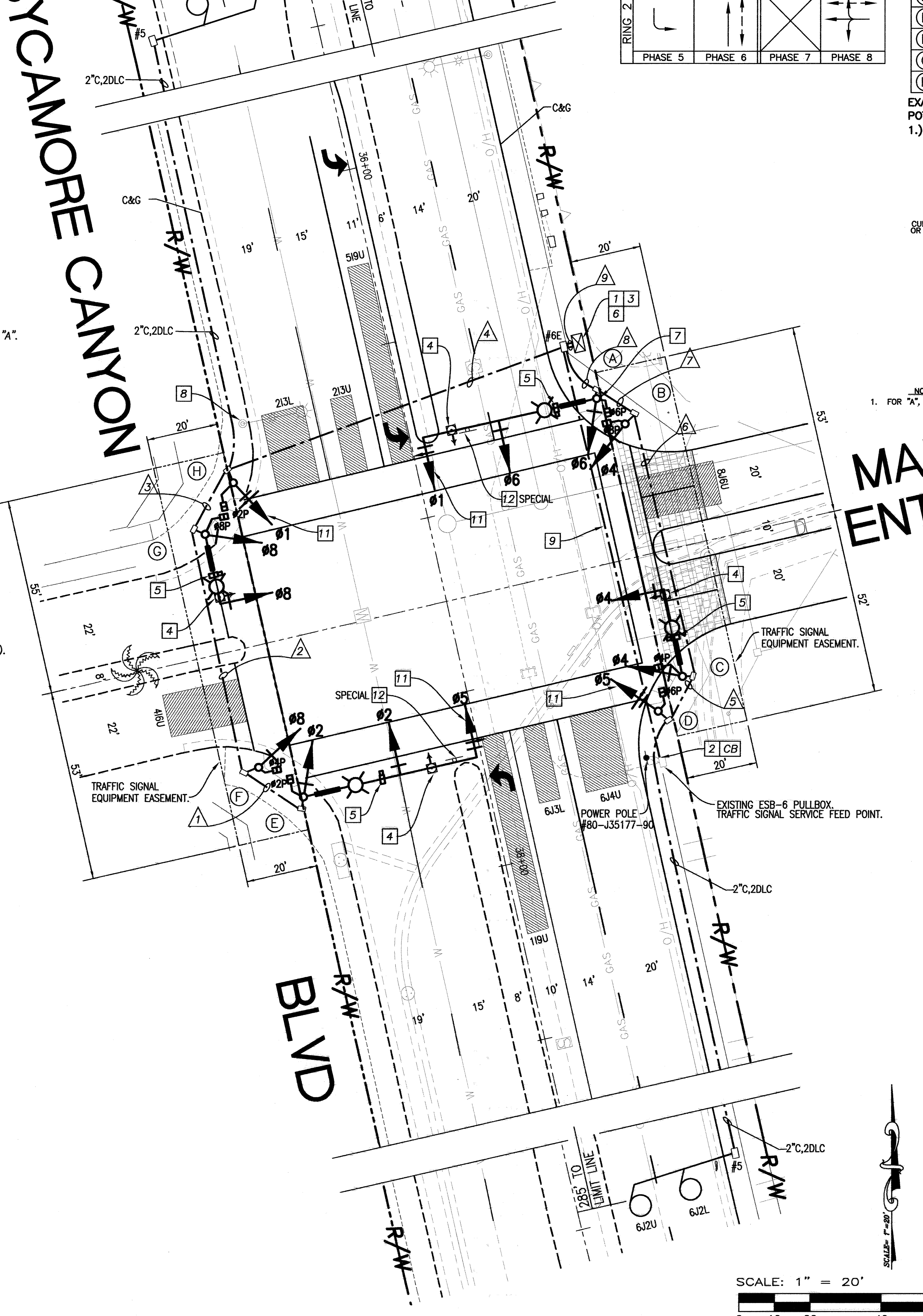


CONSTRUCTION NOTES: (THIS SHEET)

[1] CONTRACTOR SHALL CONSTRUCT (TYPE 332 CABINET) FOUNDATION. CONTRACTOR SHALL FURNISH AND INSTALL MODEL 2070 CONTROLLER ASSEMBLY IN MODEL 332 ANODIZED ALUMINUM CABINET, COMPLETE WITH DETECTION SHOWN AND AUXILIARY EQUIPMENT WITHIN A TYPE 332 CABINET PER CITY OF RIVERSIDE SPECIFICATIONS.

