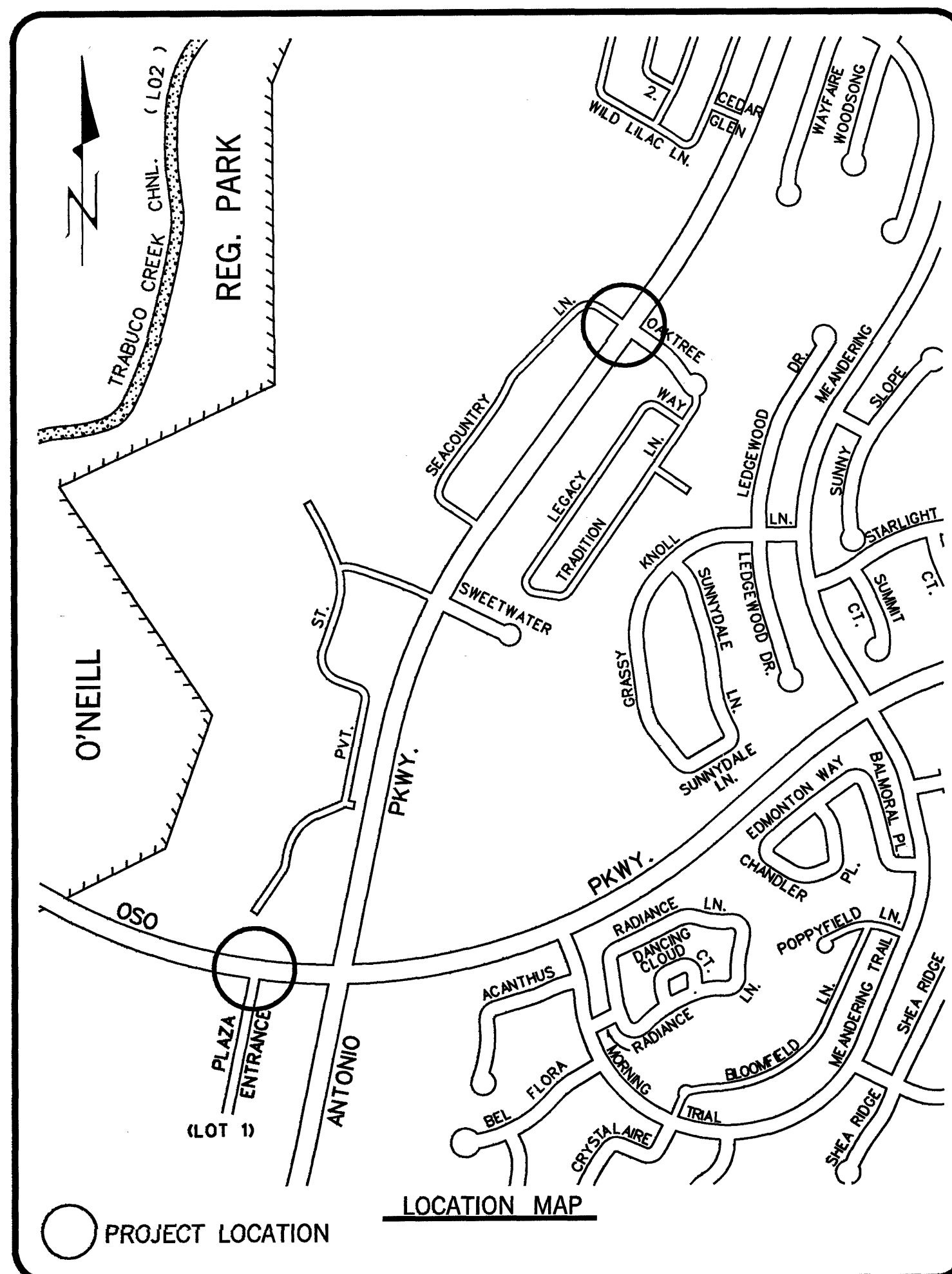




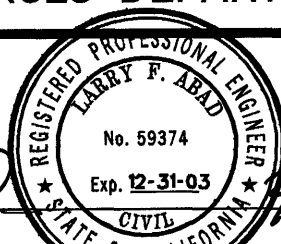
MARCH 2000

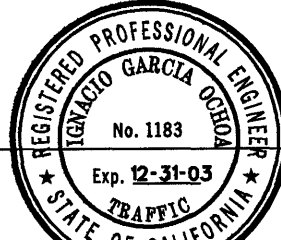
FUNDED BY:

DEVELOPER FUNDS
(AGREEMENT D95-002)



