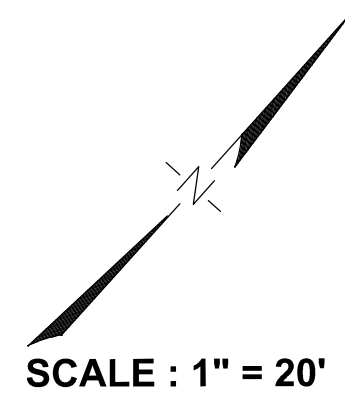
EXISTING PHASE DIAGRAM							
GROUP A				GROUP B			
RING 1				OLA	NOT USED		
RING 2				OLB	NOT USED		
	Ø1	Ø2	Ø3			Ø4	
	Ø5	Ø6	Ø7			Ø8	

OLA = Ø2+EXT
 OLB = Ø6+EXT
 RAILROAD PREEMPT SEQUENCE:
 TRACK CLEARANCE: Ø1 AND Ø6
 PREEMPT OPERATION: FLASHING RED ALL DIRECTIONS



- CONSTRUCTION NOTES (THIS SHEET ONLY):**
 - REMOVE AND CONSTRUCT CURB RAMP PER CALTRANS STD PLAN A88A. CASE AS NOTED. DETECTABLE WARNING SURFACE SHALL BE YELLOW.
 - REMOVE EXISTING VEHICLE HEAD(S) COMPLETE.
 - REMOVE EXISTING PEDESTRIAN HEAD(S) COMPLETE.
 - REMOVE EXISTING LUMINAIRE COMPLETE.
 - REMOVE EXISTING PEDESTRIAN PUSH BUTTON SIGN.
 - REMOVE EXISTING NON-ILLUMINATED RETROREFLECTIVE STREET NAME SIGN.
 - RELOCATED PED POST AND PUSH BUTTON ASSEMBLY COMPLETE TO BACK OF SIDEWALK.
 - INSTALL GPS UNIVERSAL TIME BASE UNIT AND ANTENNA IN EXISTING TYPE 170/332 CONTROLLER CABINET.
 - REPAINT IN-KIND EXISTING STRIPING DETAIL, PAVEMENT MARKING OR CROSSWALK AS SHOWN.
 - REMOVE EXISTING PAVEMENT LEGEND.
 - INSTALL 4" WHITE LINE WITH TYPE G RAISED PAVEMENT MARKERS AT 4' O.C. PER SCORRA ES 4011 THROUGH 4017.
 - INSTALL DETAIL 21 WITH TYPE H RAISED PAVEMENT MARKER AT 4' O.C. PER SCORRA ES 4011 THROUGH 4017.
 - INSTALL 2' WIDE STOP LINE, 8' IN ADVANCE OF GATE ARM, PER SCORRA ES 4011 THROUGH 4017.
 - INSTALL R8-B AND R3-18 SIGNS ON NEW POST PER SCORRA ES 4006.
 - INSTALL "KEEP CLEAR" PAVEMENT MARKINGS PER SCORRA ES 4006.

- LEGEND**
- EXISTING RED CURB (TO BE REPAINTED)
 - EXISTING WIRELESS RADIO
 - EXISTING OVERHEAD POWER LINES



SCALE : 1" = 20'

FOR SIGNING AND STRIPING GENERAL NOTES, SEE TITLE SHEET

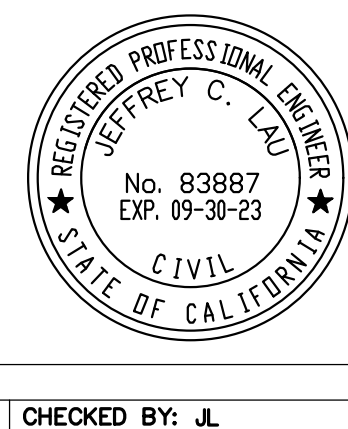
WORK ON THIS PLAN DOES NOT ENCROACH ON RAILROAD RIGHT-OF-WAY OR IMPACT RAILROAD OPERATION.

REVISIONS

REV.	DATE	BY	DESCRIPTION	APP'VD	REV.	DATE	BY	DESCRIPTION	APP'VD
1	5/23/23	BB	SIGNING & STRIPING CHANGES AT R&R CROSSING PER SCORRA	JL					

PLANS PREPARED BY:
WILLDAN Engineering
 13191 CROSSROADS PARKWAY NORTH
 SUITE 405, INDUSTRY, CA 91746
 (562) 908-6200
 UNDER THE SUPERVISION OF:

 JEFFREY C. LAU RCE 83887 DATE 10/12/22
 DRAWN BY: RG/BB DESIGNED BY: RG/BB CHECKED BY: JL



SUBMITTED BY:
 MANUEL FABIAN, CE ASSISTANT II DATE _____



TRAFFIC SIGNAL MODIFICATION PLAN HUBBARD STREET AT SAN FERNANDO ROAD / AT TRUMAN STREET

JOB NO. 7598 PLAN NO. P-722

SHEET NO.
 2
 OF
 10



■ ALL EQUIPMENT IS EXISTING UNLESS OTHERWISE NOTED. HUBBARD ST. IS NORTH/SOUTH # = POLE I.D. NUMBER
 (N) = NEW; (R) = RELOCATED
 * PEDESTRIAN SIGNAL HEADS SHALL BE "NON-COUNTDOWN".



■ ALL EQUIPMENT IS EXISTING UNLESS OTHERWISE NOTED. HUBBARD ST. IS NORTH/SOUTH # = POLE I.D. NUMBER
 (N) = NEW
 * PEDESTRIAN SIGNAL HEADS SHALL BE "NON-COUNTDOWN".

▲ ALL CONDUCTORS ARE EXISTING

FOR SIGNING AND STRIPING GENERAL NOTES, SEE TITLE SHEET

SHEET No.

3

OF

10

POLE SCHEDULE ■													
No.	STANDARD			LUMINAIRE LED EQ	VEHICLE SIGNAL MOUNTING		PED SIGNAL *	PPB	LED I.I.S.N.S.	POLE LOCATION (SEE DETAIL "A")			REMARKS
	TYPE	LUM. M.A.	SIG. M.A.		MAST ARM	POLE				E	B	C	
(A)	24-4-100(N)	12(N)	35(N)	400W(N)	MAS(N), MAS(N)	SV-1-T(N)	SP-1-T(N)	4	S(N)	LT(N)	7'	5'	#22, PEC(R); POLE HT = 25'
(B)	1A	-	-	-	-	TV-1	SP-1-T(N)	2	W(N)	RT(N)	-	-	EXISTING
(C)	17-2-80	12'	20'	400W(N)	MAS	ST-1-T(N)	SP-1-T(N)	-	-	-	-	-	EXISTING #21
(D)	PPB POST	-	-	-	-	-	-	2	W(N)	LT(N)	-	-	EXISTING
(E)	1A	-	-	-	-	TV-1-T	SP-1-T(N)	8	N(N)	RT(N)	-	-	EXISTING
(F)	26-4-80	12'	40'	400W(N)	MAS, MAS	SV-1-T	SP-1-T(N)	8	N(N)	LT(N)	.5'	3'	#9
(G)	1A	-	-	-	-	TV-1-T(N)	SP-1-T(N)	6	E(N)	RT(N)	-	-	EXISTING
(H)	17-2-80	12'	20'	400W(N)	MAS	SV-1-T(N)	SP-1-T(N)	6	E(N)	LT(N)	-	-	EXISTING #8
(I)	1A	-	-	-	-	TV-1-T(N)	SP-1-T(N)	4	S(N)	RT(N)	-	-	EXISTING
(J)	TYPE 22	6'	-	LED	-	-	-	-	-	-	-	-	EXISTING
(K)	XLS	6'	-	400W(N)	-	-	-	-	-	-	-	-	EXISTING

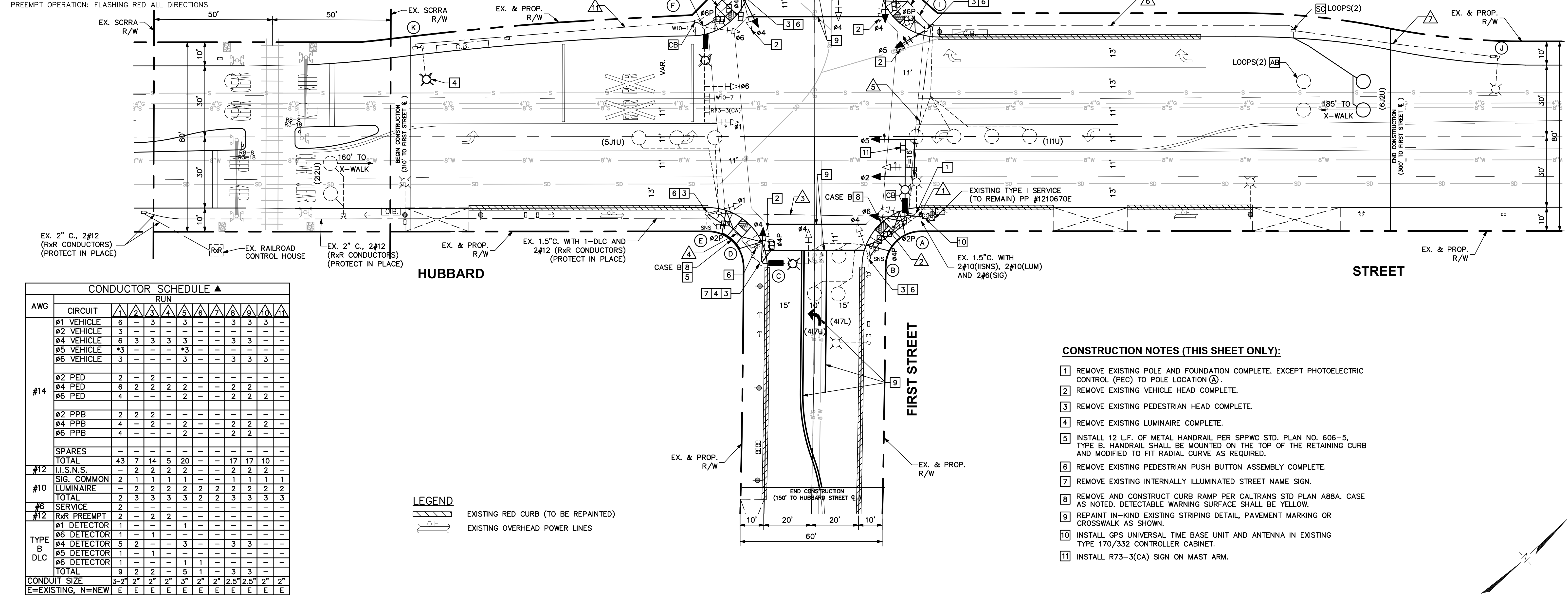
■ ALL EQUIPMENT IS EXISTING UNLESS OTHERWISE NOTED. HUBBARD ST IS NORTH/SOUTH # = POLE I.D. NUMBER
 (N) = NEW
 (R) = RELOCATE
 * PEDESTRIAN SIGNAL HEADS SHALL BE "NON-COUNTDOWN".

EXISTING PHASE DIAGRAM			
GROUP A		GROUP B	
RING 1			NOT USED
RING 2			NOT USED

* - PROTECTED/PERMISSIVE
 RAILROAD PREEMPT SEQUENCE:
 TRACK CLEARANCE: #2 AND #5
 PREEMPT OPERATION: FLASHING RED ALL DIRECTIONS

PROPOSED PHASE DIAGRAM			
GROUP A		GROUP B	
RING 1			NOT USED
RING 2			NOT USED

RAILROAD PREEMPT SEQUENCE:
 TRACK CLEARANCE: #2 AND #5
 PREEMPT OPERATION: FLASHING RED ALL DIRECTIONS



CONDUCTOR SCHEDULE ▲											
AWG	CIRCUIT	RUN									
		1	2	3	4	5	6	7	8	9	10
#14	#1 VEHICLE	6	-	3	-	3	-	-	3	3	3
	#2 VEHICLE	3	-	-	-	-	-	-	-	-	-
	#4 VEHICLE	6	3	3	3	3	-	-	3	3	-
	#5 VEHICLE	*3	-	-	-	*3	-	-	-	-	-
	#6 VEHICLE	3	-	-	3	-	-	-	3	3	3
	#12 PED	2	-	2	-	-	-	-	-	-	-
#12	#4 PED	6	2	2	2	2	-	-	2	2	-
	#6 PED	4	-	-	-	2	-	-	2	2	-
	#2 PPB	2	2	2	-	-	-	-	-	-	-
#10	#4 PPB	4	-	2	-	-	-	-	2	2	-
	#6 PPB	4	-	-	2	-	-	-	2	2	-
	SPARES	-	-	-	-	-	-	-	-	-	-
#12	TOTAL	43	7	14	5	20	-	-	17	17	10
	I.I.S.N.S.	-	2	2	2	2	-	-	2	2	2
	SIG. COMMON	2	1	1	1	1	-	-	1	1	1
#6	LUMINAIRE	-	2	2	2	2	2	2	2	2	2
	TOTAL	2	3	3	3	3	2	2	3	3	3
	SERVICE	2	-	-	-	-	-	-	-	-	-
#12	RxR PREEMPT	2	-	2	2	-	-	-	-	-	-
	#1 DETECTOR	1	-	-	1	-	-	-	-	-	-
	#6 DETECTOR	1	-	1	-	-	-	-	-	-	-
TYPE B	#4 DETECTOR	5	2	-	3	-	-	-	3	3	-
	#5 DETECTOR	1	-	1	-	-	-	-	-	-	-
	#6 DETECTOR	1	-	-	1	1	-	-	-	-	-
DLC	TOTAL	9	2	2	-	5	1	-	3	3	-
	CONDUIT SIZE	3-2"	2"	2"	2"	3"	2"	2"	2.5"	2.5"	2"
	E=EXISTING, N=NEW	E	E	E	E	E	E	E	E	E	E

▲ ALL CONDUCTORS ARE EXISTING, EXCEPT AS NOTED:
 * - INSTALL NEW CONDUCTORS FOR #5 RED INDICATION

FOR SIGNING AND STRIPING GENERAL NOTES, SEE TITLE SHEET

Know what's below.
Call before you dig.