[2] INSTALL ELECTRICAL SERVICE PER CITY OF RIVERSIDE STANDARDS. ALL ELECTRIC FACILITIES INSTALLED BY CONTRACTOR SHALL BE INSPECTED AND APPROVED BY THE DEPARTMENT CONSTRUCTION INSPECTOR (951-826-2335 OF 951-826-2416). ANY CHANGES SHALL BE APPROVED BY THE DEPARTMENT PRIOR TO EXECUTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL PHASES OF CONSTRUCTION WITH THE DEPARTMENT CONSTRUCTION INSPECTOR A MINIMUM OF THREE WEEKS PRIOR TO TRAFFIC SIGNAL TURN ON.

[3] CONTRACTOR SHALL PROVIDE AND INSTALL AN UNINTERRUPTED POWER SUPPLY (UPS) UNIT PER THE SPECIAL PROVISIONS. THE UPS UNIT AND BATTERIES SHALL BE INSTALLED IN A CABINET, EXTERNALLY MOUNTED TO THE CONTROLLER CABINET.

[4] INSTALL ONE (1) GTT MODEL No. 711 (OR CITY-APPROVED EQUAL) EMERGENCY VEHICLE PRE-EMPTION DETECTOR ASSEMBLY (INCLUDING MOUNTING HARDWARE AND CABLE) FOR EACH DIRECTION, OR OPTICOM MODEL No. 722 (DUAL DIRECTION) AS SHOWN ON PLAN. E.V.P.E. SHALL BE MOUNTED ON THE MAST ARM PER DETAIL "A".

[5] INSTALL VIDEO DETECTION CAMERA ON LUMINAIRE MAST ARM PER DETAIL. CAMERAS SHALL BE PROGRAMMED BY THE CONTRACTOR. SEE SPECIAL PROVISIONS FOR SPECIFICATIONS.

[6] INSTALL VIDEOLARM PANEL ANTENNA WITH VIDEOLARM 2.4 GHz MODEL PB24L24 RADIO ON SIGNAL POLE. EXACT PLACEMENT OF ANTENNA AND RADIO SHALL BE DETERMINED BY THE RADIO MANUFACTURER'S REPRESENTATIVE IN THE FIELD. THE CONTRACTOR SHALL INSTALL A LUMINAIRE PHOTO CELL POWER ADAPTER CABLE RATED SJT /SJO POWER TO RADIO UNIT IF MOUNTED ON THE TRAFFIC SIGNAL POLE. INSTALL CAT-5E CABLE FROM RADIO UNIT TO CONTROLLER CABINET.

[7] THE CONTRACTOR SHALL INSTALL A MOTOROLA POINT-TO-MULTIPOINT 54430 10 MHz SUBSCRIBER MODULE BROADBAND RADIO, MODEL NO. 5490SM10 OR CITY APPROVED EQUAL. RADIO SHALL BE INSTALLED ON POLE "A" PER THE SPECIAL PROVISIONS. CONTRACTOR SHALL COORDINATE WITH THE CITY OF RIVERSIDE TRAFFIC ENGINEERING SECTION AT 951-826-5104 TO DETERMINE IF THE RADIO WILL PROVIDE PROPER RF PERFORMANCE LEVELS.

[8] EXISTING LIGHT POLE TO BE REMOVED & SALVAGED.

[9] INSTALL 2"C, 2-#6(SERVICE), 2-#8(LIGHTING), 2-#12(IISNS).

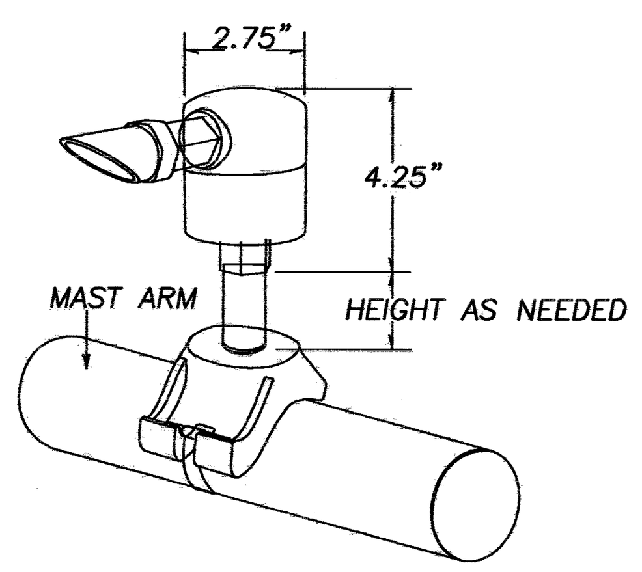
[10] N/A.