PUBLIC FACILITIES & RESOURCES DEPARTMENT

PREPARED:   2/23/00
LARRY ABAD
TRAFFIC ENGINEERING - SIGNAL DESIGN SECTION
RCE 059374 (12-31-03) DATE

RECOMMENDED:   2/23/00
I. G. OCHON
COUNTY TRAFFIC ENGINEER
RCE 35217 (9-30-03) DATE

APPROVED:  2/25/00
KENNETH R. SMITH
CHIEF ENGINEER DATE

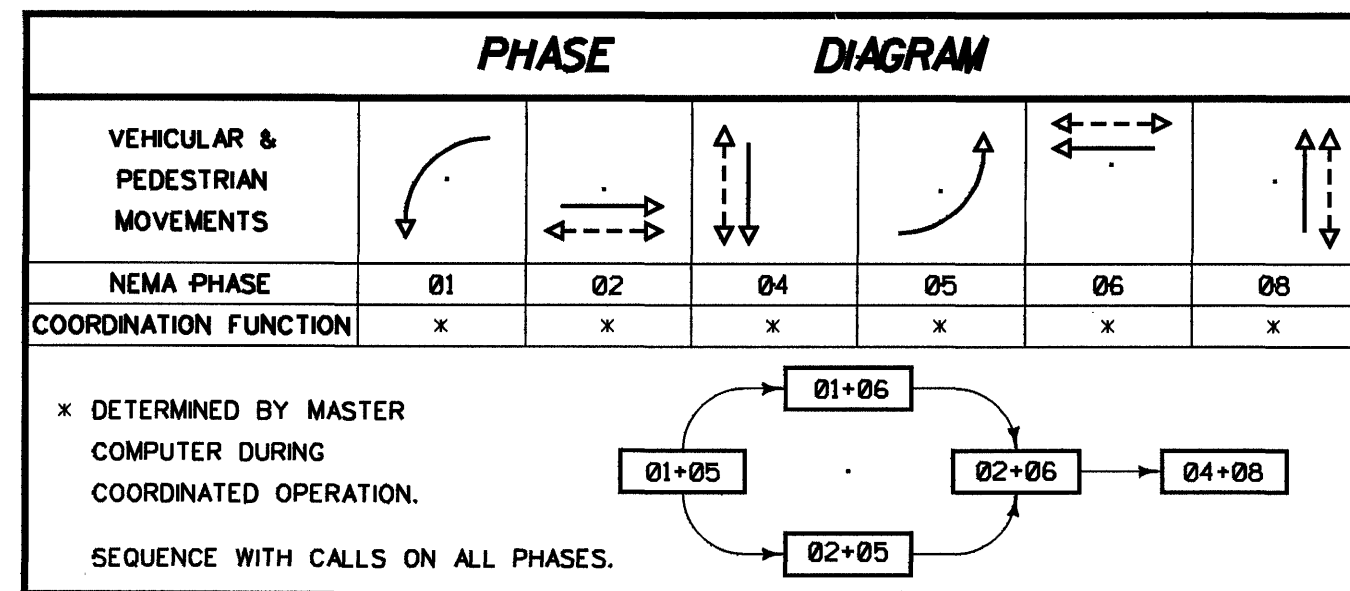
INDEX OF SHEETS	
SHEET	DESCRIPTION
1	TITLE SHEET
2	SIGNAL PLAN ANTONIO PKWY. @ OAKTREE / SEACOUNTRY LANE
3	SIGNAL PLAN OSO PKWY. @ DRIVEWAY 213 m WEST OF ANTONIO PKWY.
4	SIGNING AND STRIPING PLAN
5	DETAIL SHEET

UTILITY OWNER	PHONE NO.	CONTACT
COX COMMUNICATION	(949) 716-2143	DUANE BROWNING
THE GAS COMPANY	(949) 634-3215	CHARLIE GILBERT
PACIFIC BELL	(714) 666-5710	JEFF MERICKEL
SDG&E	(949) 361-8047	PATTI GOOD
SANTA MARGARITA WATER DISTRICT USA	(949) 459-6514	DIA BADIR

[illegible]

W. O. NO. ER10149 & ER10150
DWG. NO.

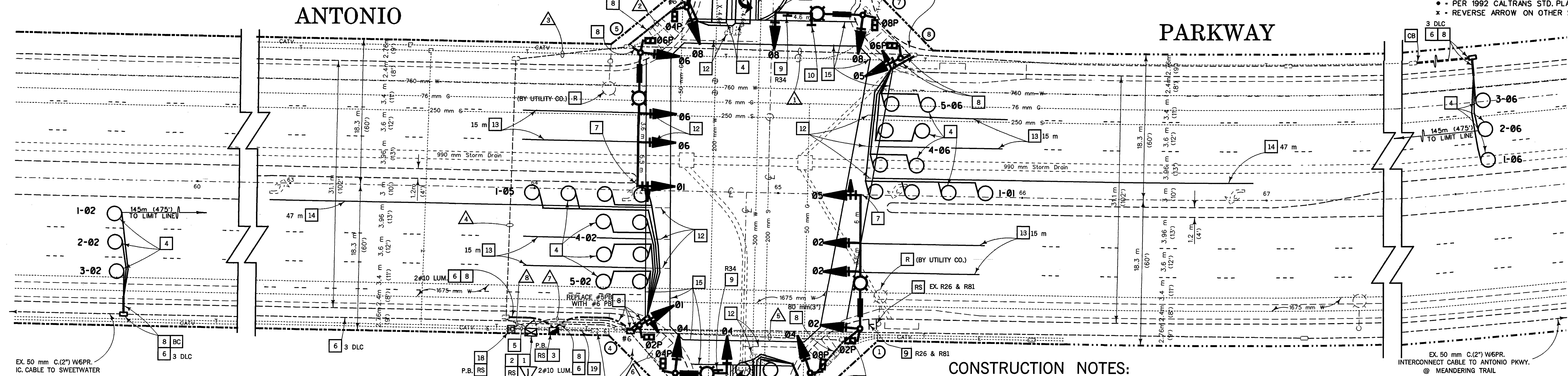
SHEET 1 OF 5



POLE SCHEDULE													
POLE DATA			SIGNAL	H.P.S.V. LUMINAIRE		SIGNAL MOUNTING			PED. PUSH BUTTON		FOUNDATION		REFLECTORIZED STREET NAME SIGN (DOUBLE FACE)
NO.	TYPE	HEIGHT	M.A.	M.A.	WATTS	VEH.	M.A.	PED.	PHASE	POLE QUAD	TYPE	SIZE	
①	29-5-129	9.14	16.76	4.57	250	SV-1-T	3MAS	● SP-1-CS	8	S	C	.92 x 2.8	Oaktree ➡
②	1A	3	—	—	—	TV-2-T	—	● SP-1-CS	2	W	S	.61 x .61 x .92	—
③	17-3-129	9.14	6.1	3.7	200	SV-1-T	1MAS	● SP-1-CS	2	W	C	.76 x 2.4	Antonio
④	1A	3	—	—	—	TV-1-T	—	● SP-1-CS	4	N	S	.61 x .61 x .92	—
⑤	29-5-129	9.14	16.76	4.57	250	SV-1-T	3MAS	● SP-1-CS	4	N	C	.92 x 2.8	Seacountry ➡
⑥	1A	3	—	—	—	TV-2-T	—	● SP-1-CS	6	E	S	.61 x .61 x .92	—
⑦	24-4-129	9.14	10.7	3.7	200	SV-1-T	1MAS	● SP-1-CS	6	E	C	.92 x 2.4	Antonio
⑧	1A	3	—	—	—	TV-1-T	—	● SP-1-CS	8	S	S	.61 x .61 x .92	—

EXACT POLE LOCATIONS DETERMINED BY ENGINEER IN THE FIELD.
POT HOLE POLE FOUNDATION LOCATIONS PRIOR TO ORDERING POLES.