REV.	DATE	BY	DESCRIPTION	APP'VD
1	5/23/23	BB	SIGNING & STRIPING CHANGES AT R/R CROSSING PER SCRR	JL

REV.	DATE	BY	DESCRIPTION	APP'VD
1	5/23/23	BB	SIGNING & STRIPING CHANGES AT R/R CROSSING PER SCRR	JL

PLANS PREPARED BY:
WILLIDAN Engineering
 13191 CROSSROADS PARKWAY NORTH
 SUITE 405, INDUSTRY, CA 91746
 (562) 908-6200
 UNDER THE SUPERVISION OF:

 10/12/22
 DESIGNED BY: RG/BB CHECKED BY: JL

SUBMITTED BY:
 MANUEL FABIAN, CE ASSISTANT II
 DATE: _____

CITY OF
SAN FERNANDO
 HISTORIC & VISIONARY
 PUBLIC WORKS DEPARTMENT

TRAFFIC SIGNAL MODIFICATION PLAN
**HUBBARD STREET
 AT FIRST STREET**
 JOB NO. 7598 PLAN NO. P-722

SHEET NO.
 4
 OF
 10

TRAFFIC SIGNAL GENERAL NOTES

- TRAFFIC SIGNAL AND HIGHWAY LIGHTING EQUIPMENT, AND INSTALLATION THEREOF SHALL CONFORM TO CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD), CALTRANS STANDARD PLANS AND SPECIFICATIONS, LATEST EDITIONS, THESE PLANS, AND THE SPECIAL PROVISIONS.
- ALL MATERIALS AND EQUIPMENT SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR.
- VEHICLE INDICATIONS SHALL BE 12" LIGHT EMITTING DIODE (LED) RED, LED YELLOW, AND LED GREEN PER THE SPECIAL PROVISIONS.
- CONDUIT SHALL BE MIN. 2" SCHEDULE 80 PVC AND PULL BOXES SHALL BE #5, UNLESS SHOWN OTHERWISE.
- ALL CONDUIT AND PULL BOXES NOT SHOWN FOR REUSE SHALL BE ABANDONED.
- CONDUCTOR SCHEDULE IS PROVIDED AS AN INSTALLATION GUIDE ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE CORRECT CONDUCTORS REQUIRED FOR THE INTENDED OPERATION.
- PEDESTRIAN INDICATIONS SHALL BE LED COUNTDOWN PEDESTRIAN HEADS, UNLESS OTHERWISE NOTED ON THE POLE SCHEDULE. SEE SPECIAL PROVISIONS.
- ALL PEDESTRIAN PUSH BUTTONS AND SIGNS SHALL BE TYPE B (2" BUTTON) PUSH BUTTONS AND R10-3b PEDESTRIAN PUSH BUTTON SIGNS.
- INDUCTIVE DETECTOR LOOPS SHALL BE 6' DIAMETER TYPE "E" AND CENTERED IN TRAVEL LANE. LIMIT LINE LOOPS SHALL BE TYPE "D". BICYCLE DETECTOR LOOPS PER CALTRANS STANDARDS. PLACE LIMIT LINE LOOPS AT THE CROSSWALK OR LIMIT LINE.
- ALL WIRING SHALL BE MARKED (TAGGED) WITHIN THE CONTROLLER CABINET FOR PHASE IDENTIFICATION. ALL SIGNAL CABLES IN PULL
- BOXES SHALL BE MARKED AS TO WHICH POLE No. THEY TERMINATE.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE AND LOCATION OF ALL UNDERGROUND FACILITIES, AND TO PROTECT THEM FROM DAMAGE. THE CONTRACTOR SHALL BEAR THE TOTAL EXPENSE OF REPAIR OR REPLACEMENT OF ANY UNDERGROUND FACILITIES DAMAGED DURING CONSTRUCTION.
- LOCATION OF UNDERGROUND FACILITIES ARE APPROXIMATE. THE CONTRACTOR SHALL POTHOLE TO DETERMINE THE EXACT LOCATION AND VERIFY ALL CONDITIONS ON THE JOBSITE PRIOR TO ORDERING POLES.
- THE CONTRACTOR SHALL EXERCISE EXTREME CARE TO AVOID DAMAGING EXISTING UTILITIES BY LOCATING ALL UTILITIES PRIOR TO CONSTRUCTION. HAND DIG FOUNDATIONS UNTIL CLEAR OF OBSTRUCTION. COORDINATE POLE INSTALLATION WITH OVERHEAD UTILITY AND SUBSTRUCTURE OWNERS. CONTACT UNDERGROUND SERVICE ALERT AT (800) 422-4133, 48 HOURS PRIOR TO CONSTRUCTION.
- ANY MODIFICATION OF OR CHANGES TO APPROVED PLANS MUST BE APPROVED BY THE CITY ENGINEER.
- CONTRACTOR SHALL FURNISH AND INSTALL TEMPORARY EQUIPMENT NECESSARY TO MAINTAIN CURRENT SIGNAL OPERATION, INCLUDING BUT NOT LIMITED TO CONTROLLER ASSEMBLIES AND SIGNAL POLES.
- CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORT DURING INSTALLATION OF CONCRETE FOUNDATIONS ON ANY EXISTING NEARBY CABINETS, POLES, OR STANDARDS.
- ALL FOUNDATIONS FROM WHICH POLES OR POSTS ARE REMOVED SHALL BE COMPLETELY REMOVED.
- EXISTING HIGH VOLTAGE OVERHEAD UTILITY LINES EXIST ON THIS PROJECT. A HIGH VOLTAGE CONTRACTOR MAY BE REQUIRED FOR THE REMOVAL AND INSTALLATION OF TRAFFIC SIGNAL POLES. ANY ADDITIONAL COSTS FOR SUCH WORK SHALL BE INCURRED BY THE CONTRACTOR.

CONSTRUCTION NOTES (THIS SHEET ONLY):

- REMOVE EXISTING POLE AND FOUNDATION COMPLETE, EXCEPT PHOTOELECTRIC CONTROL (PEC) TO POLE LOCATION (A).
- REMOVE EXISTING VEHICLE HEAD COMPLETE.
- REMOVE EXISTING PEDESTRIAN HEAD COMPLETE.
- REMOVE EXISTING LUMINAIRE COMPLETE.
- INSTALL 12 L.F. OF METAL HANDRAIL PER SPPWC STD. PLAN NO. 606-5, TYPE B. HANDRAIL SHALL BE MOUNTED ON THE TOP OF THE RETAINING CURB AND MODIFIED TO FIT RADIAL CURVE AS REQUIRED.
- REMOVE EXISTING PEDESTRIAN PUSH BUTTON ASSEMBLY COMPLETE.
- REMOVE EXISTING INTERNALLY ILLUMINATED STREET NAME SIGN.
- REMOVE AND CONSTRUCT CURB RAMP PER CALTRANS STD PLAN A88A. CASE AS NOTED. DETECTABLE WARNING SURFACE SHALL BE YELLOW.
- REPAINT IN-KIND EXISTING STRIPING DETAIL, PAVEMENT MARKING OR CROSSWALK AS SHOWN.
- INSTALL GPS UNIVERSAL TIME BASE UNIT AND ANTENNA IN EXISTING TYPE 170/332 CONTROLLER CABINET.
- INSTALL R73-3(CA) SIGN ON MAST ARM.

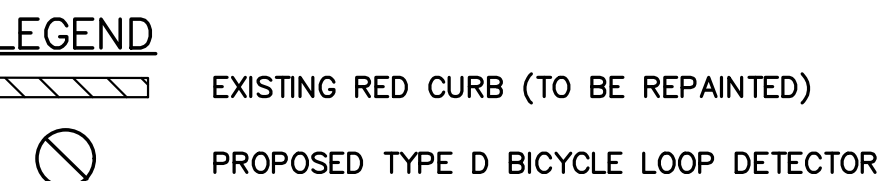
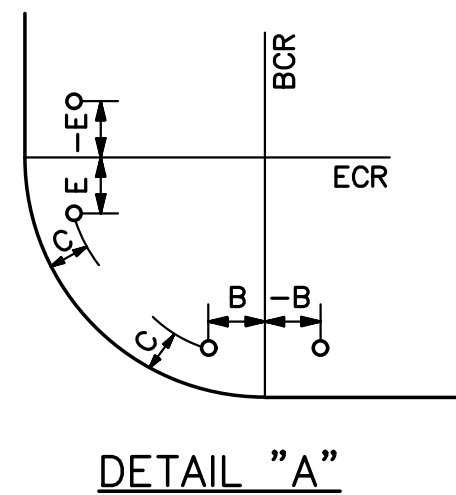
WORK ON THIS PLAN DOES NOT ENCROACH ON RAILROAD RIGHT-OF-WAY OR IMPACT RAILROAD OPERATION.

SCALE : 1" = 20'

■ ALL EQUIPMENT IS EXISTING UNLESS OTHERWISE NOTED. MACLAY AVE. IS NORTH/SOUTH # = POLE I.D. NUMBER
 (N) = NEW
 ● = WITH PEC
 g. INSTALL NEW POLE AT EXISTING POLE LOCATION. SEE GENERAL NOTE 15.

ALL PHASES ON RECALL.
(NO CONNECTION TO RAILROAD CONTROL HOUSE)

Ø4 AND Ø8 ON VEHICLE AND PEDESTRIAN RECALL.
(NO CONNECTION TO RAILROAD CONTROL HOUSE)



▲ ALL CONDUCTORS ARE NEW
(NO CONNECTION TO RAILROAD CONTROL HOUSE)

REVISIONS

PLANS PREPARED BY:

 **WILLDAN**
Engineering

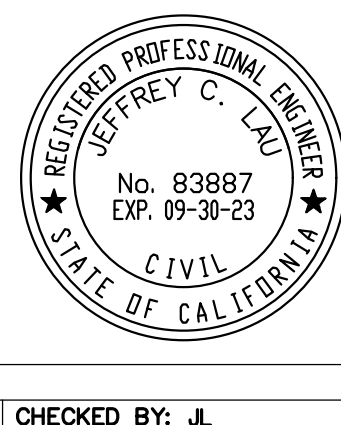
*outstanding
your
reach*

13191 CROSSROADS PARKWAY NORTH
SUITE 405, INDUSTRY, CA 91746
(562) 908-6200

UNDER THE SUPERVISION OF:



JEFFREY C. LAU	RCE 83887
DRAWN BY: RG/BB	DESIGNED BY: [blank]



CITY OF
SAN FERNANDO
HISTORIC & VISIONARY

PUBLIC WORKS DEPARTMENT

JOB NO. 7598	PLAN NO. P-722
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SHEET No.
5
OF
10

INTERSECTION IS NOT CONNECTED TO THE RAILROAD CONTROL HOUSE. WORK ON THIS PLAN DOES NOT ENCROACH ON RAILROAD RIGHT-OF-WAY OR IMPACT RAILROAD OPERATION.

SCALE : 1" = 20'

- ## TRAFFIC SIGNAL GENERAL NOTES
1. TRAFFIC SIGNAL AND HIGHWAY LIGHTING EQUIPMENT, AND INSTALLATION THEREOF SHALL CONFORM TO CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD), CALTRANS STANDARD PLANS AND SPECIFICATIONS, LATEST EDITIONS, THESE PLANS, AND THE SPECIAL PROVISIONS.
 2. ALL MATERIALS AND EQUIPMENT SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR.
 3. VEHICLE INDICATIONS SHALL BE 12" LIGHT EMITTING DIODE (LED) RED, LED YELLOW, AND LED GREEN PER THE SPECIAL PROVISIONS.
 4. CONDUIT SHALL BE MIN. 2" SCHEDULE 80 PVC AND PULL BOXES SHALL BE #5, UNLESS SHOWN OTHERWISE.
 5. ALL CONDUIT AND PULL BOXES NOT SHOWN FOR REUSE SHALL BE ABANDONED.
 6. CONDUCTOR SCHEDULE IS PROVIDED AS AN INSTALLATION GUIDE ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE CORRECT CONDUCTORS REQUIRED FOR THE INTENDED OPERATION.
 7. PEDESTRIAN INDICATIONS SHALL BE LED COUNTDOWN PEDESTRIAN HEADS, UNLESS OTHERWISE NOTED ON THE POLE SCHEDULE. SEE SPECIAL PROVISIONS.
 8. ALL PEDESTRIAN PUSH BUTTONS AND SIGNS SHALL BE TYPE B (2" BUTTON) PUSH BUTTONS AND R10-3b PEDESTRIAN PUSH BUTTON SIGNS.
 9. INDUCTIVE DETECTOR LOOPS SHALL BE 6' DIAMETER TYPE "E" AND CENTERED IN TRAVEL LANE. LIMIT LINE LOOPS SHALL BE TYPE "D" BICYCLE DETECTOR LOOPS PER CALTRANS STANDARDS. PLACE LIMIT LINE LOOPS AT THE CROSSWALK OR LIMIT LINE.
 10. ALL WIRING SHALL BE MARKED (TAGGED) WITHIN THE CONTROLLER CABINET FOR PHASE IDENTIFICATION. ALL SIGNAL CABLES IN PULL BOXES SHALL BE MARKED AS TO WHICH POLE No. THEY TERMINATE.
 11. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE AND LOCATION OF ALL UNDERGROUND FACILITIES, AND TO PROTECT THEM FROM DAMAGE. THE CONTRACTOR SHALL BEAR THE TOTAL EXPENSE OF REPAIR OR REPLACEMENT OF ANY UNDERGROUND FACILITIES DAMAGED DURING CONSTRUCTION.
 12. LOCATION OF UNDERGROUND FACILITIES ARE APPROXIMATE. THE CONTRACTOR SHALL POTHOLE TO DETERMINE THE EXACT LOCATION AND VERIFY ALL CONDITIONS ON THE JOBSITE PRIOR TO ORDERING POLES.
 13. THE CONTRACTOR SHALL EXERCISE EXTREME CARE TO AVOID DAMAGING EXISTING UTILITIES BY LOCATING ALL UTILITIES PRIOR TO CONSTRUCTION. HAND DIG FOUNDATIONS UNTIL CLEAR OF OBSTRUCTION. COORDINATE POLE INSTALLATION WITH OVERHEAD UTILITY AND SUBSTRUCTURE OWNERS. CONTACT UNDERGROUND SERVICE ALERT AT (800) 422-4133, 48 HOURS PRIOR TO CONSTRUCTION.
 14. ANY MODIFICATION OF OR CHANGES TO APPROVED PLANS MUST BE APPROVED BY THE CITY ENGINEER.
 15. CONTRACTOR SHALL FURNISH AND INSTALL TEMPORARY EQUIPMENT NECESSARY TO MAINTAIN CURRENT SIGNAL OPERATION, INCLUDING BUT NOT LIMITED TO CONTROLLER ASSEMBLIES AND SIGNAL POLES.
 16. CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORT DURING INSTALLATION OF CONCRETE FOUNDATIONS ON ANY EXISTING NEARBY CABINETS, POLES, OR STANDARDS.
 17. ALL FOUNDATIONS FROM WHICH POLES OR POSTS ARE REMOVED SHALL BE COMPLETELY REMOVED.
 18. EXISTING HIGH VOLTAGE OVERHEAD UTILITY LINES EXIST ON THIS PROJECT. A HIGH VOLTAGE CONTRACTOR MAY BE REQUIRED FOR THE REMOVAL AND INSTALLATION OF TRAFFIC SIGNAL POLES. ANY ADDITIONAL COSTS FOR SUCH WORK SHALL BE INCURRED BY THE CONTRACTOR.