[11] CONTRACTOR SHALL INSTALL 4-SECTION LEFT TURN INDICATION SIGNAL HEAD THAT INCLUDES FLASHING YELLOW LEFT TURN PER DETAIL "A".

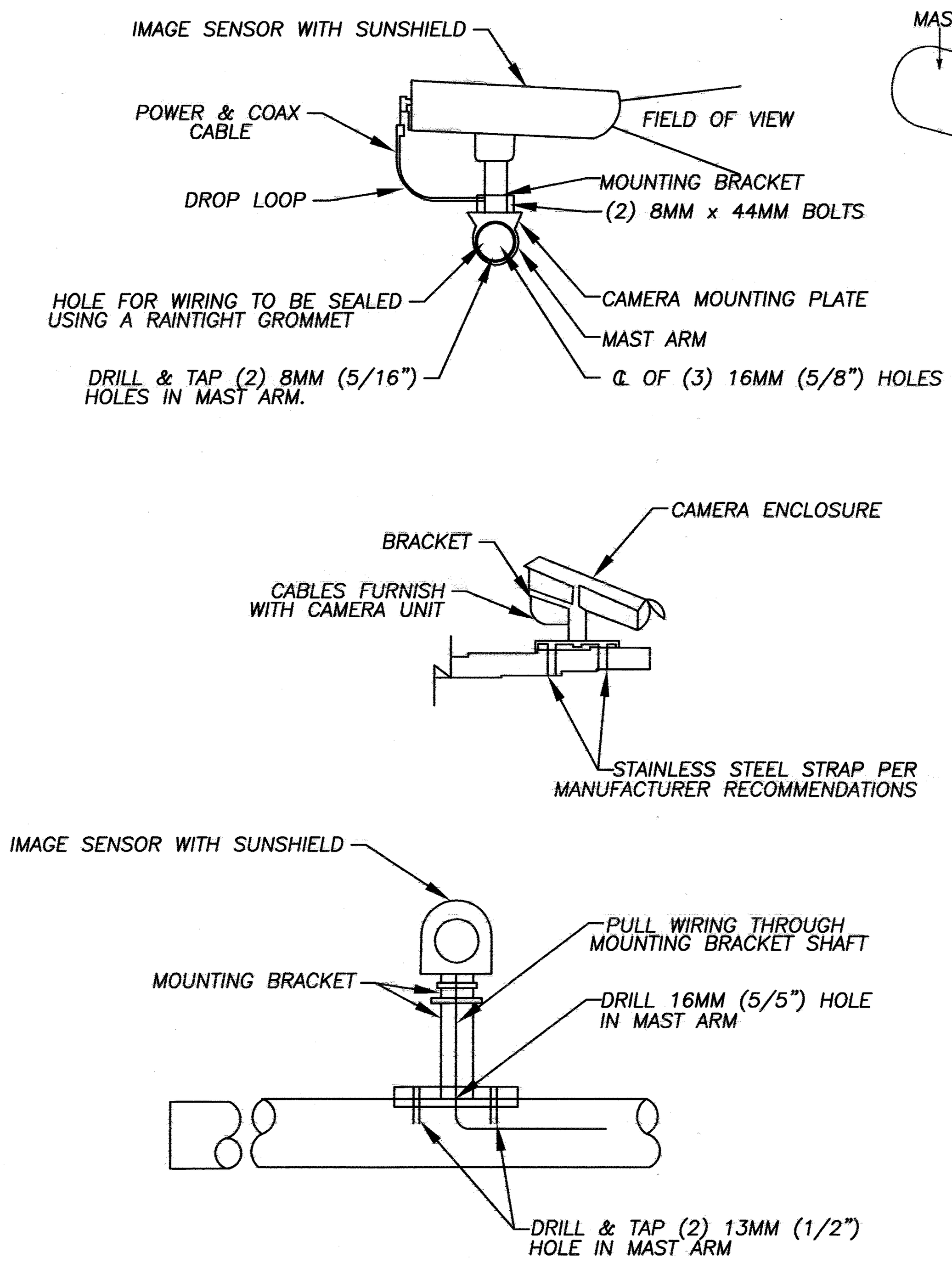
[12] INSTALL SIGN AS NOTED.