C - C.I.D.H.
S - SQUARE.
• - PER 1992 CALTRANS STD. PLAN
x - REVERSE ARROW ON OTHER SIDE



CONSTRUCTION NOTES:

- CONSTRUCT P.C. CONCRETE CONTROLLER CABINET FOUNDATION.
- FURNISH & INSTALL TRAFFIC CONTROLLER IN A FULLY WIRED ALUMINUM CABINET PER THIS PLAN AND THE SPECIAL PROVISIONS. FACE CABINET DOOR TOWARDS ANTONIO PARKWAY.
- FURNISH & INSTALL TYPE III-B ELECTRICAL SERVICE & FOUNDATION.
- FURNISH AND INSTALL DETECTOR LOOPS AS SHOWN AND PER GENERAL NOTES SHEET 5.
- FURNISH & INSTALL 6 PAIR #22 TWISTED, SHIELDED INTERCONNECT TELEPHONE CABLE FOR TELEPHONE SERVICE CONNECTION.
- FURNISH & INSTALL CONDUCTORS AS INDICATED.
- FURNISH & INSTALL EVP CABLE FROM END OF MASTARM TO CONTROLLER CABINET AND COIL 3 m (10') OF CABLE INSIDE CONTROLLER CABINET.
- FURNISH & INSTALL 50 mm (2") CONDUIT AND/OR #5 PULL BOXES (UNLESS OTHERWISE NOTED).
- FURNISH & INSTALL SIGN, POST AND MOUNTING HARDWARE AS INDICATED.
- INSTALL PIPE TENON WITH REMOVABLE GALVANIZED CAP AND PULL ROPE.
- REMOVE & SALVAGE THE EXISTING SIGN AS INDICATED.
- SANDBLAST & REMOVE CONFLICTING STRIPING, STENCIL (IN BLOCK FORM) AND MARKERS AS SHOWN.
- PAINT 100 mm (4") SOLID WHITE (PER DETAIL 9).
- PAINT 200 mm (8") SOLID WHITE (PER DETAIL 38).
- PAINT 300 mm (12") SOLID WHITE.
- PAINT 100 mm (4") DOUBLE YELLOW (PER DETAIL 22 OR 29).
- STENCIL AS SHOWN.
- FURNISH & INSTALL INTERCONNECT SPLICE CABINET PER DETAIL "F" ON SHEET 5.
- FURNISH & INSTALL 3#6 CONDUCTORS OR PULLROPE AS DIRECTED BY UTILITY COMPANY.

LEGEND

- P PROTECT IN PLACE
BC INSTALL PULL BOX IN EXISTING CONDUIT RUN
CB INSTALL CONDUIT INTO EXISTING PULL BOX
RS REMOVE AND SALVAGE

GENERAL NOTES:

SEE SHEET 5
-CONTRACTOR SHALL REMOVE ALL EXISTING #5 AND #6 TRAFFIC SIGNAL PULLBOX LIDS AND REPLACE THEM WITH NON-PCC LIDS IN CONFORMANCE WITH STANDARD SPECIFICATIONS.

CONDUCTOR		SCHEDULE							
AWG	CIRCUIT	1	2	3	4	5	6	7	8
SCC-3		1	4	4	2	1	4	4	
SCC-12		2	1	4	4	2	1	4	4
3 # 20	EVP	1		2	2	1	1	2	2
# 10	LUMINAIRE	2		2	2	2	2		
# 6	SERVICE								
DLC	01	1		1	1				1
	02							5	
	04		2	2	2				2
	05							1	
	06	5		5	5				5
TOTAL		6	2	8	8	2		8	8
CONDUIT SIZE		(30mm) (3")	50mm (3")	(80mm) (3")	(80mm) (3")	(80mm) (3")	(50mm) (2")	(80mm) (3")	(80mm) (3")

INDUCTIVE LOOP DETECTOR SCHEDULE		
SENSOR	UNIT	CHANNEL DETECTOR
# 1	1	1-05
	2	1-02
# 2	1	2-02
	2	3-02
# 3	1	4-02
	2	5-02
# 4	1	1-01
	2	1-06
# 5	1	2-06
	2	3-06
# 6	1	4-06
	2	5-06
# 7	1	1-04
	2	2-04
# 8	1	1-08
	2	2-08
# 9	1	EVP-1
	2	EVP-2
# 10	1	EVP-3
	2	EVP-4

DETECTOR LOOP LOCATIONS SHALL BE APPROVED BY ENGINEER IN FIELD PRIOR TO INSTALLATION. ALL DETECTOR UNITS SHALL BE RACK MOUNTED, DUAL CHANNEL, DUAL OUTPUT PER CHANNEL WITH INTEGRAL COLORGATED EXTENSION AND DELAY CAPABILITY. OUTPUT "A" SHALL BE TIMED. OUTPUT "B" SHALL BE PRESENCE MODE FOR SYSTEM SAMPLING & COUNT OUTPUT ONLY. PROVIDE 14 SLOT DETECTOR RACK AND CARDS.

ORANGE COUNTY PUBLIC FACILITIES & RESOURCES DEPARTMENT	
ANTONIO PARKWAY AT OAKTREE / SEACOUNTRY	
SIGNAL PLAN	
DESIGNED: T. PHAM	CHECKED: L. ABAD
DRAWN: T.P., K.N.G., M.E.	DRAWING NO. ER10149
SCALE: AS SHOWN	DATE: MAR. 2000
SHEET 2 OF 5	

POLE SCHEDULE (METER)													
POLE DATA			SIGNAL	H.P.S.V. LUMINAIRE		SIGNAL MOUNTING			PED. PUSH BUTTON		FOUNDATION		REFLECTORIZED STREET NAME SIGN (DOUBLE FACE)
NO.	TYPE	HEIGHT	M.A.	M.A.	WATTS	VEH.	M.A.	PED.	PHASE	POLE QUAD	TYPE	SIZE (m)	
①	TYPE 15	9.1	_____	4.57	250	_____	_____	_____	4	N	C	.76 x 1.5	_____
②	1A	3.0	_____	_____	_____	TV-1-T	_____	• SP-1-CS	_____	_____	S	.61 x .61 x .92	_____
③	29-5-129	9.1	16.8	4.57	250	SV-2-TB	3MAS	_____	_____	_____	C	.92 x 2.8	← Plaza ↗
④	17-3-129	9.1	6.1	4.57	250	SV-1-T	1MAS	• SP-1-CS	2	E	C	.76 x 2.4	☑ Oso Parkway
⑤	24-4-129	9.1	10.7	4.57	250	SV-1-T	2MAS	• SP-1-CS	2	W	C	.92 x 2.4	↖ Plaza →
⑥	1A	3.0	_____	_____	_____	TV-1-T	_____	SP-1-CS	4	N	S	.61 x .61 x .92	_____

EXACT POLE LOCATIONS DETERMINED BY ENGINEER IN THE FIELD.
POTHOLE POLE FOUNDATION LOCATIONS PRIOR TO ORDERING POLES.