CONSTRUCTION NOTES (THIS SHEET ONLY):

- 1] INSTALL GPS UNIVERSAL TIME BASE UNIT AND ANTENNA IN EXISTING TYPE 170/332 CONTROLLER CABINET.
- 2] REMOVE EXISTING VEHICLE HEAD(S) COMPLETE.
- 3] REMOVE EXISTING PEDESTRIAN HEAD(S) COMPLETE.
- 4] INSTALL YELLOW DETECTABLE WARNING SURFACE ON EXISTING CURB RAMP
- 5] REMOVE EXISTING POLE AND FOUNDATION COMPLETE.
- 6] INSTALL R3-4 SIGN ON SIGNAL MAST ARM.
- 7] REPAINT IN-KIND EXISTING STRIPING DETAIL, PAVEMENT MARKING OR CROSSWALK AS SHOWN.

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POLE SCHEDULE ■															
No.	STANDARD			LUMINAIRE LED EQ ●	VEHICLE SIGNAL MOUNTING		PED SIGNAL *	PPB			LED I.I.S.N.S. ●	POLE LOCATION (SEE DETAIL "A")			REMARKS
	TYPE	LUM. M.A.	SIG. M.A.		MAST ARM	POLE		MTG.	Ø	QUAD		ARROW	E	B	
(A)	24-4-70	12'	25'	200W(N)	MAS	SV-1-T(N)	SP-1-T(N)	2	N	LT	Truman St(N) CITY OF SAN FERNANDO	EXISTING			#340
(B)	15TS	8'	-	200W(N)	-	SV-1-T(N)	SP-1-T(N)	4	E	RT	-	EXISTING			#175
(C)	24-4-100(N)	12'(N)	35'(N)	200W(N)	MAS(N), MAS(N)	SV-1-T(N)	SP-1-T(N)	-	-	-	MacLay Ave(N) CITY OF SAN FERNANDO	SEE NOTE a.			#200
(D)	PPB POLE	-	-	-	-	-	-	4/6	S/E	RT/LT	-	EXISTING			
(E)	15TS	8'	-	200W(N)	-	SV-1-T(N)	SP-1-T(N)	-	-	-	-	EXISTING			#342
(F)	24-4-70	12'	25'	200W(N)	MAS	SV-1-T(N)	SP-1-T(N)	6	S	LT	Truman St(N) CITY OF SAN FERNANDO	EXISTING			#341
(G)	MARBELITE	8'	-	200W(N)	-	-	-	-	-	-	-	EXISTING			#344
(H)	15TS	8'	-	200W(N)	-	SV-1-T(N)	SP-1-T(N)	8	W	RT	-	EXISTING			#199
(I)	26-4-100(N)	12'(N)	40'(N)	200W(N)	MAS(N), MAS(N)	SV-1-T(N)	SP-1-T(N)	-	-	-	MacLay Ave(N) CITY OF SAN FERNANDO	-1.5'	-	6'	#176
(J)	PPB POLE	-	-	-	-	-	-	2/4	N/W	RT/LT	-	EXISTING			
(K)	15TS	8'	-	200W(N)	-	SV-1-T(N)	SP-1-T(N)	-	-	-	-	EXISTING			#339; EX. PEC

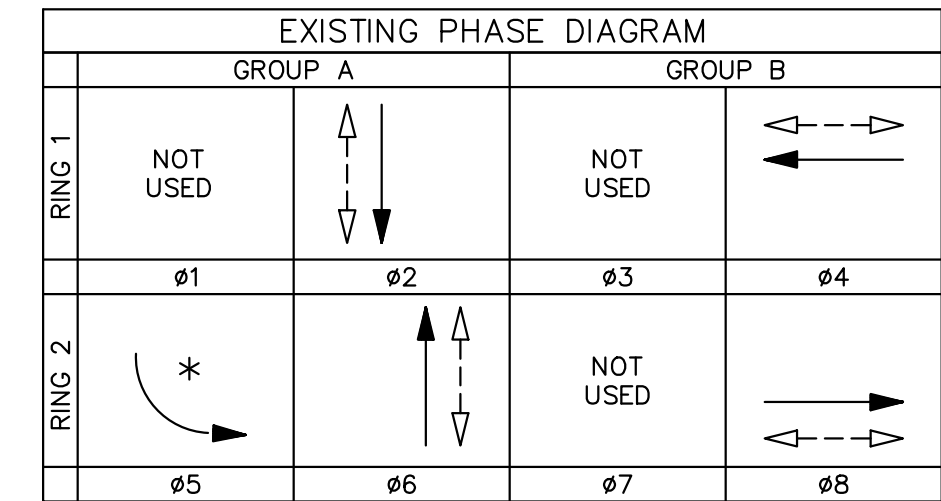
■ ALL EQUIPMENT IS EXISTING UNLESS OTHERWISE NOTED.

(N) = NEW

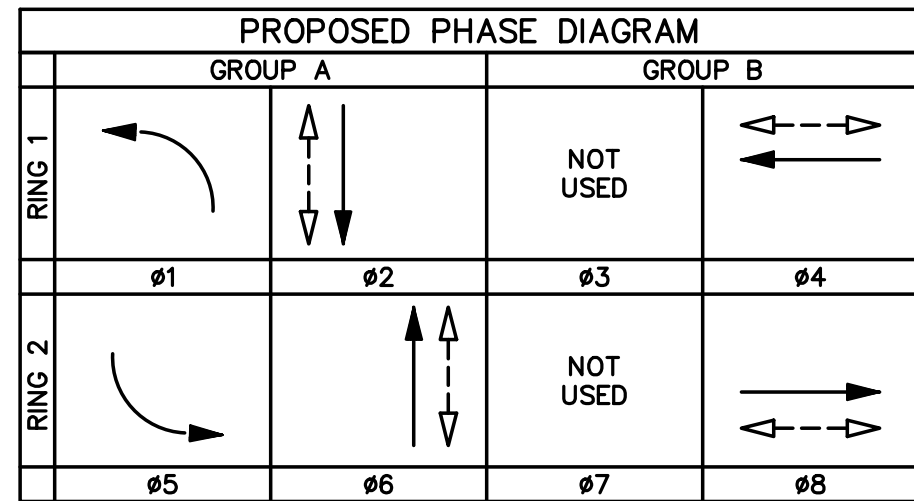
● = WITH PEC

a. INSTALL NEW POLE AT EXISTING POLE LOCATION. SEE GENERAL NOTE 15.

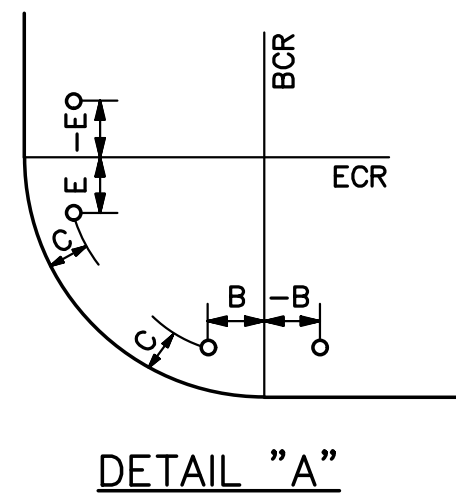
* PEDESTRIAN SIGNAL HEADS SHALL BE "NON-COUNTDOWN".



* PROTECTED/PERMISSIVE PHASE
RAILROAD PREEMPT SEQUENCE:
TRACK CLEARANCE: φ4
PREEMPT OPERATION: FLASHING RED ALL DIRECTIONS



RAILROAD PREEMPT SEQUENCE:
TRACK CLEARANCE: φ4
PREEMPT OPERATION: FLASHING RED ALL DIRECTIONS



CONDUCTOR SCHEDULE ▲									
AWG	CIRCUIT	RUN							
		1	2	3	4	5	6	7	8
12 CONDUCTOR CABLE	POLE (A)	1	1	1	1	1	1	1	1
	POLE (B)	1	1	1	1	1	1	1	1
	POLE (C)	1	1	1	1	1	1	1	1
	POLE (D)	1	1	1	1	1	1	1	1
	POLE (E)	1	1	1	1	1	1	1	1
	POLE (F)	1	1	1	1	1	1	1	1
	POLE (G)	1	1	1	1	1	1	1	1
	POLE (H)	1	1	1	1	1	1	1	1
	POLE (I)	1	1	1	1	1	1	1	1
	POLE (J)	1	1	1	1	1	1	1	1
3 CONDUCTOR CABLE	POLE (K)	1	1	1	1	1	1	1	1
	TOTAL	8	8	4	4	2	1	2	2
	#12 I.I.S.N.S.	-	2	2	2	2	-	2	2
	#10 LUMINAIRE	-	2	2	2	2	-	2	2
	#6 SERVICE	2	-	-	-	-	-	2	-
	φ1 DETECTOR	1	1	1	1	1	1	-	-
	φ2 DETECTOR	3	3	-	-	-	-	-	-
	φ4 DETECTOR	4	4	4	-	-	-	-	-
	φ5 DETECTOR	1	1	-	-	-	-	-	-
	φ6 DETECTOR	3	3	3	3	3	3	-	-
TYPE B DLC	φ8 DETECTOR	4	-	-	-	-	-	4	-
	TOTAL	16	12	8	8	4	4	4	-
	12CSC R/R PREEMPT.	2	2	2	2	2	2	-	-
	7#14 INTERCONNECT	1	1	-	-	-	-	-	-
	CONDUIT SIZE	2-4"	3-4"	4"	3"	3"	3"	3"	3"
	% FILL	22	25	22	32	20	11	19	10
	E=EXISTING, N=NEW	N	N	N	E	E	E	E	E
	▲ ALL CONDUCTORS ARE NEW								

FOR SIGNING AND STRIPING GENERAL NOTES, SEE TITLE SHEET

811

Know what's below.
Call before you dig.

REV. DATE BY DESCRIPTION APP'VD

1 5/18/23 BB SIGNING & STRIPING CHANGES AT R/R CROSSING PER SCORRA

REVISIONS

REV. DATE BY DESCRIPTION APP'VD

1 5/18/23 BB SIGNING & STRIPING CHANGES AT R/R CROSSING PER SCORRA

PLANS PREPARED BY:
WILLARD Engineering
13191 CROSSROADS PARKWAY NORTH
SUITE 405, INDUSTRY, CA 91746
(562) 908-6200
UNDER THE SUPERVISION OF:
JEFFREY C. LAU
RCE 83887
10/12/22
DESIGNED BY: RG/BB
CHECKED BY: JL