TRAFFIC SIGNAL GENERAL NOTES:

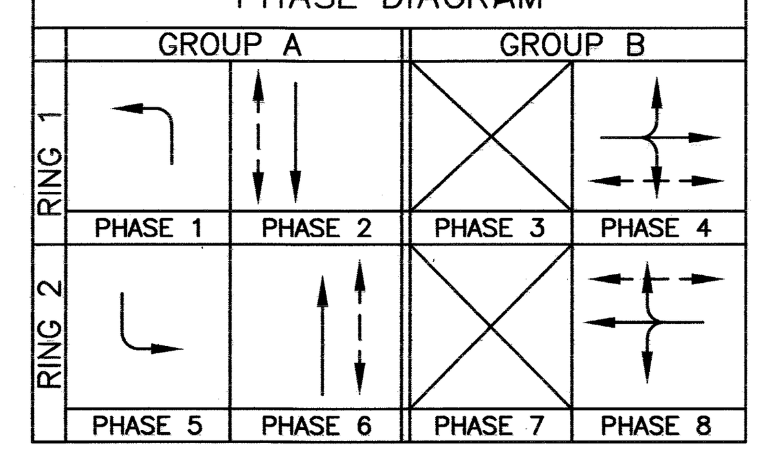
1. ALL ITEMS FURNISHED AND ALL WORK TO BE DONE SHALL CONFORM TO THE REQUIREMENTS OF: THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION (CALTRANS) STANDARD PLANS AND SPECIFICATIONS, DATED 2006; THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES ADOPTED 2014; AND THE SPECIAL PROVISIONS.
2. UTILITIES SHOWN ON THE PLAN ARE CORRECT AND ACCURATE TO THE EXTENT OF AVAILABLE RECORDS. THE CONTRACTOR IS REQUIRED TO TAKE STEPS TO ASCERTAIN THE EXACT LOCATION OF ALL KNOWN SUBSTRUCTURES PRIOR TO DOING WORK THAT MAY DAMAGE OR INTERFERE WITH SUCH FACILITIES ("UNDERGROUND SERVICE ALERT" (800) 227-2600).
3. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS TO NOTIFY ALL AFFECTED AGENCIES AND THE RIVERSIDE UTILITY COMPANIES A MINIMUM OF 48 HOURS PRIOR TO START OF CONSTRUCTION.
4. UNLESS SHOWN OTHERWISE, INDUCTIVE LOOPS SHALL BE MODIFIED TYPE "D" & TYPE "E" WITH 10', 15' AND 30' SPACING IN THE DIRECTION OF TRAVEL. NECESSARY STRIPING SHALL BE LOCATED PRIOR TO POSITIONING LOOPS. LOOPS SHALL BE SEALED WITH HOT MELT SEALANT. SEE DETAIL.
5. CONDUCTOR SCHEDULE IS FURNISHED AS AN INSTALLATION GUIDELINE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE CORRECT CONDUCTORS REQUIRED FOR THE INTENDED OPERATION.
6. CONDUIT BETWEEN ADJOINING PULL BOXES SHALL BE 2" UNLESS SHOWN OTHERWISE. ALL CONDUIT AND FITTINGS SHALL BE RIGID METAL, UNLESS SHOWN OTHERWISE (BURIED IN A MINIMUM OF 30" OF COVER IN THE STREET AND PARKWAY).