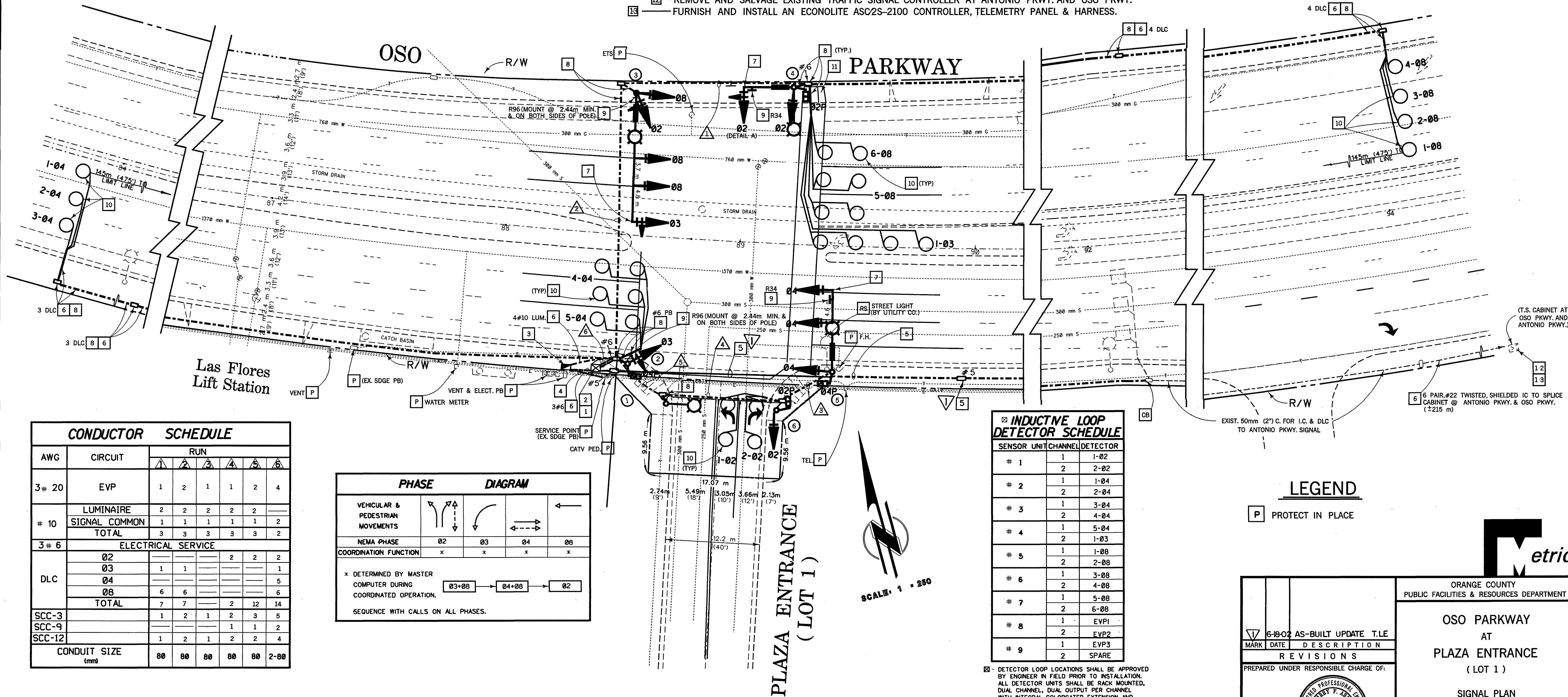
C = C.I.D.H. ☒ = SINGLE FACE (METAL BACK PLATE).
S = SQUARE.
• = 1992 CALTRANS STD. PLAN
* = REVERSE ARROW FOR OPPOSING APPROACH

CONSTRUCTION NOTES:

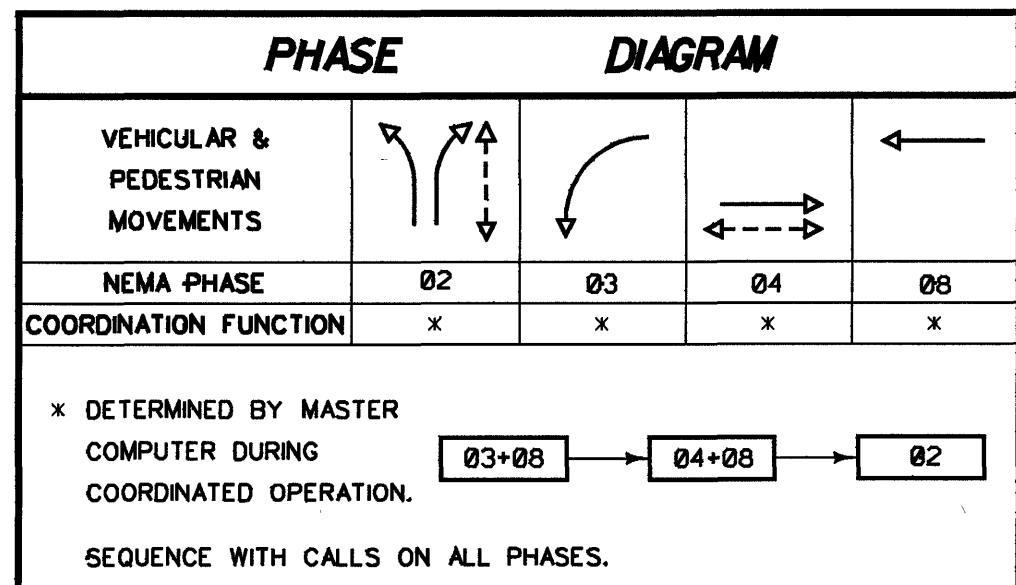
- CONSTRUCT P.C. CONCRETE CONTROLLER CABINET FOUNDATION.
- FURNISH & INSTALL TRAFFIC CONTROLLER IN A FULLY WIRED ALUMINUM CABINET PER THIS PLAN AND THE SPECIAL PROVISIONS. FACE CABINET DOOR TOWARDS OSO PARKWAY.
- FURNISH & INSTALL TYPE III-B ELECTRICAL SERVICE & FOUNDATION.
- FURNISH & INSTALL 50 mm (2") CONDUIT, PULL ROPE OR 3#6 CONDUCTORS TO ELECTRICAL SERVICE AS DIRECTED BY UTILITY COMPANY INSPECTOR.
- FURNISH & INSTALL 50mm (2") CONDUIT, NO. 5 PULL BOX, AND 6 PAIR #22 TWISTED, SHIELDED INTERCONNECT TELEPHONE CABLE FOR TELEPHONE SERVICE CONNECTION.
- FURNISH & INSTALL CONDUCTORS AS INDICATED.
- FURNISH & INSTALL EVP CABLE FROM END OF MASTARM TO CONTROLLER CABINET AND COIL 3 m (10') OF CABLE INSIDE CONTROLLER CABINET.
- FURNISH & INSTALL 50 mm (2") CONDUIT AND/OR #5 PULL BOXES (UNLESS OTHERWISE NOTED).
- FURNISH & INSTALL SIGN AND MOUNTING HARDWARE AS INDICATED.
- FURNISH AND INSTALL DETECTOR LOOPS AS SHOWN AND PER GENERAL NOTES SHEET 5.
- CONSTRUCT ACCESS RAMP TYPE 4 PER O.C. PFRD STANDARD PLAN 1115.
- REMOVE AND SALVAGE EXISTING TRAFFIC SIGNAL CONTROLLER AT ANTONIO PKWY. AND OSO PKWY.
- FURNISH AND INSTALL AN ECONOLITE ASC2S-2100 CONTROLLER, TELEMETRY PANEL & HARNESS.