SUBMITTED BY:
MANUEL FABIAN, CE ASSISTANT II
DATE

APPROVED BY:
SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY
DATE

CITY OF
SAN FERNANDO
HISTORIC & VISIONARY

PUBLIC WORKS DEPARTMENT

TRAFFIC SIGNAL MODIFICATION PLAN
MACLAY AVENUE
AT TRUMAN STREET

JOB NO. 7598
PLAN NO. P-722

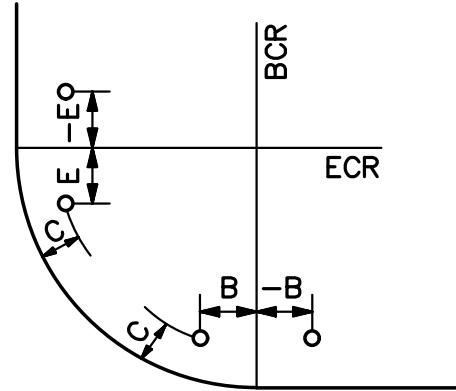
SHEET NO.
6
OF
10

POLE SCHEDULE ■														
No.	STANDARD			LUMINAIRE LED EQ	VEHICLE SIGNAL MOUNTING		PED SIGNAL *	PPB		LED I.I.S.N.S. ●	POLE LOCATION (SEE DETAIL "A")			REMARKS
	TYPE	LUM. M.A.	SIG. M.A.		MAST ARM	POLE		MTG.	ø		QUAD	ARROW	E	
(A)	19-2-129	12'	25'	200W(N)	MAS	SV-1-T(N)	SP-1-T(N)	4	N	LT	First St (N) CITY OF SAN FERNANDO	EXISTING		#428
(B)	1A	—	—	—	—	TV-1-T(N)	SP-1-T(N)	2	E	RT	—	EXISTING		
(C)	17-2-100(N)	12'(N)	20'(N)	200W(N)	MAS(N)	TV-1-T(N)	SP-1-T(N)	—	—	—	Maclay Ave(N) CITY OF SAN FERNANDO	SEE NOTE a.		
(D)	PPB POLE	—	—	—	—	—	—	2	E	LT	—	EXISTING		
(E)	1A	—	—	—	—	TV-1-T(N)	SP-1-T(N)	—	—	—	—	EXISTING		
(F)	PPB POLE	—	—	—	—	—	—	4	N	LT	—	EXISTING		
(G)	PPB POLE	—	—	—	—	—	—	4	S	LT	—	EXISTING		
(H)	17-2-80	6'	20'	200W(N)	MAS	SV-1-T(N)	SP-1-T(N)	—	—	—	First St (N) CITY OF SAN FERNANDO	EXISTING		#347
(I)	1A	—	—	—	—	TV-1-T(N)	SP-1-T(N)	2	W	RT	—	EXISTING		
(J)	17-2-100(N)	12'(N)	20'(N)	200W(N)	MAS(N)	TV-1-T(N)	SP-1-T(N)	2	W(N)	LT(N)	Maclay Ave(N) CITY OF SAN FERNANDO	SEE NOTE a.		
(K)	1A	—	—	—	—	TV-1-T(N)	SP-1-T(N)	4	N	RT	—	EXISTING		

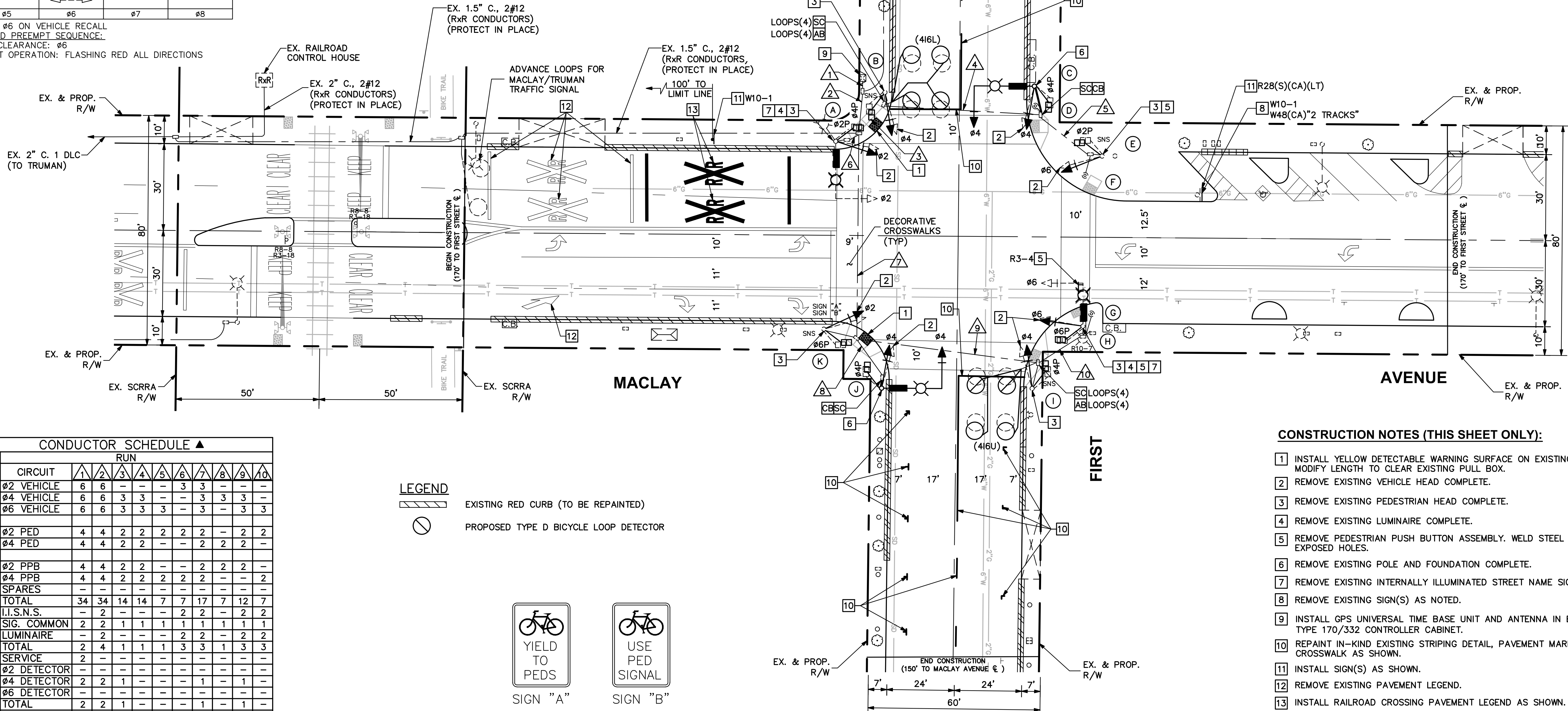
■ ALL EQUIPMENT IS EXISTING UNLESS OTHERWISE NOTED.
(N) = NEW, (R) = RELOCATE
● = WITH PEC
a. INSTALL NEW POLE AT EXISTING POLE LOCATION. SEE GENERAL NOTE 15.
* PEDESTRIAN SIGNAL HEADS SHALL BE "NON-COUNTDOWN".

EXISTING PHASE DIAGRAM			
GROUP A		GROUP B	
RING 1	NOT USED	← →	NOT USED
	Ø1	Ø2	Ø3
RING 2	NOT USED	→ ←	NOT USED
	Ø5	Ø6	Ø7

Ø2 AND Ø6 ON VEHICLE RECALL
RAILROAD PREEMPT SEQUENCE:
TRACK CLEARANCE: Ø6
PREEMPT OPERATION: FLASHING RED ALL DIRECTIONS



DETAIL "A"



CONDUCTOR SCHEDULE ▲											
AWG	CIRCUIT	RUN									
		1	2	3	4	5	6	7	8	9	10
#14	Ø2 VEHICLE	6	6	—	—	—	3	3	—	—	—
	Ø4 VEHICLE	6	6	3	3	—	—	3	3	—	—
	Ø6 VEHICLE	6	6	3	3	3	—	3	—	3	3
	Ø2 PED	4	4	2	2	2	2	2	—	2	2
	Ø4 PED	4	4	2	2	—	—	2	2	2	—
	Ø2 PPB	4	4	2	2	—	—	2	2	2	—
	Ø4 PPB	4	4	2	2	2	2	2	—	—	2
	SPARES	—	—	—	—	—	—	—	—	—	—
TOTAL	34	34	14	14	7	7	17	7	12	7	
#12	I.I.S.N.S.	—	2	—	—	—	2	2	—	2	2
#10	SIG. COMMON	2	2	1	1	1	1	1	1	1	1
	LUMINAIRE	—	2	—	—	—	2	2	—	2	2
#6	TOTAL	2	4	1	1	1	3	3	1	3	3
	SERVICE	2	—	—	—	—	—	—	—	—	—
TYPE B DLC	Ø2 DETECTOR	—	—	—	—	—	—	—	—	—	—
	Ø4 DETECTOR	2	2	1	—	—	—	1	—	1	—
	Ø6 DETECTOR	—	—	—	—	—	—	—	—	—	—
	TOTAL	2	2	1	—	—	—	1	—	1	—
#12	RxR PREEMPT	2	2	—	—	—	2	—	—	—	—
CONDUIT SIZE		2.5"	2"	2"	2"	2"	2"	2"	2"	2"	2"
E=EXISTING, N=NEW		E	E	E	E	E	E	E	E	E	E

▲ ALL CONDUCTORS ARE EXISTING

TRAFFIC SIGNAL GENERAL NOTES

- TRAFFIC SIGNAL AND HIGHWAY LIGHTING EQUIPMENT, AND INSTALLATION THEREOF SHALL CONFORM TO CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD), CALTRANS STANDARD PLANS AND SPECIFICATIONS, LATEST EDITIONS, THESE PLANS, AND THE SPECIAL PROVISIONS.
 - ALL MATERIALS AND EQUIPMENT SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR.
 - VEHICLE INDICATIONS SHALL BE 12" LIGHT EMITTING DIODE (LED) RED, LED YELLOW, AND LED GREEN PER THE SPECIAL PROVISIONS.
 - CONDUIT SHALL BE MIN. 2" SCHEDULE 80 PVC AND PULL BOXES SHALL BE #5, UNLESS SHOWN OTHERWISE.
 - ALL CONDUIT AND PULL BOXES NOT SHOWN FOR REUSE SHALL BE ABANDONED.
 - CONDUCTOR SCHEDULE IS PROVIDED AS AN INSTALLATION GUIDE ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE CORRECT CONDUCTORS REQUIRED FOR THE INTENDED OPERATION.
 - PEDESTRIAN INDICATIONS SHALL BE LED COUNTDOWN PEDESTRIAN HEADS, UNLESS OTHERWISE NOTED ON THE POLE SCHEDULE. SEE SPECIAL PROVISIONS.
 - ALL PEDESTRIAN PUSH BUTTONS AND SIGNS SHALL BE TYPE B (2" BUTTON) PUSH BUTTONS AND R10-3b PEDESTRIAN PUSH BUTTON SIGNS.
 - INDUCTIVE DETECTOR LOOPS SHALL BE 6' DIAMETER TYPE "E" AND CENTERED IN TRAVEL LANE. LIMIT LINE LOOPS SHALL BE TYPE "D", BICYCLE DETECTOR LOOPS PER CALTRANS STANDARDS. PLACE LIMIT LINE LOOPS AT THE CROSSWALK OR LIMIT LINE.
 - ALL WIRING SHALL BE MARKED (TAGGED) WITHIN THE CONTROLLER CABINET FOR PHASE IDENTIFICATION. ALL SIGNAL CABLES IN PULL
- BOXES SHALL BE MARKED AS TO WHICH POLE No. THEY TERMINATE.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE AND LOCATION OF ALL UNDERGROUND FACILITIES, AND TO PROTECT THEM FROM DAMAGE. THE CONTRACTOR SHALL BEAR THE TOTAL EXPENSE OF REPAIR OR REPLACEMENT OF ANY UNDERGROUND FACILITIES DAMAGED DURING CONSTRUCTION.
 - LOCATION OF UNDERGROUND FACILITIES ARE APPROXIMATE. THE CONTRACTOR SHALL POTHOLE TO DETERMINE THE EXACT LOCATION AND VERIFY ALL CONDITIONS ON THE JOBSITE PRIOR TO ORDERING POLES.
 - THE CONTRACTOR SHALL EXERCISE EXTREME CARE TO AVOID DAMAGING EXISTING UTILITIES BY LOCATING ALL UTILITIES PRIOR TO CONSTRUCTION. HAND DIG FOUNDATIONS UNTIL CLEAR OF OBSTRUCTION. COORDINATE POLE INSTALLATION WITH OVERHEAD UTILITY AND SUBSTRUCTURE OWNERS. CONTACT UNDERGROUND SERVICE ALERT AT (800) 422-4133, 48 HOURS PRIOR TO CONSTRUCTION.
 - ANY MODIFICATION OF OR CHANGES TO APPROVED PLANS MUST BE APPROVED BY THE CITY ENGINEER.
 - CONTRACTOR SHALL FURNISH AND INSTALL TEMPORARY EQUIPMENT NECESSARY TO MAINTAIN CURRENT SIGNAL OPERATION, INCLUDING BUT NOT LIMITED TO CONTROLLER ASSEMBLIES AND SIGNAL POLES.
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 - ALL FOUNDATIONS FROM WHICH POLES OR POSTS ARE REMOVED SHALL BE COMPLETELY REMOVED.
 - EXISTING HIGH VOLTAGE OVERHEAD UTILITY LINES EXIST ON THIS PROJECT. A HIGH VOLTAGE CONTRACTOR MAY BE REQUIRED FOR THE REMOVAL AND INSTALLATION OF TRAFFIC SIGNAL POLES. ANY ADDITIONAL COSTS FOR SUCH WORK SHALL BE INCURRED BY THE CONTRACTOR.

CONSTRUCTION NOTES (THIS SHEET ONLY):

- INSTALL YELLOW DETECTABLE WARNING SURFACE ON EXISTING CURB RAMP. MODIFY LENGTH TO CLEAR EXISTING PULL BOX.
- REMOVE EXISTING VEHICLE HEAD COMPLETE.
- REMOVE EXISTING PEDESTRIAN HEAD COMPLETE.
- REMOVE EXISTING LUMINAIRE COMPLETE.
- REMOVE PEDESTRIAN PUSH BUTTON ASSEMBLY. WELD STEEL DISKS TO COVER EXPOSED HOLES.
- REMOVE EXISTING POLE AND FOUNDATION COMPLETE.
- REMOVE EXISTING INTERNALLY ILLUMINATED STREET NAME SIGN.
- REMOVE EXISTING SIGN(S) AS NOTED.
- INSTALL GPS UNIVERSAL TIME BASE UNIT AND ANTENNA IN EXISTING TYPE 170/332 CONTROLLER CABINET.
- REPAINT IN-KIND EXISTING STRIPING DETAIL, PAVEMENT MARKING OR CROSSWALK AS SHOWN.
- INSTALL SIGN(S) AS SHOWN.
- REMOVE EXISTING PAVEMENT LEGEND.
- INSTALL RAILROAD CROSSING PAVEMENT LEGEND AS SHOWN.