GTT EVPE DETAIL

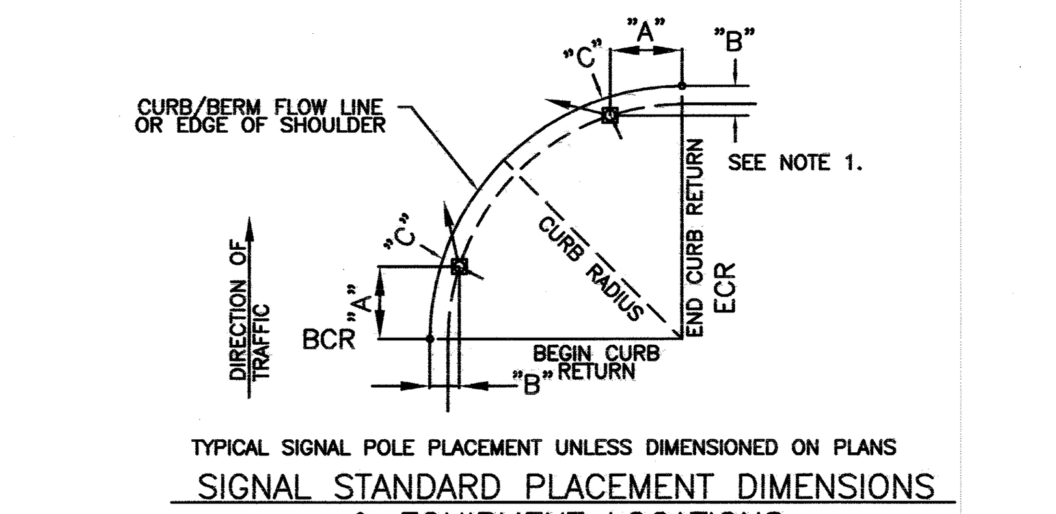


PHASE DIAGRAM



POLE SCHEDULE													
LOC	STANDARD		ARMS		LUMINAIRE	PED PUSH BT.			SIGNAL MOUNTING		R.S.N.S.	PLACEMENT	
	TYPE	HT.	SIG.	LUM.	LED	TYPE	PHASE	QUAD	VEHICLE	APS COUNTDOWN PED.	MESSAGE	A	B
(A)	29-5-100	30'	50'	15'	250W	B	8	S	2 MAS, SV-1-T	SP-1-T	Main Entry	4'	6'
(B)	1A	10'	–	–	–	B	6	W	TV-1-T	SP-1-T	–	12'	5'
(C)	19-4-100	30'	25'	12'	250W	B	6	W	1 MAS, SV-1-T	SP-1-T	Sycamore Canyon Blvd 6000	13'	6'
(D)	1A	10'	–	–	–	B	4	N	TV-1-T	SP-1-T	–	10'	4'
(E)	29-5-100	30'	50'	15'	250W	B	4	N	2 MAS, SV-1-T	SP-1-T	Windemere Apts	12'	4'
(F)	1A	10'	–	–	–	B	2	E	TV-1-T	SP-1-T	–	12'	4'
(G)	17-3-100	30'	20'	15'	250W	B	2	E	1 MAS, SV-1-T	SP-1-T	Sycamore Canyon Blvd 5900	15'	4'
(H)	1A	10'	–	–	–	B	8	S	TV-1-T	SP-1-T	–	13'	4'

EXACT POLE LOCATIONS DETERMINED BY ENGINEER IN THE FIELD.
POTHOLE POLE FOUNDATION LOCATIONS PRIOR TO ORDERING POLES.
1.)PED PUSH BUTTONS SHALL BE 2-WIRE ACCESSIBLE PEDESTRIAN SIGNALS (APS) PER CITY SPECIFICATIONS.



SIGNAL STANDARD PLACEMENT DIMENSIONS & EQUIPMENT LOCATIONS

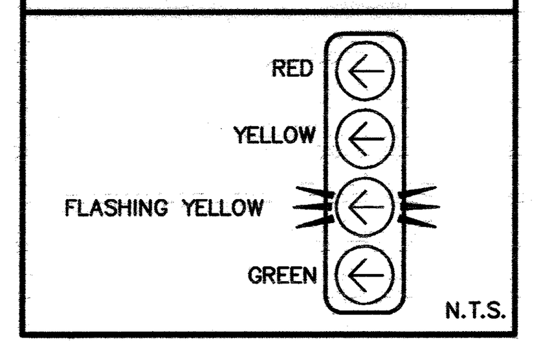
NOTE
1. FOR "A", "B", AND "C" DIMENSIONS, SEE POLE SCHEDULE, OR AS DIRECTED BY THE ENGINEER.