GENERAL NOTES:

- SEE SHEET 5
- FOR SIGNING & STRIPING SEE SHEET 4.
 - CONTRACTOR SHALL REMOVE ALL EXISTING #5 & #6 PULLBOX LIDS AND REPLACE THEM WITH NON-PCC LIDS IN CONFORMANCE WITH STANDARD SPECIFICATION.



CONDUCTOR SCHEDULE						
AWG	CIRCUIT	RUN				
		1	2	3	4	5
3# 20	EVP	1	2	1	1	2
# 10	LUMINAIRE	2	2	2	2	2
	SIGNAL COMMON	1	1	1	1	2
	TOTAL	3	3	3	3	2
3# 6	ELECTRICAL SERVICE					
DLC	02				2	2
	03	1	1			1
	04					5
	08	6	6			6
	TOTAL	7	7		2	12
SCC-3		1	2	1	2	3
SCC-9					1	2
SCC-12		1	2	1	2	4
CONDUIT SIZE (mm)		80	80	80	80	2-80



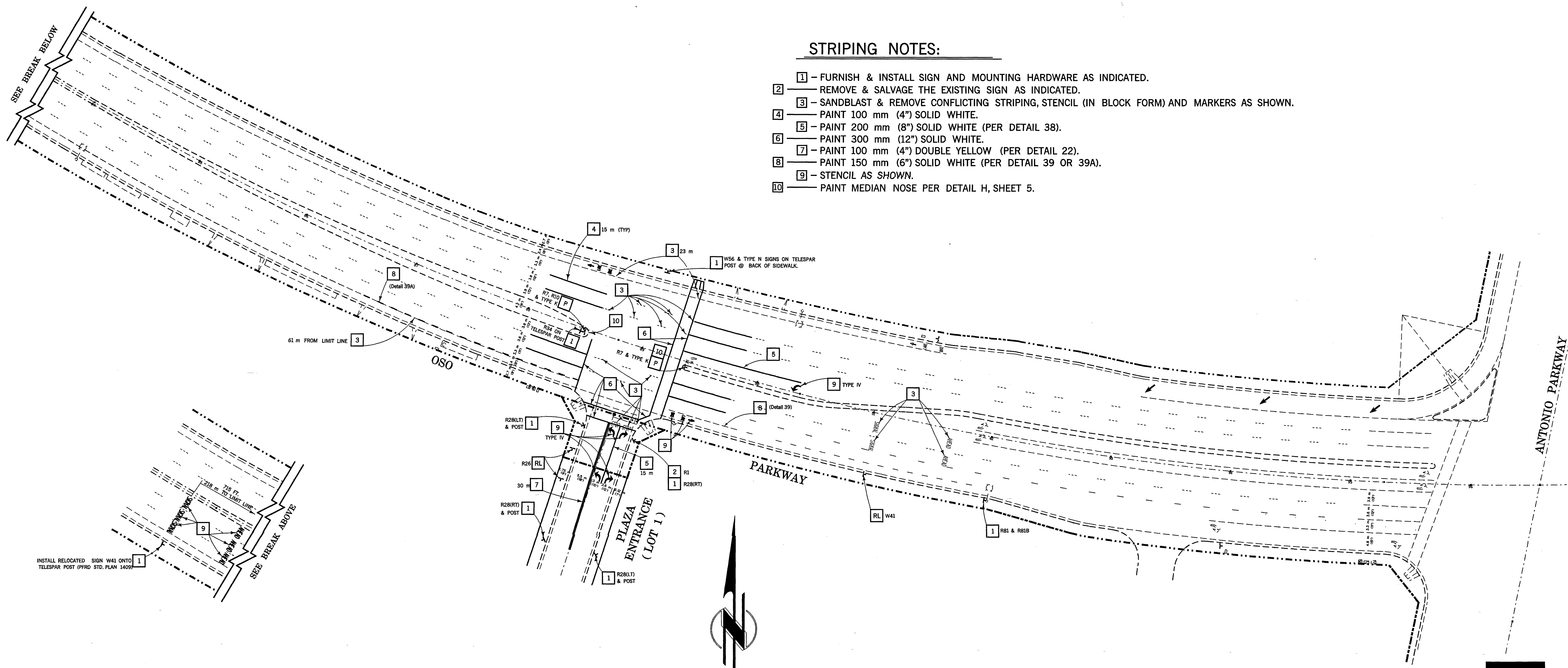
INDUCTIVE LOOP DETECTOR SCHEDULE			
SENSOR UNIT	CHANNEL	DETECTOR	
# 1	1	1-02	
	2	2-02	
# 2	1	1-04	
	2	2-04	
# 3	1	3-04	
	2	4-04	
# 4	1	5-04	
	2	1-03	
# 5	1	1-08	
	2	2-08	
# 6	1	3-08	
	2	4-08	
# 7	1	5-08	
	2	6-08	
# 8	1	EVPI	
	2	EVP2	
# 9	1	EVP3	
	2	SPARE	

DETECTOR LOOP LOCATIONS SHALL BE APPROVED BY ENGINEER IN FIELD PRIOR TO INSTALLATION. ALL DETECTOR UNITS SHALL BE RACK MOUNTED, DUAL CHANNEL, DUAL OUTPUT PER CHANNEL WITH INTEGRAL COLORATED EXTENSION AND DELAY CAPABILITY. OUTPUT "A" SHALL BE TIMED. OUTPUT "B" SHALL BE PRESENCE MODE FOR SYSTEM SAMPLING & COUNT OUTPUT ONLY. PROVIDE 14 SLOT DETECTOR RACK AND CARDS.