WORK ON THIS PLAN DOES NOT ENCROACH ON RAILROAD
RIGHT-OF-WAY OR IMPACT RAILROAD OPERATION.

SCALE : 1" = 20'

FOR SIGNING AND STRIPING GENERAL NOTES, SEE TITLE SHEET

REVISIONS

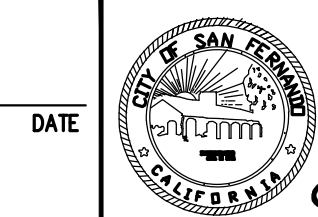
REV.	DATE	BY	DESCRIPTION	APP'VD
1	5/23/23	BB	SIGNING & STRIPING CHANGES AT R/R CROSSING PER SCRR	JL

PLANS PREPARED BY:
WILLDAN
Engineering
13191 CROSSROADS PARKWAY NORTH
SUITE 405, INDUSTRY, CA 91746
(562) 908-6200
UNDER THE SUPERVISION OF:

JEFFREY C. LAO RCE 83887 DATE 10/12/22
DRAWN BY: RG/BB DESIGNED BY: RG/BB CHECKED BY: JL

SUBMITTED BY:

MANUEL FABIAN, CE ASSISTANT II



CITY OF
SAN FERNANDO
HISTORIC & VISIONARY

PUBLIC WORKS DEPARTMENT

TRAFFIC SIGNAL MODIFICATION PLAN
MACLAY AVENUE
AT FIRST STREET

JOB NO. 7598

PLAN NO. P-722

SHEET NO.

7

OF

10



Know what's below.
Call before you dig.

POLE SCHEDULE ■															
No.	STANDARD			LUMINAIRE LED EQ	VEHICLE SIGNAL MOUNTING		PED SIGNAL	PPB			LED I.I.S.N.S.	POLE LOCATION (SEE DETAIL "A")			REMARKS
	TYPE	LUM. M.A.	SIG. M.A.		MAST ARM	POLE		MTG.	Ø	QUAD		ARROW	E	B	
(A)	17-2-80	6'	15'	200W(N)	MAS	SV-1-T(N)	SP-1-T	8	S	LT	San Fernando Rd(N) CITY OF SAN FERNANDO	EXISTING			#273, EX. PEC
(B)	1A	-	-	-	-	TV-1-T(N)	SP-1-T	-	-	-		EXISTING			
(C)	1A	-	-	-	-	TV-1-T	-	-	-	-		EXISTING			
(D)	1A	-	-	-	-	TV-1-T(N)	SP-2-T	4	N	RT		EXISTING			
(E)	1A	-	-	-	-	TV-1-T(N)	-	-	-	-	-	EXISTING			#254
(F)	17-2-80	6'	15'	200W(N)	MAS	SV-1-T(N)	SP-2-T	4	N	LT	San Fernando Rd(N) CITY OF SAN FERNANDO	EXISTING			
(G)	1A	-	-	-	-	TV-1	-	-	-	-		EXISTING			
(H)	1A	-	-	-	-	TV-1-T(N)	-	-	-	-		EXISTING			
(I)	1A	-	-	-	-	TV-1-T(N)	SP-2-T	8	S	RT		EXISTING			
(J)	1A	-	-	-	-	TV-1-T(N)	-	-	-	-	-	EXISTING			

■ ALL EQUIPMENT IS EXISTING UNLESS OTHERWISE NOTED.
(N) = NEW

BRAND BLVD. IS NORTH/SOUTH

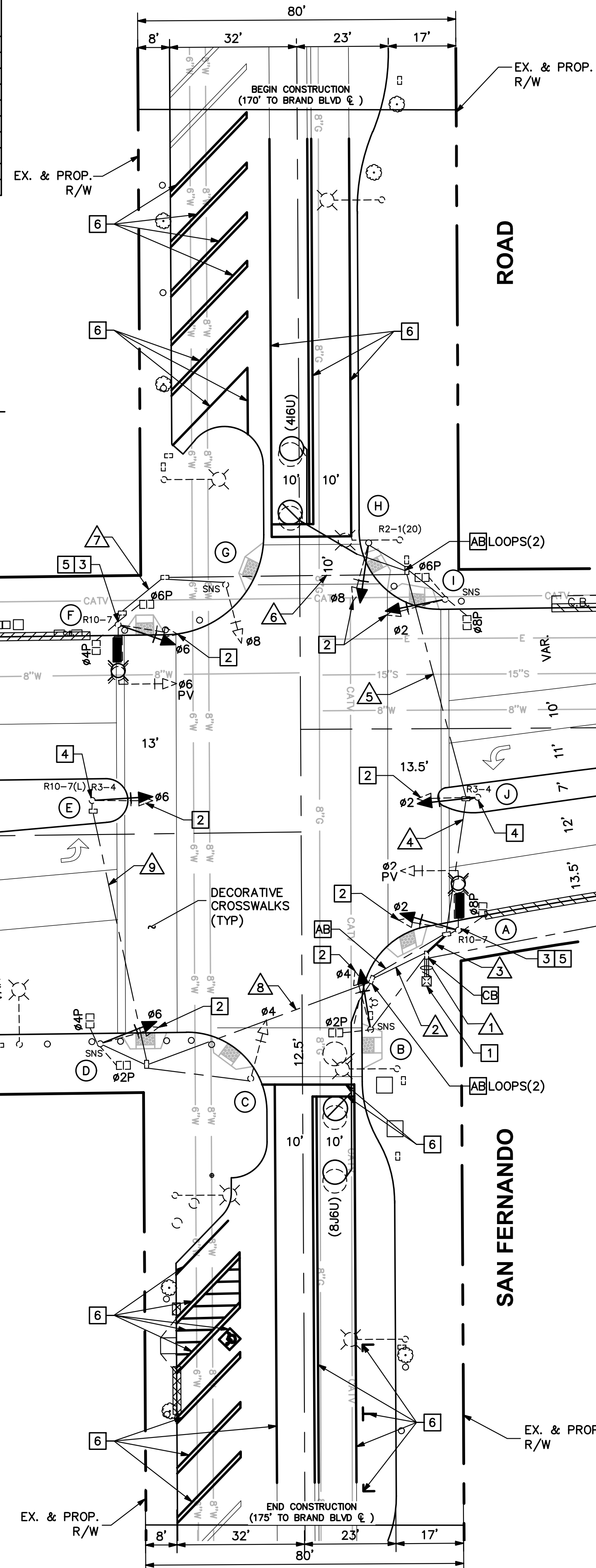
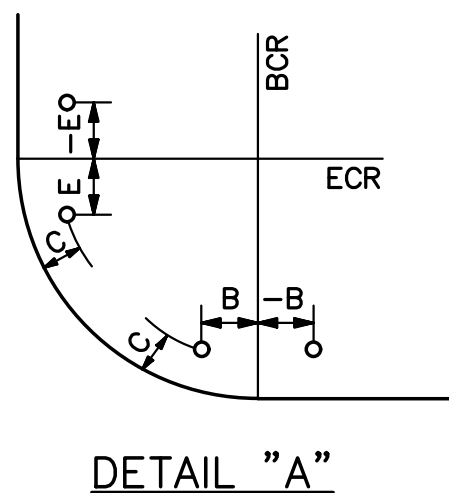
= POLE I.D. NUMBER

EXISTING PHASE DIAGRAM			
GROUP A		GROUP B	
RING 1	NOT USED	NOT USED	NOT USED
RING 2	NOT USED	NOT USED	NOT USED

Ø2 ON VEHICLE AND PEDESTRIAN RECALL
(NO CONNECTION TO RAILROAD CONTROL HOUSE)

PROPOSED PHASE DIAGRAM			
GROUP A		GROUP B	
RING 1	NOT USED	NOT USED	NOT USED
RING 2	NOT USED	NOT USED	NOT USED

Ø2 AND Ø6 ON VEHICLE AND PEDESTRIAN RECALL
(NO CONNECTION TO RAILROAD CONTROL HOUSE)



TRAFFIC SIGNAL GENERAL NOTES

- TRAFFIC SIGNAL AND HIGHWAY LIGHTING EQUIPMENT, AND INSTALLATION THEREOF SHALL CONFORM TO CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD), CALTRANS STANDARD PLANS AND SPECIFICATIONS, LATEST EDITIONS, THESE PLANS, AND THE SPECIAL PROVISIONS.
- ALL MATERIALS AND EQUIPMENT SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR.
- VEHICLE INDICATIONS SHALL BE 12" LIGHT EMITTING DIODE (LED) RED, LED YELLOW, AND LED GREEN PER THE SPECIAL PROVISIONS.
- CONDUIT SHALL BE MIN. 2" SCHEDULE 80 PVC AND PULL BOXES SHALL BE #5, UNLESS SHOWN OTHERWISE.
- ALL CONDUIT AND PULL BOXES NOT SHOWN FOR REUSE SHALL BE ABANDONED.
- CONDUCTOR SCHEDULE IS PROVIDED AS AN INSTALLATION GUIDE ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE CORRECT CONDUCTORS REQUIRED FOR THE INTENDED OPERATION.
- PEDESTRIAN INDICATIONS SHALL BE LED COUNTDOWN PEDESTRIAN HEADS, UNLESS OTHERWISE NOTED ON THE POLE SCHEDULE. SEE SPECIAL PROVISIONS.
- ALL PEDESTRIAN PUSH BUTTONS AND SIGNS SHALL BE TYPE B (2" BUTTON) PUSH BUTTONS AND R10-3b PEDESTRIAN PUSH BUTTON SIGNS.
- INDUCTIVE DETECTOR LOOPS SHALL BE 6" DIAMETER TYPE "E" AND CENTERED IN TRAVEL LANE. LIMIT LINE LOOPS SHALL BE TYPE "D" BICYCLE DETECTOR LOOPS PER CALTRANS STANDARDS. PLACE LIMIT LINE LOOPS AT THE CROSSWALK OR LIMIT LINE.
- ALL WIRING SHALL BE MARKED (TAGGED) WITHIN THE CONTROLLER CABINET FOR PHASE IDENTIFICATION. ALL SIGNAL CABLES IN PULL
- BOXES SHALL BE MARKED AS TO WHICH POLE No. THEY TERMINATE.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE AND LOCATION OF ALL UNDERGROUND FACILITIES, AND TO PROTECT THEM FROM DAMAGE. THE CONTRACTOR SHALL BEAR THE TOTAL EXPENSE OF REPAIR OR REPLACEMENT OF ANY UNDERGROUND FACILITIES DAMAGED DURING CONSTRUCTION.
- LOCATION OF UNDERGROUND FACILITIES ARE APPROXIMATE. THE CONTRACTOR SHALL POTHOLE TO DETERMINE THE EXACT LOCATION AND VERIFY ALL CONDITIONS ON THE JOBSITE PRIOR TO ORDERING POLES.
- THE CONTRACTOR SHALL EXERCISE EXTREME CARE TO AVOID DAMAGING EXISTING UTILITIES BY LOCATING ALL UTILITIES PRIOR TO CONSTRUCTION. HAND DIG FOUNDATIONS UNTIL CLEAR OF OBSTRUCTION. COORDINATE POLE INSTALLATION WITH OVERHEAD UTILITY AND SUBSTRUCTURE OWNERS. CONTACT UNDERGROUND SERVICE ALERT AT (800) 422-4133, 48 HOURS PRIOR TO CONSTRUCTION.
- ANY MODIFICATION OF OR CHANGES TO APPROVED PLANS MUST BE APPROVED BY THE CITY ENGINEER.
- CONTRACTOR SHALL FURNISH AND INSTALL TEMPORARY EQUIPMENT NECESSARY TO MAINTAIN CURRENT SIGNAL OPERATION, INCLUDING BUT NOT LIMITED TO CONTROLLER ASSEMBLIES AND SIGNAL POLES.
- CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORT DURING INSTALLATION OF CONCRETE FOUNDATIONS ON ANY EXISTING NEARBY CABINETS, POLES, OR STANDARDS.
- ALL FOUNDATIONS FROM WHICH POLES OR POSTS ARE REMOVED SHALL BE COMPLETELY REMOVED.
- EXISTING HIGH VOLTAGE OVERHEAD UTILITY LINES EXIST ON THIS PROJECT. A HIGH VOLTAGE CONTRACTOR MAY BE REQUIRED FOR THE REMOVAL AND INSTALLATION OF TRAFFIC SIGNAL POLES. ANY ADDITIONAL COSTS FOR SUCH WORK SHALL BE INCURRED BY THE CONTRACTOR.

CONDUCTOR SCHEDULE ▲									
AWG	CIRCUIT	RUN							
		1	2	3	4	5	6	7	8
28CSC	SIGNAL	2	1	1	1	1	1	1	1
#12	I.I.S.N.S.	-	2	2	2	2	2	2	-
#10	LUMINAIRE	-	2	2	2	2	2	2	-
#10	SERVICE	2	-	-	-	-	-	-	-
TYPE	Ø4 DETECTOR	1	-	1	1	1	-	-	-
B	Ø8 DETECTOR	1	1	-	-	-	-	-	-
DLC	TOTAL	2	1	1	1	1	-	-	-
CONDUIT SIZE		3-2"	2"	2"	2"	2"	2"	2"	2"
% FILL		16	24	24	25	25	25	19	19
E=EXISTING, N=NEW		E	E	N	E	E	E	E	E

▲ ALL CONDUCTORS ARE NEW
(NO CONNECTION TO RAILROAD CONTROL HOUSE)

LEGEND
EXISTING RED CURB (TO BE REPAINTED)
EXISTING BLUE CURB (TO BE REPAINTED)

CONSTRUCTION NOTES (THIS SHEET ONLY):

- INSTALL GPS UNIVERSAL TIME BASE UNIT AND ANTENNA IN EXISTING TYPE 170/332 CONTROLLER CABINET.
- REMOVE EXISTING VEHICLE HEAD COMPLETE.
- REMOVE EXISTING LUMINAIRE COMPLETE.
- REMOVE PEDESTRIAN PUSH BUTTON ASSEMBLY. WELD STEEL DISKS TO COVER EXPOSED HOLES.
- REMOVE EXISTING NON-ILLUMINATED RETROREFLECTIVE STREET NAME SIGN.
- REPAINT IN-KIND EXISTING STRIPING DETAIL, PAVEMENT MARKING OR CROSSWALK AS SHOWN.