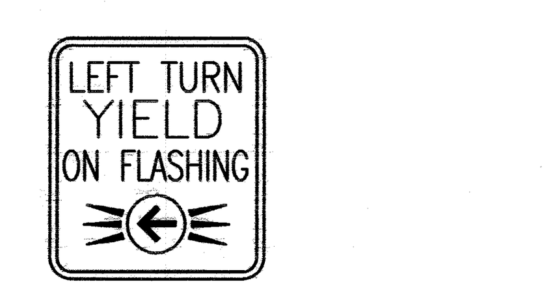
CONDUCTOR SCHEDULE										
A.W.G. OR CABLE TYPE		1	2	3	4	5	6	7	8	9
CONDUCTOR CABLE 3 / 12 CONDUCTOR CABLE	POLE A	–/–	–/–	–/–	–/–	–/–	–/–	–/–	1/1	1/1
	POLE B	–/–	–/–	–/–	–/–	–/–	–/–	1/1	1/1	1/1
	POLE C	–/–	–/–	–/–	–/–	–/–	1/1	1/1	1/1	1/1
	POLE D	–/–	–/–	–/–	–/–	1/1	1/1	1/1	1/1	1/1
	POLE E	1/1	1/1	1/1	1/1	–/–	–/–	–/–	–/–	1/1
	POLE F	–/–	1/1	1/1	1/1	–/–	–/–	–/–	–/–	1/1
	POLE G	–/–	–/–	1/1	1/1	–/–	–/–	–/–	–/–	1/1
	POLE H	–/–	–/–	–/–	1/1	–/–	–/–	–/–	–/–	1/1
TOTAL CABLES 3 / 12		1/1	2/2	3/3	4/4	1/1	2/2	3/3	4/4	8/8
OPTICOM CABLE		1	1	2	2	–	1	1	1	4
VIDEO (COAX.)		1	1	2	2	–	1	1	1	4
CAMERA 3#16 & CABLE POWER		1	1	2	2	–	1	1	1	4
10	LUMINAIRE	2	2	2	2	–	2	2	2	–
6	SIGNAL SERVICE	–	–	–	–	–	–	–	–	2
TYPE "B" DLC	Ø1 DETECTOR	–	–	–	–	–	–	–	–	–
	Ø2 DETECTOR	–	–	–	2	–	–	–	–	2
	Ø4 DETECTOR	–	–	–	–	–	–	–	–	–
	Ø5 DETECTOR	–	–	–	–	–	–	–	–	–
	Ø6 DETECTOR	–	–	–	–	2	2	2	2	2
	Ø8 DETECTOR	–	–	–	–	–	–	–	–	–
	TOTAL	–	–	–	2	2	2	2	2	4
CONDUIT SIZE (INCH)		3"	3"	3"	3"	3"	3"	3"	3"	2-4"

TRAFFIC SIGNAL GENERAL NOTES (CONTINUED):