LEGEND

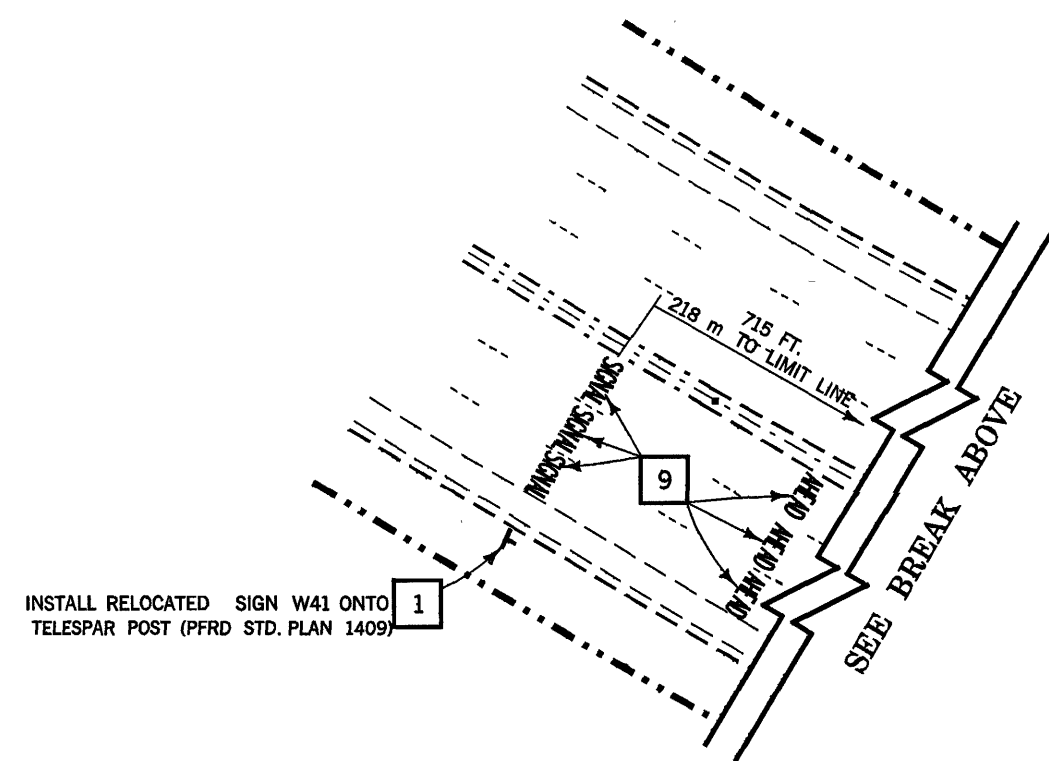
P PROTECT IN PLACE

ORANGE COUNTY PUBLIC FACILITIES & RESOURCES DEPARTMENT	
OSO PARKWAY AT PLAZA ENTRANCE (LOT 1)	
SIGNAL PLAN	
DESIGNED: T. PHAM	CHECKED: L. ABAD
DRAWN: T. PHAM / KY NG	DRAWING NO. ER10150
SCALE: AS SHOWN	DATE: MAR. 2000
SHEET 3 OF 5	



STRIPING NOTES:

- 1 - FURNISH & INSTALL SIGN AND MOUNTING HARDWARE AS INDICATED.
- 2 - REMOVE & SALVAGE THE EXISTING SIGN AS INDICATED.
- 3 - SANDBLAST & REMOVE CONFLICTING STRIPING, STENCIL (IN BLOCK FORM) AND MARKERS AS SHOWN.
- 4 - PAINT 100 mm (4") SOLID WHITE.
- 5 - PAINT 200 mm (8") SOLID WHITE (PER DETAIL 38).
- 6 - PAINT 300 mm (12") SOLID WHITE.
- 7 - PAINT 100 mm (4") DOUBLE YELLOW (PER DETAIL 22).
- 8 - PAINT 150 mm (6") SOLID WHITE (PER DETAIL 39 OR 39A).
- 9 - STENCIL AS SHOWN.
- 10 - PAINT MEDIAN NOSE PER DETAIL H, SHEET 5.



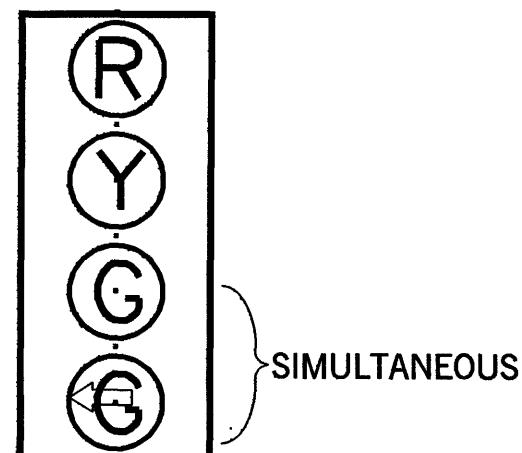
LEGEND

RL RELOCATE

ORANGE COUNTY PUBLIC FACILITIES & RESOURCES DEPARTMENT		
OSO PARKWAY AT PLAZA ENTRANCE (LOT 1)		
SIGNING AND STRIPING PLAN		
MARK	DATE	DESCRIPTION
REVISIONS		
PREPARED UNDER RESPONSIBLE CHARGE OF:		
DESIGNED: T. PHAM	CHECKED: L. ABAD	SHEET 4 OF 5
DRAWN: T. PHAM / KY NG	DATE: MAR. 2000	DRAWING NO. ER10150