INTERSECTION IS NOT CONNECTED TO THE RAILROAD CONTROL HOUSE. WORK ON THIS PLAN DOES NOT ENCRATCH ON RAILROAD RIGHT-OF-WAY OR IMPACT RAILROAD OPERATION.

SCALE : 1" = 20'

FOR SIGNING AND STRIPING GENERAL NOTES, SEE TITLE SHEET

REV.	DATE	BY	DESCRIPTION	APP'VD
1	5/23/23	BB	SIGNING & STRIPING CHANGES AT R/W CROSSING PER SCRA	JL

PLANS PREPARED BY:
WILLDAN Engineering
13191 CROSSROADS PARKWAY NORTH
SUITE 405, INDUSTRY, CA 91746
(562) 908-6200
UNDER THE SUPERVISION OF:

JEFFREY C. LAU RCE 83887
DRAWN BY: RG/BB

10/12/22
DESIGNED BY: RG/BB
CHECKED BY: JL

SUBMITTED BY:
MANUEL FABIAN, CE ASSISTANT II
DATE

CITY OF
SAN FERNANDO
HISTORIC & VISIONARY
PUBLIC WORKS DEPARTMENT

TRAFFIC SIGNAL MODIFICATION PLAN
BRAND BOULEVARD
AT SAN FERNANDO ROAD
JOB NO. 7598
PLAN NO. P-722

SHEET NO.
8
OF
10

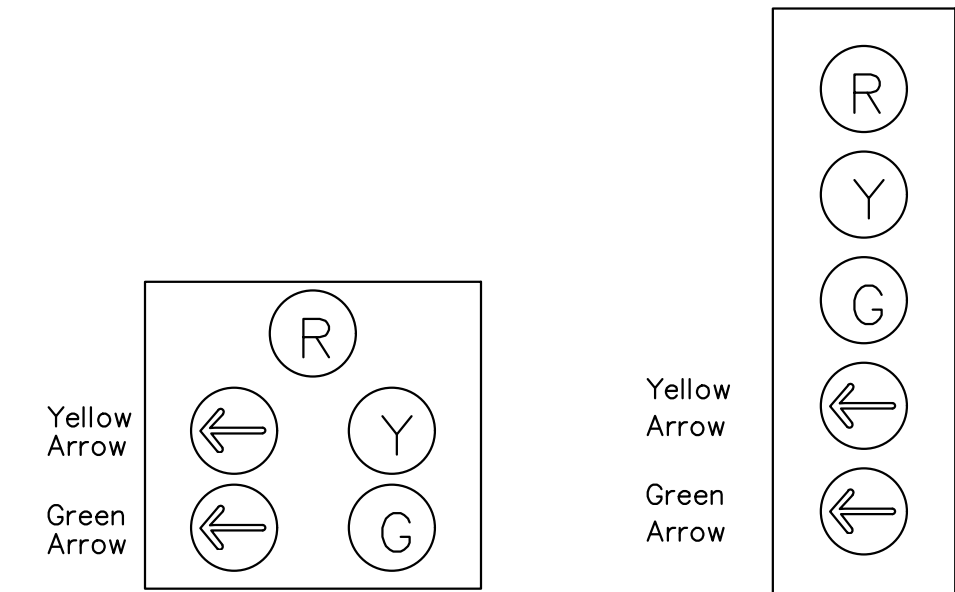
POLE SCHEDULE ■															
No.	STANDARD			LUMINAIRE LED EQ	VEHICLE SIGNAL MOUNTING		PED SIGNAL *	PPB		R.R.S.N.S.	POLE LOCATION (SEE DETAIL "A")			REMARKS	
	TYPE	LUM. M.A.	SIG. M.A.		MAST ARM	POLE		MTG.	Ø		QUAD	ARROW	E		B
(A)	17-2-80	6'	15'	200W(N)	MAS(N)	SV-1-T(N)	SP-1-T	—	—	Brand Blvd (N) CITY OF SAN FERNANDO	EXISTING	—	—	#183, PEC	
(B)	PED POST(N)	—	—	—	—	—	—	8	W(N)	LT(N)	—	7'	—	3'	
(C)	1A	—	—	—	—	TV-1-T	SP-1-T	2	N	RT	—	EXISTING	—	WWV ANTENNA	
(D)	19-3-129	6'	25'	200W(N)	MAS-5A	SV-1-T	SP-1-T	2	N	LT	Truman St (N) CITY OF SAN FERNANDO	EXISTING	—	—	#252
(E)	PED POST(N)	—	—	—	—	—	—	4	E(N)	RT(N)	—	—	9'	6.5'	
(F)	1A	—	—	—	—	TV-1-T(N)	SP-1-T	—	—	—	—	EXISTING	—	—	
(G)	17-2-80	6'	15'	200W(N)	MAS	SV-1-T(N)	SP-1-T	—	—	Brand Blvd (N) CITY OF SAN FERNANDO	EXISTING	—	—	#198	
(H)	PED POST(N)	—	—	—	—	—	—	4	2 E(N)	LT(N) RT(N)	—	9.5'	—	9'	
(I)	1A	—	—	—	—	TV-1-T	SP-1-T	—	—	—	—	EXISTING	—	—	
(J)	17-2-80	6'	20'	200W(N)	MAS-5A	SV-1-T(N)	SP-1-T	—	—	Truman St (N) CITY OF SAN FERNANDO	EXISTING	—	—	#239	
(K)	PED POST(N)	—	—	—	—	—	—	2	S(N)	LT(N)	—	7'	—	5'	
(L)	1A	—	—	—	—	TV-1-T(N)	SP-1-T	8	W	RT	—	EXISTING	—	—	

■ ALL EQUIPMENT IS EXISTING UNLESS OTHERWISE NOTED.
(N) = NEW

* PEDESTRIAN SIGNAL HEADS SHALL BE "NON-COUNTDOWN".

EXISTING PHASE DIAGRAM			
GROUP A		GROUP B	
NOT USED	↑ ↓	↑ ↓	↑ ↓
Ø1	↑ ↓	Ø3	↑ ↓
Ø2	↑ ↓	Ø4	↑ ↓
Ø5	↑ ↓	Ø7	↑ ↓
Ø6	↑ ↓	Ø8	↑ ↓

* PROTECTED/PERMISSIVE PHASE
Ø2 ON VEHICLE RECALL
RAILROAD PREEMPT SEQUENCE:
TRACK CLEARANCE: Ø4 AND Ø7
PREEMPT OPERATION: FLASHING RED ALL DIRECTIONS

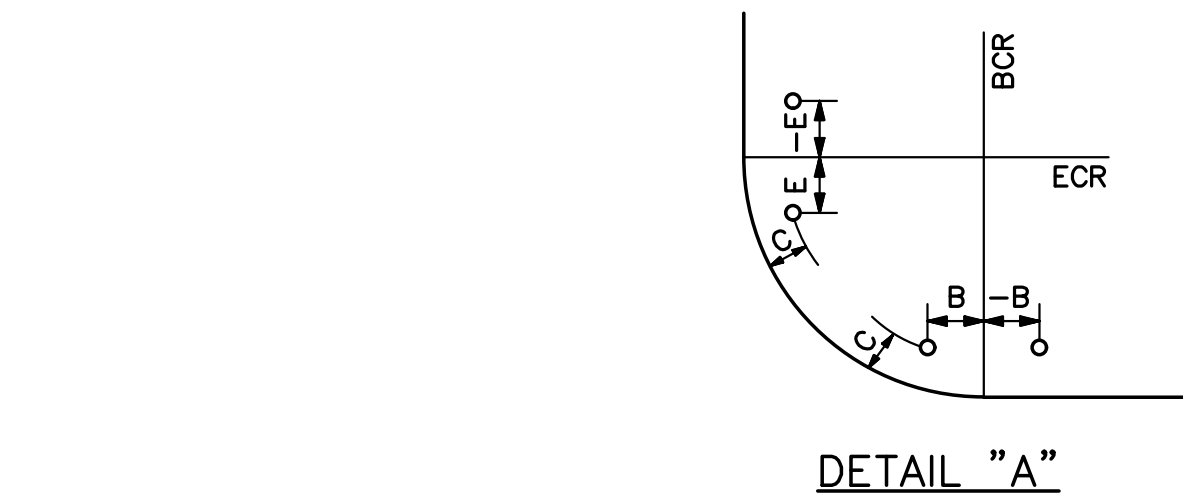


DETAIL "B"
(No Scale)

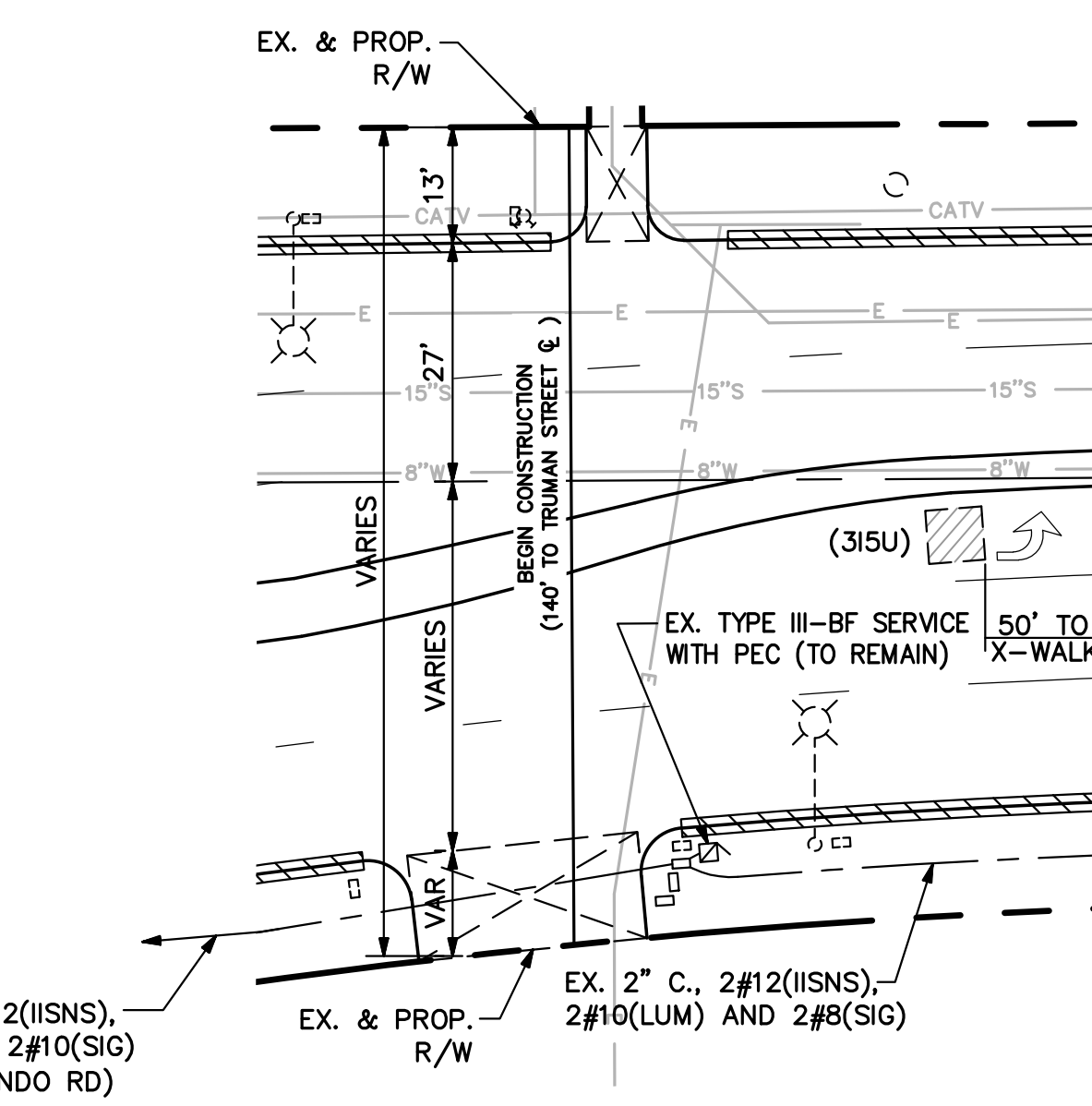
DETAIL "C"
(No Scale)

CONDUCTOR SCHEDULE ▲									
AWG	CIRCUIT	RUN							
		1	2	3	4	5	6	7	8
#10	Ø2 VEHICLE	6	3	3	3	3	3	3	3
	Ø3 VEHICLE	2	—	—	2	2	2	—	—
	Ø4 VEHICLE	3	3	—	—	—	—	—	—
	Ø7 VEHICLE	2	2	—	—	—	—	—	—
	Ø8 VEHICLE	3	—	—	3	3	3	3	—
#8	Ø2 PED	4	2	2	2	2	2	2	2
	Ø4 PED	4	2	—	2	2	2	2	—
	Ø8 PED	2	—	—	2	2	2	—	—
	Ø2 PPB	2	1	—	1	1	1	1	—
	Ø4 PPB	2	1	1	1	1	1	1	1
#14	Ø8 PPB	1	—	—	1	1	—	—	—
	SPARES	6	3	3	3	3	3	3	3
	TOTAL	37	17	9	20	20	19	17	9
	SIG. COMMON	2	1	1	1	1	1	1	1
	LUMINAIRE	—	2	—	2	2	2	2	2
#14	TOTAL	—	—	—	—	—	—	—	—
	#8 SERVICE	2	—	—	—	—	—	—	—
	VIDEO CABLE	4	1	—	3	2	2	1	1
	POWER CABLE	4	1	—	3	2	2	1	1
	RxR PREEMPT	3	—	—	3	3	—	—	—
#14	CONDUIT SIZE	3-3"	1.5"	2"	2"	1.5"	1.5"	1.5"	2"
	E=EXISTING, N=NEW	E	E	E	E	E	E	E	E