7. TRAFFIC SIGNAL INTERCONNECT (SIC) SHALL BE 2" UNLESS SHOWN OTHERWISE, BURIED IN A MINIMUM OF 30" OF COVER IN THE STREET AND PARKWAY. No. 6 PULL BOXES WITH LIDS LABELED "COMMUNICATIONS", SHALL BE SPACED AT 400' AND THE MAXIMUM SIC BENDING RADIUS SHALL NOT EXCEED 45'. SIC CONDUIT SHALL ONLY INCLUDE SIGNAL INTERCONNECT CONDUCTORS.
8. UNDERGROUND SIGNAL CONDUCTORS SHALL NOT BE SPLICED.
9. PULL BOXES SHALL BE No. 6 WITH FIBERLITE LIDS LABELED "TRAFFIC SIGNAL" UNLESS OTHERWISE NOTED ON THE PLAN.
10. PULL BOXES SHALL NOT BE LOCATED IN OR WITHIN 1' OF ANY CURB ACCESS RAMP OR DRIVEWAY.
11. THE CONTRACTOR SHALL VERIFY WITH THE ENGINEER THE PRECISE FIELD LOCATIONS OF AUL TRAFFIC SIGNAL EQUIPMENT PRIOR TO THE INSTALLATION.
12. ALL LANDSCAPING WHICH IS DAMAGED BY CONSTRUCTION ACTIVITIES SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE CITY AND THE PROPERTY OWNER.
13. NEW MAST ARM MOUNTED SIGN SHALL BE FABRICATED WITH 3M DIAMOND GRADE DG3 REFLECTIVE SHEETING (ASTM TYPE XI) OR APPROVED EQUAL. SIGNS SHALL BE STANDARD SIZE AND HAVE A MINIMUM SIDE DIMENSION OF 30".
14. VEHICLE HEADS SHALL BE 12" LED TYPE. THE HOUSING, BACKPLATES AND VISORS SHALL BE METAL.
15. INTERNALLY ILLUMINATED STREET NAME SIGNS (IISNS) SHALL BE TYPE A. STREET NAME LEGENDS SHALL BE UPPER/LOWER CASE AND SHALL INCLUDE BLOCK NUMBERS AND ROAD NAME SUFFIXES.
16. SALVAGED TRAFFIC SIGNAL EQUIPMENT SHALL BE DELIVERED TO THE CITY OF RIVERSIDE TRAFFIC SIGNAL MAINTENANCE YARD.
17. DAMAGED SIDEWALK CONCRETE SHALL BE REPLACED PER CITY OF RIVERSIDE STANDARD.
18. THE CONTRACTOR SHALL REMOVE ALL UNUSED PULL BOXES AND RE -PAVE SURROUNDING AREA TO MATCH EXISTING OR PROPOSED GRADE. ALL UNUSED CONDUIT SHALL BE ABANDONED AND CAPPED ONCE UNUSED CONDUCTORS ARE REMOVED.
19. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO FURNISH AND INSTALL ANY ADDITIONAL LOAD SWITCHES AND/OR DETECTOR CARDS, IF NECESSARY, FOR THE PROPOSED OPERATION. ALL CONTRACTORS
20. ALL CONTRACTORS WORKING ON OR AROUND THE CITY OF RIVERSIDE'S UNDERGROUND ELECTRICAL FACILITIES MUST HAVE THE PROPERLY QUALIFIED PERSONNEL AND EQUIPMENT TO PERFORM THE SPECIFIED WORK. THE CONTRACTOR SWILL BE SOLELY RESPONSIBLE TO ESTABLISH AND MAINTAIN A SAFE WORKING ENVIRONMENT INCLUDING, BUT NOT LIMITED TO WORK AROUND ENERGIZED HIGH VOLTAGE FACILITIES, GAS TESTING OF CONFINED SPACES, TRAFFIC AND PROTECTION. EVERY ENTRY BY ANY PERSONNEL INTO A PUBLIC UTILITIES HIGH VOLTAGE STRUCTURE WILL REQUIRE THE PRESENCE OF A QUALIFIED ELECTRICAL WORKER IN ACCORDANCE WITH Cal/OSHA. ALL DEVELOPERS AND CONTRACTORS ARE REQUIRED TO SUBMIT REQUIRED DOCUMENTATION AND FOLLOW REQUIRED PROCEDURES. COPIES OF THE POLICY AND DOCUMENTS MAY BE OBTAINED AT 3901 ORANGE ST. RIVERSIDE, CA OR AT www.RIVERSIOEPUBUCUITILITIES.COM

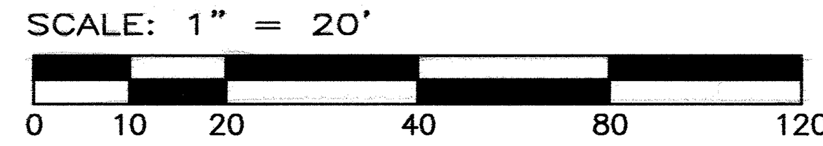
DETAIL "A"





SPECIAL

SCALE: 1" = 20'



IMPORTANT NOTICE
CALL TOLL FREE
48 HOURS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT
1-800-227-2600

TRAMES SOLUTIONS INC.
100 E SAN MARCOS BLVD, SUITE 400
SAN MARCOS, CA 92069
TEL: 760-291-1400
TRAFFIC DESIGN • TRAFFIC IMPACT ANALYSIS • TRANSPORTATION PLANNING
PRESCOTT SATO R.C.E. NO. 60277 10/19/16 DATE 6/30/18 EXP. DATE

REGISTERED PROFESSIONAL ENGINEER PRESCOTT T. SATO No. C 60277 Exp. 6/30/18 CIVIL STATE OF CALIFORNIA

MARK	REVISIONS	APPR.	DATE

DESIGNED BY Blaine DRAWN BY Blaine CHECKED BY Scott

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
PRINCIPAL ENGINEER		
CONST. CONTRACT ADMIN.		
PUBLIC UTILITIES		
SURVEYOR		
TRAFFIC DIVISION		

APPROVED BY
CITY ENGINEER
DATE 10/31/16

SYCAMORE CANYON BLVD AT MAIN ENTRY
TRAFFIC SIGNAL PLAN
HORIZONTAL SCALE: 1" = 20'

ACCT. NO.
X-554
SHEET 1 OF 1