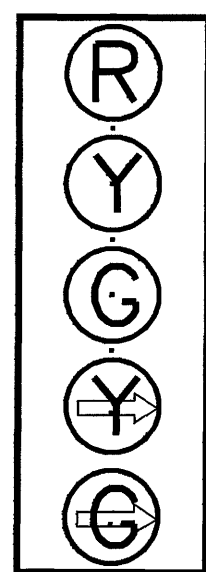
DETAIL A

4-SECTION SIGNAL HEAD
300 mm LENSES



DETAIL E

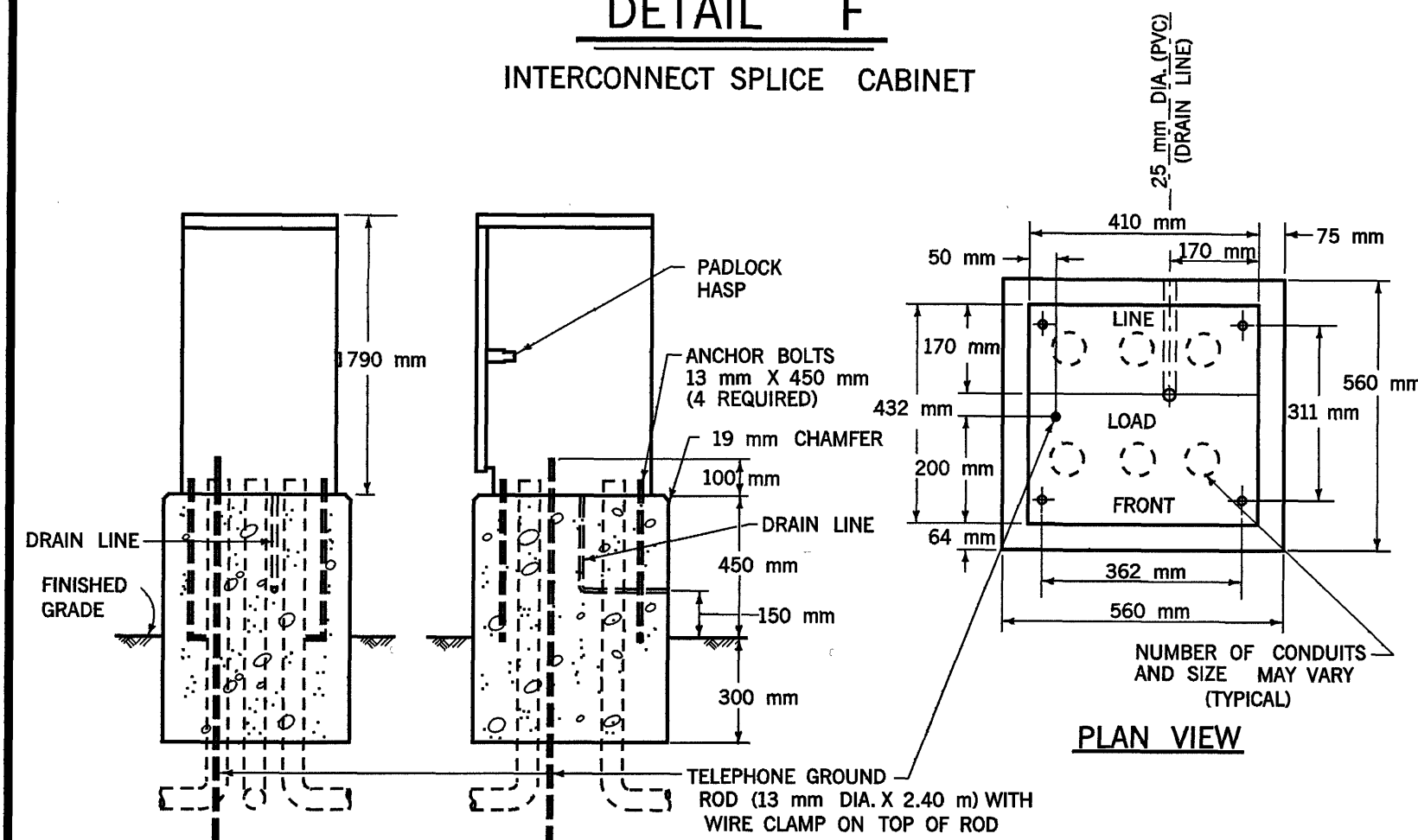
5-SECTION SIGNAL HEAD
300 mm LENSES



- BAND STRAP OR BOLT FRAME WORK AT TOP, TO SIGNAL POLE, AS DIRECTED BY ENGINEER.
- NO CAST ALUMINUM TERMINAL BLOCKS ALLOWED.