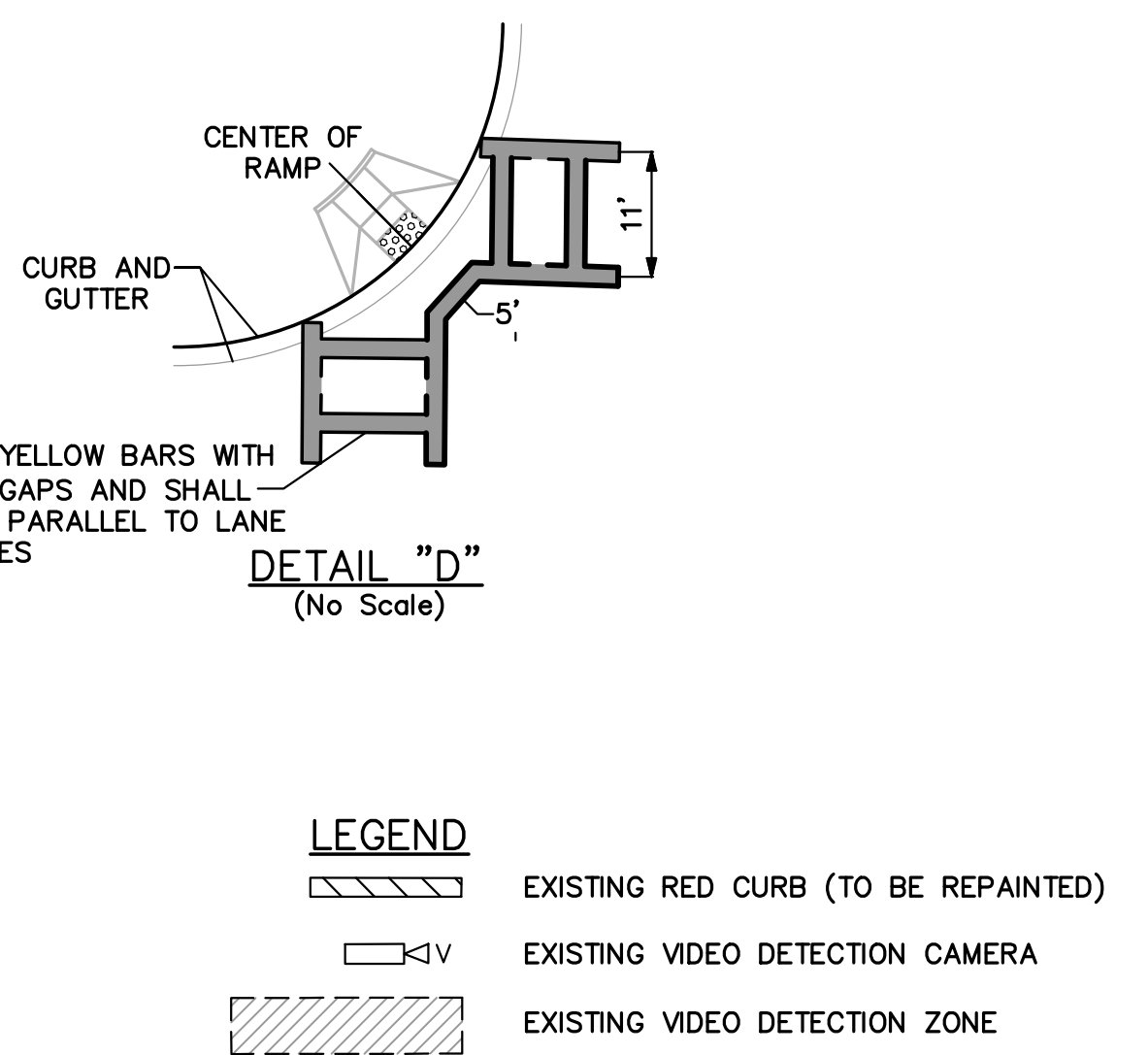
▲ — ALL CONDUCTORS ARE EXISTING



DETAIL "A"
(No Scale)



DETAIL "D"
(No Scale)



LEGEND

- EXISTING RED CURB (TO BE REPAINTED)
- EXISTING VIDEO DETECTION CAMERA
- EXISTING VIDEO DETECTION ZONE

TRAFFIC SIGNAL GENERAL NOTES

- TRAFFIC SIGNAL AND HIGHWAY LIGHTING EQUIPMENT, AND INSTALLATION THEREOF SHALL CONFORM TO CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD), CALTRANS STANDARD PLANS AND SPECIFICATIONS, LATEST EDITIONS, THESE PLANS, AND THE SPECIAL PROVISIONS.
- ALL MATERIALS AND EQUIPMENT SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR.
- VEHICLE INDICATIONS SHALL BE 12" LIGHT EMITTING DIODE (LED) RED, LED YELLOW, AND LED GREEN PER THE SPECIAL PROVISIONS.
- CONDUIT SHALL BE MIN. 2" SCHEDULE 80 PVC AND PULL BOXES SHALL BE #5, UNLESS SHOWN OTHERWISE.
- ALL CONDUIT AND PULL BOXES NOT SHOWN FOR REUSE SHALL BE ABANDONED.
- CONDUCTOR SCHEDULE IS PROVIDED AS AN INSTALLATION GUIDE ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE CORRECT CONDUCTORS REQUIRED FOR THE INTENDED OPERATION.
- PEDESTRIAN INDICATIONS SHALL BE LED COUNTDOWN PEDESTRIAN HEADS, UNLESS OTHERWISE NOTED ON THE POLE SCHEDULE. SEE SPECIAL PROVISIONS.
- ALL PEDESTRIAN PUSH BUTTONS AND SIGNS SHALL BE TYPE B (2" BUTTON) PUSH BUTTONS AND R10-3b PEDESTRIAN PUSH BUTTON SIGNS.
- INDUCTIVE DETECTOR LOOPS SHALL BE 6' DIAMETER TYPE "E" AND CENTERED IN TRAVEL LANE. LIMIT LINE LOOPS SHALL BE TYPE "D" BICYCLE DETECTOR LOOPS PER CALTRANS STANDARDS. PLACE LIMIT LINE LOOPS AT THE CROSSWALK OR LIMIT LINE.
- ALL WIRING SHALL BE MARKED (TAGGED) WITHIN THE CONTROLLER CABINET FOR PHASE IDENTIFICATION. ALL SIGNAL CABLES IN PULL BOXES SHALL BE MARKED AS TO WHICH POLE NO. THEY TERMINATE.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE AND LOCATION OF ALL UNDERGROUND FACILITIES, AND TO PROTECT THEM FROM DAMAGE. THE CONTRACTOR SHALL BEAR THE TOTAL EXPENSE OF REPAIR OR REPLACEMENT OF ANY UNDERGROUND FACILITIES DAMAGED DURING CONSTRUCTION.
- LOCATION OF UNDERGROUND FACILITIES ARE APPROXIMATE. THE CONTRACTOR SHALL POTHOLE TO DETERMINE THE EXACT LOCATION AND VERIFY ALL CONDITIONS ON THE JOBSITE PRIOR TO ORDERING POLES.
- THE CONTRACTOR SHALL EXERCISE EXTREME CARE TO AVOID DAMAGING EXISTING UTILITIES BY LOCATING ALL UTILITIES PRIOR TO CONSTRUCTION. HAND DIG FOUNDATIONS UNTIL CLEAR OF OBSTRUCTION. COORDINATE POLE INSTALLATION WITH OVERHEAD UTILITY AND SUBSTRUCTURE OWNERS. CONTACT UNDERGROUND SERVICE ALERT AT (800) 422-4133, 48 HOURS PRIOR TO CONSTRUCTION.
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- CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORT DURING INSTALLATION OF CONCRETE FOUNDATIONS ON ANY EXISTING NEARBY CABINETS, POLES, OR STANDARDS.
- ALL FOUNDATIONS FROM WHICH POLES OR POSTS ARE REMOVED SHALL BE COMPLETELY REMOVED.
- EXISTING HIGH VOLTAGE OVERHEAD UTILITY LINES EXIST ON THIS PROJECT. A HIGH VOLTAGE CONTRACTOR MAY BE REQUIRED FOR THE REMOVAL AND INSTALLATION OF TRAFFIC SIGNAL POLES. ANY ADDITIONAL COSTS FOR SUCH WORK SHALL BE INCURRED BY THE CONTRACTOR.

CONSTRUCTION NOTES (THIS SHEET ONLY):

- REMOVE AND CONSTRUCT CURB RAMP PER CALTRANS STD PLAN A88A. CASE AS NOTED. DETECTABLE WARNING SURFACE SHALL BE YELLOW.
- REMOVE EXISTING VEHICLE HEAD COMPLETE.
- REMOVE EXISTING LUMINAIRE COMPLETE.
- REMOVE EXISTING NON-ILLUMINATED RETROREFLECTIVE STREET NAME SIGN.
- REMOVE PEDESTRIAN PUSH BUTTON ASSEMBLY. WELD STEEL DISKS TO COVER EXPOSED HOLES.
- REMOVE EXISTING CROSSWALK AND INSTALL NEW LADDER STYLE CROSSWALK AS SHOWN ON PLAN, SEE DETAIL "D". REMOVE ALL LANE LINES AND PAVEMENT MARKINGS ENCROACHING IN NEW CROSSWALK.
- INSTALL GPS UNIVERSAL TIME BASE UNIT AND ANTENNA IN EXISTING TYPE 170/332 CONTROLLER CABINET.
- REPAINT IN-KIND EXISTING STRIPING DETAIL, PAVEMENT MARKING OR CROSSWALK AS SHOWN.
- COORDINATE ADJUSTMENT OF VIDEO DETECTION ZONE TO BACK OF NEW CROSSWALK WITH SIGNAL MAINTENANCE COMPANY.
- REMOVE EXISTING PEDESTRIAN HEAD COMPLETE.
- INSTALL YELLOW DETECTABLE WARNING SURFACE AT END OF EXISTING PCC SIDEWALK IN BACK OF WALK.
- REMOVE EXISTING PAVEMENT LEGEND.
- INSTALL 4" WHITE LINE WITH TYPE G RAISED PAVEMENT MARKERS AT 4' O.C. PER SCRRRA ES 4011 THROUGH 4017.
- INSTALL DETAIL 21 WITH TYPE H RAISED PAVEMENT MARKER AT 4' O.C. PER SCRRRA ES 4011 THROUGH 4017.
- INSTALL 2' WIDE STOP LINE, 8' IN ADVANCE OF GATE ARM, PER SCRRRA ES 4011 THROUGH 4017.
- INSTALL R3-18 SIGN ON EXISTING POST PER SCRRRA ES 4006.
- INSTALL "KEEP CLEAR" PAVEMENT MARKINGS PER SCRRRA ES 4006.

WORK ON THIS PLAN ENCROACHES ON RAILROAD RIGHT-OF-WAY BUT DOES NOT IMPACT RAILROAD OPERATION.

SCALE : 1" = 20'

FOR SIGNING AND STRIPING GENERAL NOTES, SEE TITLE SHEET



Know what's below.
Call before you dig.

REV.	DATE	BY	DESCRIPTION	APP'D
1	5/23/23	BB	SIGNING & STRIPING CHANGES AT R&R CROSSING PER SCRRRA	JL

REV.	DATE	BY	DESCRIPTION	APP'D
1	5/23/23	BB	SIGNING & STRIPING CHANGES AT R&R CROSSING PER SCRRRA	JL

PLANS PREPARED BY:
WILLDAN Engineering
13191 CROSSROADS PARKWAY NORTH
SUITE 405, INDUSTRY, CA 91746
(562) 908-6200
UNDER THE SUPERVISION OF:

JEFFREY C. LAU RCE 83887 DATE 10/12/22
DRAWN BY: RG/BB DESIGNED BY: RG/BB CHECKED BY: JL

SUBMITTED BY:
MANUEL FABIAN, CE ASSISTANT II DATE


CITY OF SAN FERNANDO
HISTORIC & VISIONARY
PUBLIC WORKS DEPARTMENT

TRAFFIC SIGNAL MODIFICATION PLAN
BRAND BOULEVARD
AT TRUMAN STREET
JOB NO. 7598 PLAN NO. P-722

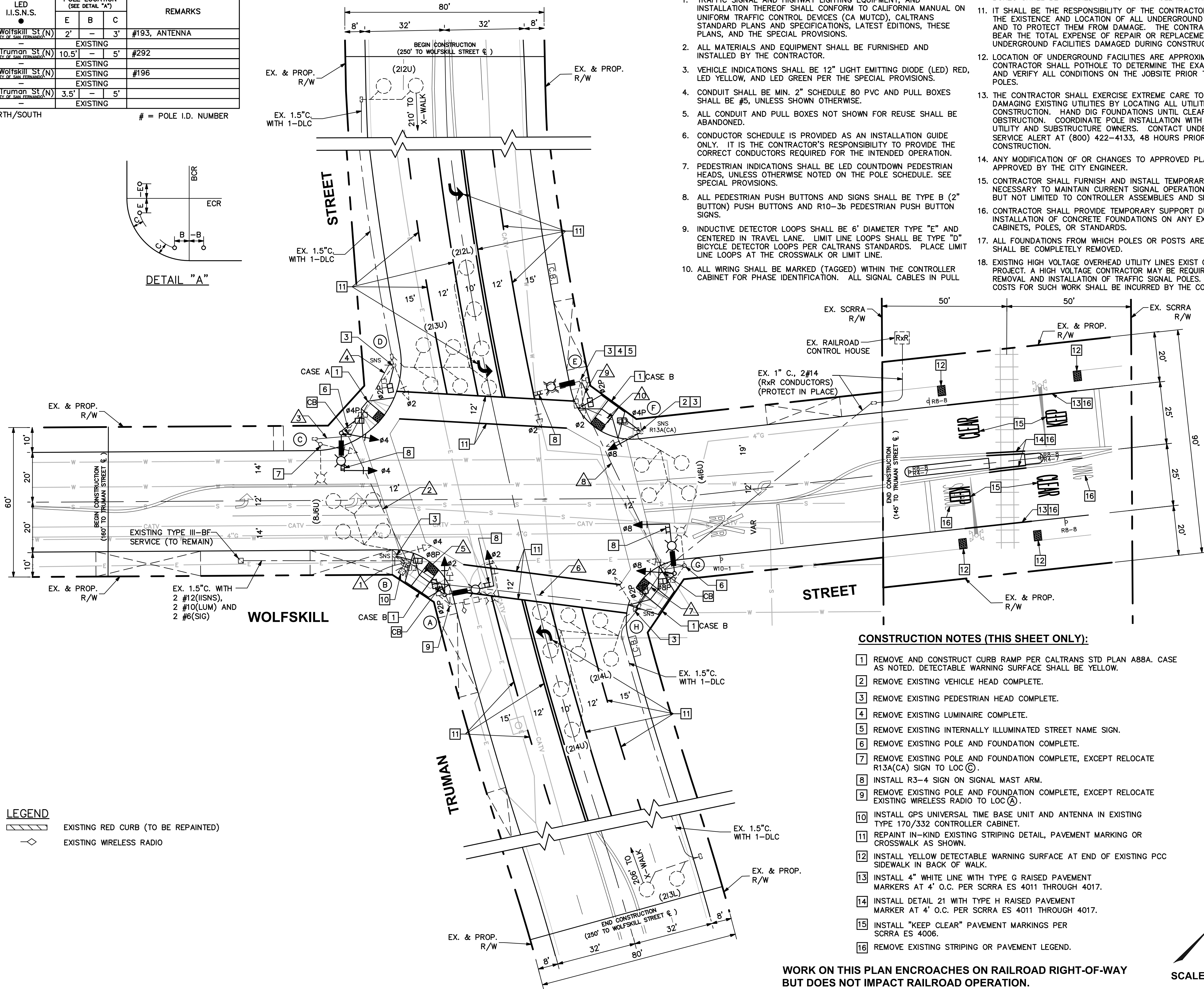
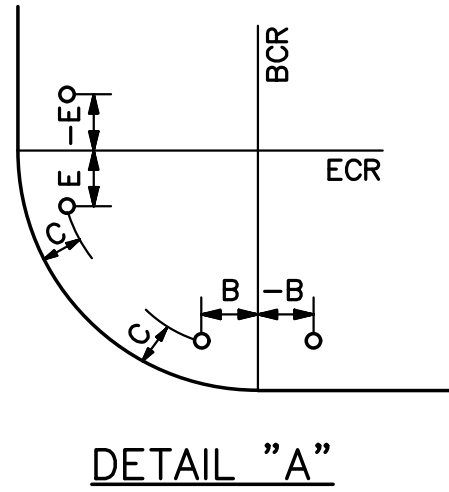
SHEET NO.
9
OF
10

POLE SCHEDULE ■															
No.	STANDARD			LUMINAIRE LED EQ ●	VEHICLE SIGNAL MOUNTING		PED SIGNAL * MTG.	PPB			LED I.I.S.N.S. ●	POLE LOCATION (SEE DETAIL "A")			REMARKS
	TYPE	LUM. M.A.	SIG. M.A.		MAST ARM	POLE		ø	QUAD	ARROW		E	B	C	
(A)	17-3-100(N)	12'(N)	20'(N)	200W(N)	MAS(N)	SV-1-T(N)	SP-1-T(N)	8	W(N)	LT(N)	Wolfskill St(N) CITY OF SAN FERNANDO	2'	-	3'	#193, ANTENNA
(B)	1A	-	-	-	-	TV-1-T	SP-1-T(N)	2	N	RT	-	EXISTING			
(C)	17-3-100(N)	12'(N)	15'(N)	200W(N)	MAS(N)	SV-1-T(N)	SP-1-T(N)	2	N(N)	LT(N)	Truman St(N) CITY OF SAN FERNANDO	10.5'	-	5'	#292
(D)	1A	-	-	-	-	TV-1-T	SP-1-T(N)	4	E	RT	-	EXISTING			
(E)	17-3-80	12'	20'	200W(N)	MAS	SV-1-T	SP-1-T(N)	4	E	LT	Wolfskill St(N) CITY OF SAN FERNANDO	EXISTING			#196
(F)	1A	-	-	-	-	TV-1-T(N)	SP-1-T(N)	2	S	RT	-	EXISTING			
(G)	17-3-100(N)	12'(N)	20'(N)	200W(N)	MAS(N)	SV-1-T(N)	SP-1-T(N)	2	S(N)	LT(N)	Truman St(N) CITY OF SAN FERNANDO	3.5'	-	5'	
(H)	1A	-	-	-	-	TV-1-T	SP-1-T(N)	8	W	RT	-	EXISTING			

■ ALL EQUIPMENT IS EXISTING UNLESS OTHERWISE NOTED.
(N) = NEW
● = WITH PEC
a. INSTALL NEW POLE AT EXISTING POLE LOCATION. SEE GENERAL NOTE 15.
* PEDESTRIAN SIGNAL HEADS SHALL BE "NON-COUNTDOWN".

EXISTING PHASE DIAGRAM			
GROUP A		GROUP B	
RING 1	NOT USED	NOT USED	NOT USED
RING 2	NOT USED	NOT USED	NOT USED
Ø1	Ø2	Ø3	Ø4
Ø5	Ø6	Ø7	Ø8

RAILROAD PREEMPT SEQUENCE:
TRACK CLEARANCE: Ø4
PREEMPT OPERATION: FLASHING RED ALL DIRECTIONS



TRAFFIC SIGNAL GENERAL NOTES

- TRAFFIC SIGNAL AND HIGHWAY LIGHTING EQUIPMENT, AND INSTALLATION THEREOF SHALL CONFORM TO CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD), CALTRANS STANDARD PLANS AND SPECIFICATIONS, LATEST EDITIONS, THESE PLANS, AND THE SPECIAL PROVISIONS.
 - ALL MATERIALS AND EQUIPMENT SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR.
 - VEHICLE INDICATIONS SHALL BE 12" LIGHT EMITTING DIODE (LED) RED, LED YELLOW, AND LED GREEN PER THE SPECIAL PROVISIONS.
 - CONDUIT SHALL BE MIN. 2" SCHEDULE 80 PVC AND PULL BOXES SHALL BE #5, UNLESS SHOWN OTHERWISE.
 - ALL CONDUIT AND PULL BOXES NOT SHOWN FOR REUSE SHALL BE ABANDONED.
 - CONDUCTOR SCHEDULE IS PROVIDED AS AN INSTALLATION GUIDE ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE CORRECT CONDUCTORS REQUIRED FOR THE INTENDED OPERATION.
 - PEDESTRIAN INDICATIONS SHALL BE LED COUNTDOWN PEDESTRIAN HEADS, UNLESS OTHERWISE NOTED ON THE POLE SCHEDULE. SEE SPECIAL PROVISIONS.
 - ALL PEDESTRIAN PUSH BUTTONS AND SIGNS SHALL BE TYPE B (2" BUTTON) PUSH BUTTONS AND R10-3b PEDESTRIAN PUSH BUTTON SIGNS.
 - INDUCTIVE DETECTOR LOOPS SHALL BE 6" DIAMETER TYPE "E" AND CENTERED IN TRAVEL LANE. LIMIT LINE LOOPS SHALL BE TYPE "D" BICYCLE DETECTOR LOOPS PER CALTRANS STANDARDS. PLACE LIMIT LINE LOOPS AT THE CROSSWALK OR LIMIT LINE.
 - ALL WIRING SHALL BE MARKED (TAGGED) WITHIN THE CONTROLLER CABINET FOR PHASE IDENTIFICATION. ALL SIGNAL CABLES IN PULL
- BOXES SHALL BE MARKED AS TO WHICH POLE No. THEY TERMINATE.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE AND LOCATION OF ALL UNDERGROUND FACILITIES, AND TO PROTECT THEM FROM DAMAGE. THE CONTRACTOR SHALL BEAR THE TOTAL EXPENSE OF REPAIR OR REPLACEMENT OF ANY UNDERGROUND FACILITIES DAMAGED DURING CONSTRUCTION.
 - LOCATION OF UNDERGROUND FACILITIES ARE APPROXIMATE. THE CONTRACTOR SHALL POTHOLE TO DETERMINE THE EXACT LOCATION AND VERIFY ALL CONDITIONS ON THE JOBSITE PRIOR TO ORDERING POLES.
 - THE CONTRACTOR SHALL EXERCISE EXTREME CARE TO AVOID DAMAGING EXISTING UTILITIES BY LOCATING ALL UTILITIES PRIOR TO CONSTRUCTION. HAND DIG FOUNDATIONS UNTIL CLEAR OF OBSTRUCTION. COORDINATE POLE INSTALLATION WITH OVERHEAD UTILITY AND SUBSTRUCTURE OWNERS. CONTACT UNDERGROUND SERVICE ALERT AT (800) 422-4133, 48 HOURS PRIOR TO CONSTRUCTION.
 - ANY MODIFICATION OF OR CHANGES TO APPROVED PLANS MUST BE APPROVED BY THE CITY ENGINEER.
 - CONTRACTOR SHALL FURNISH AND INSTALL TEMPORARY EQUIPMENT NECESSARY TO MAINTAIN CURRENT SIGNAL OPERATION, INCLUDING BUT NOT LIMITED TO CONTROLLER ASSEMBLIES AND SIGNAL POLES.
 - CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORT DURING INSTALLATION OF CONCRETE FOUNDATIONS ON ANY EXISTING NEARBY CABINETS, POLES, OR STANDARDS.
 - ALL FOUNDATIONS FROM WHICH POLES OR POSTS ARE REMOVED SHALL BE COMPLETELY REMOVED.
 - EXISTING HIGH VOLTAGE OVERHEAD UTILITY LINES EXIST ON THIS PROJECT. A HIGH VOLTAGE CONTRACTOR MAY BE REQUIRED FOR THE REMOVAL AND INSTALLATION OF TRAFFIC SIGNAL POLES. ANY ADDITIONAL COSTS FOR SUCH WORK SHALL BE INCURRED BY THE CONTRACTOR.

CONSTRUCTION NOTES (THIS SHEET ONLY):

- REMOVE AND CONSTRUCT CURB RAMP PER CALTRANS STD PLAN A88A. CASE AS NOTED. DETECTABLE WARNING SURFACE SHALL BE YELLOW.
- REMOVE EXISTING VEHICLE HEAD COMPLETE.
- REMOVE EXISTING PEDESTRIAN HEAD COMPLETE.
- REMOVE EXISTING LUMINAIRE COMPLETE.
- REMOVE EXISTING INTERNALLY ILLUMINATED STREET NAME SIGN.
- REMOVE EXISTING POLE AND FOUNDATION COMPLETE.
- REMOVE EXISTING POLE AND FOUNDATION COMPLETE, EXCEPT RELOCATE R13A(CA) SIGN TO LOC (C).
- INSTALL R3-4 SIGN ON SIGNAL MAST ARM.
- REMOVE EXISTING POLE AND FOUNDATION COMPLETE, EXCEPT RELOCATE EXISTING WIRELESS RADIO TO LOC (A).
- INSTALL GPS UNIVERSAL TIME BASE UNIT AND ANTENNA IN EXISTING TYPE 170/332 CONTROLLER CABINET.
- REPAINT IN-KIND EXISTING STRIPING DETAIL, PAVEMENT MARKING OR CROSSWALK AS SHOWN.
- INSTALL YELLOW DETECTABLE WARNING SURFACE AT END OF EXISTING PCC SIDEWALK IN BACK OF WALK.
- INSTALL 4" WHITE LINE WITH TYPE G RAISED PAVEMENT MARKERS AT 4' O.C. PER SCRRA ES 4011 THROUGH 4017.
- INSTALL DETAIL 21 WITH TYPE H RAISED PAVEMENT MARKER AT 4' O.C. PER SCRRA ES 4011 THROUGH 4017.
- INSTALL "KEEP CLEAR" PAVEMENT MARKINGS PER SCRRA ES 4006.
- REMOVE EXISTING STRIPING OR PAVEMENT LEGEND.

WORK ON THIS PLAN ENCROACHES ON RAILROAD RIGHT-OF-WAY BUT DOES NOT IMPACT RAILROAD OPERATION.

SCALE : 1" = 20'

FOR SIGNING AND STRIPING GENERAL NOTES, SEE TITLE SHEET



Know what's below.
Call before you dig.

REV.	DATE	BY	DESCRIPTION	APP'VD
1	5/23/23	BB	SIGNING & STRIPING CHANGES AT R/R CROSSING PER SCRRA	JL

PLANS PREPARED BY:
WILLDAN Engineering
13191 CROSSROADS PARKWAY NORTH
SUITE 405, INDUSTRY, CA 91746
(562) 908-6200
UNDER THE SUPERVISION OF:

JEFFREY C. LAU RCE 83887 DATE 10/12/22
DRAWN BY: RG/BB DESIGNED BY: RG/BB CHECKED BY: JL

SUBMITTED BY:
MANUEL FABIAN, CE ASSISTANT II
DATE
REMOVE EXISTING PAVEMENT LEGEND.

CITY OF
SAN FERNANDO
HISTORIC & VISIONARY
PUBLIC WORKS DEPARTMENT

TRAFFIC SIGNAL MODIFICATION PLAN
**WOLFSKILL STREET
AT TRUMAN STREET**
JOB NO. 7598 PLAN NO. P-722

SHEET NO.
10
OF
10