DETAIL F

INTERCONNECT SPLICE CABINET

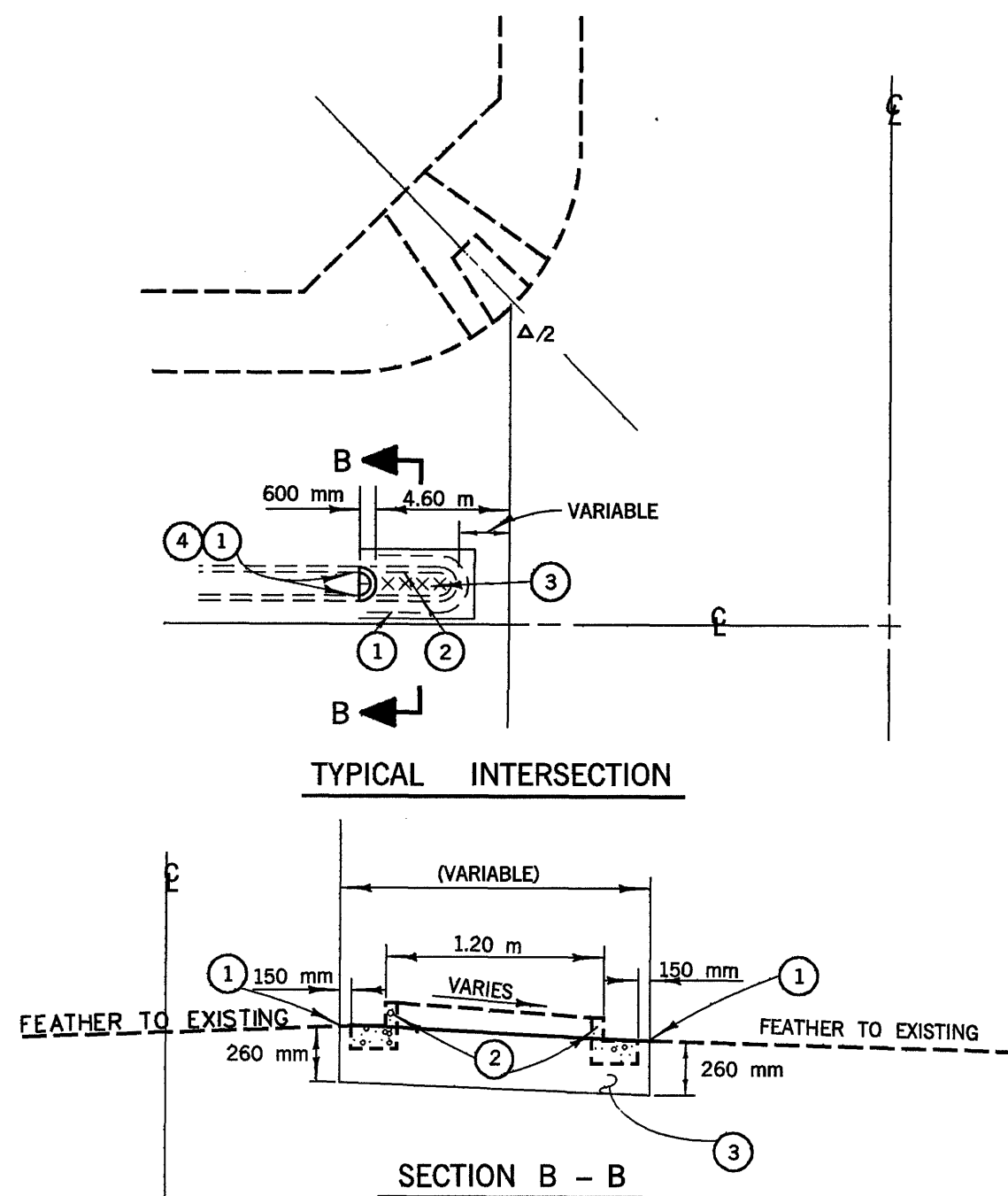


NOTES - DETAIL F

- FOUNDATION TO BE 560 mm X 560 mm. ANCHOR BOLT PLACEMENT PER CABINET MFG. TEMPLATE.
- ENCLOSURE SHALL BE ALUMINUM AND FURNISHED WITH A DETACHABLE MOUNTING BASE.
- ALL FACTORY INSTALLED COMPONENTS SHALL BE U.L. LISTED OR PER PUBLISHED N.E.C. STANDARDS.
- A 19 mm CONSTRUCTION GRADE PLYWOOD PANEL SHALL BE FASTENED TO THE REAR WALL. PANEL SHALL BE 300 mm X 600 mm AND SHALL HAVE A No. M1-25 AND R-841 STANDOFF FASTENED IN THE CENTER OF THE PANEL.
- ENCLOSURE FINISH SHALL CONFORM TO A.S.T.M. B-117. PAINT TO BE APPLIED TO EXTERNAL AND INTERNAL CABINET SURFACE SHALL BE WHITE ANTI-GRAFFITI CARDINAL'S 6409 G SERIES OR APPROVED EQUAL ANTI-GRAFFITI PAINT SHALL BE APPLIED TO CABINET AT THE TIME OF MANUFACTURE.
- PROVIDE 40 mm CONDUIT FOR FUTURE 115 VAC SERVICE.
- PROVIDE GROUND BUS INSIDE SPLICE CABINET.

DETAIL B

INTERSECTIONS RAISED MEDIAN

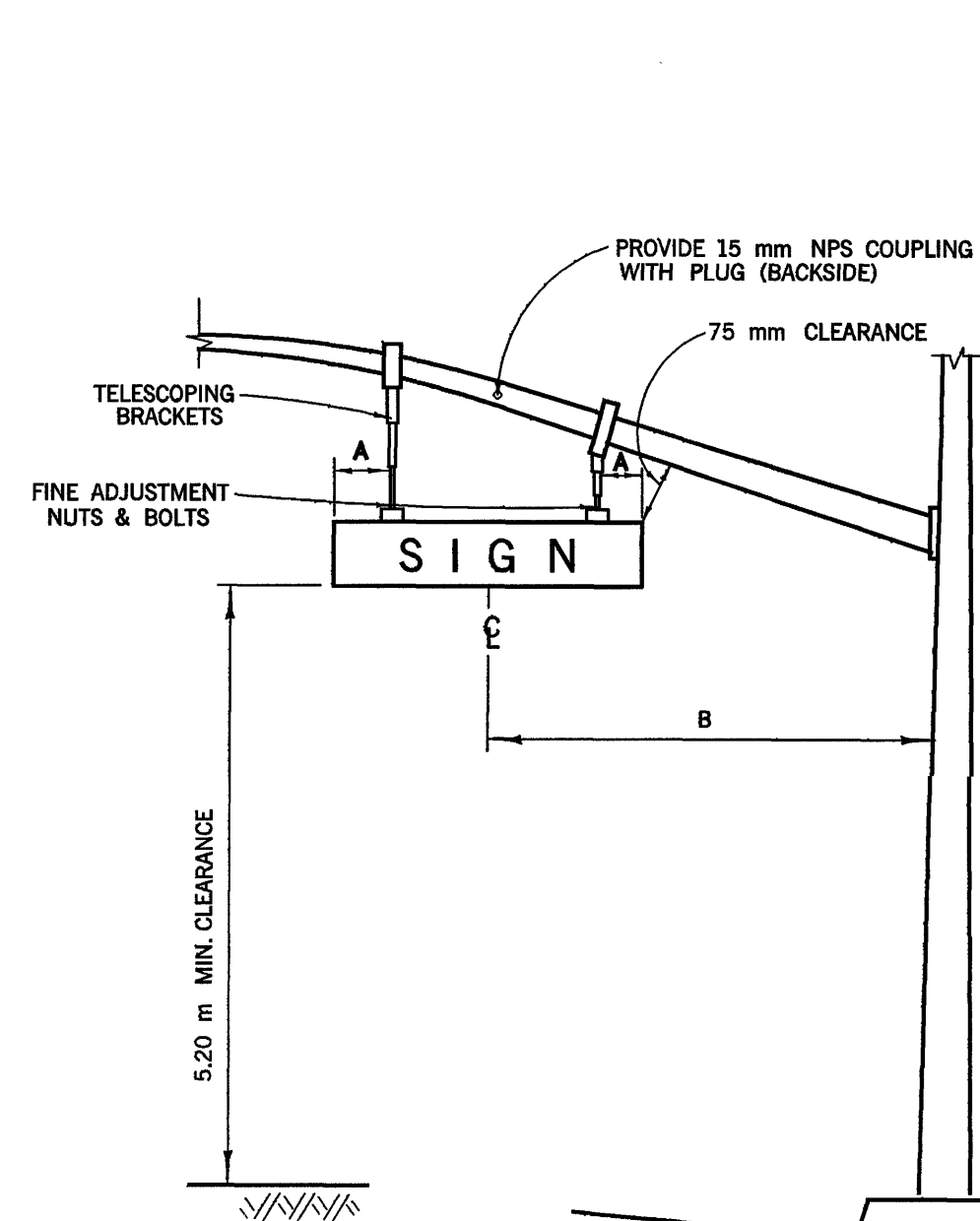


NOTES - DETAILS B

- SAW CUT AND JOIN EXISTING
- REMOVE CONCRETE
- CONSTRUCT 260 mm A.C. OVER NATIVE SOIL
- CONSTRUCT TYPE A1-8 CONCRETE CURB PER APWA STD. PLAN 120-0.

DETAIL C

REFLECTORIZED STREET NAME SIGN COMPONENTS

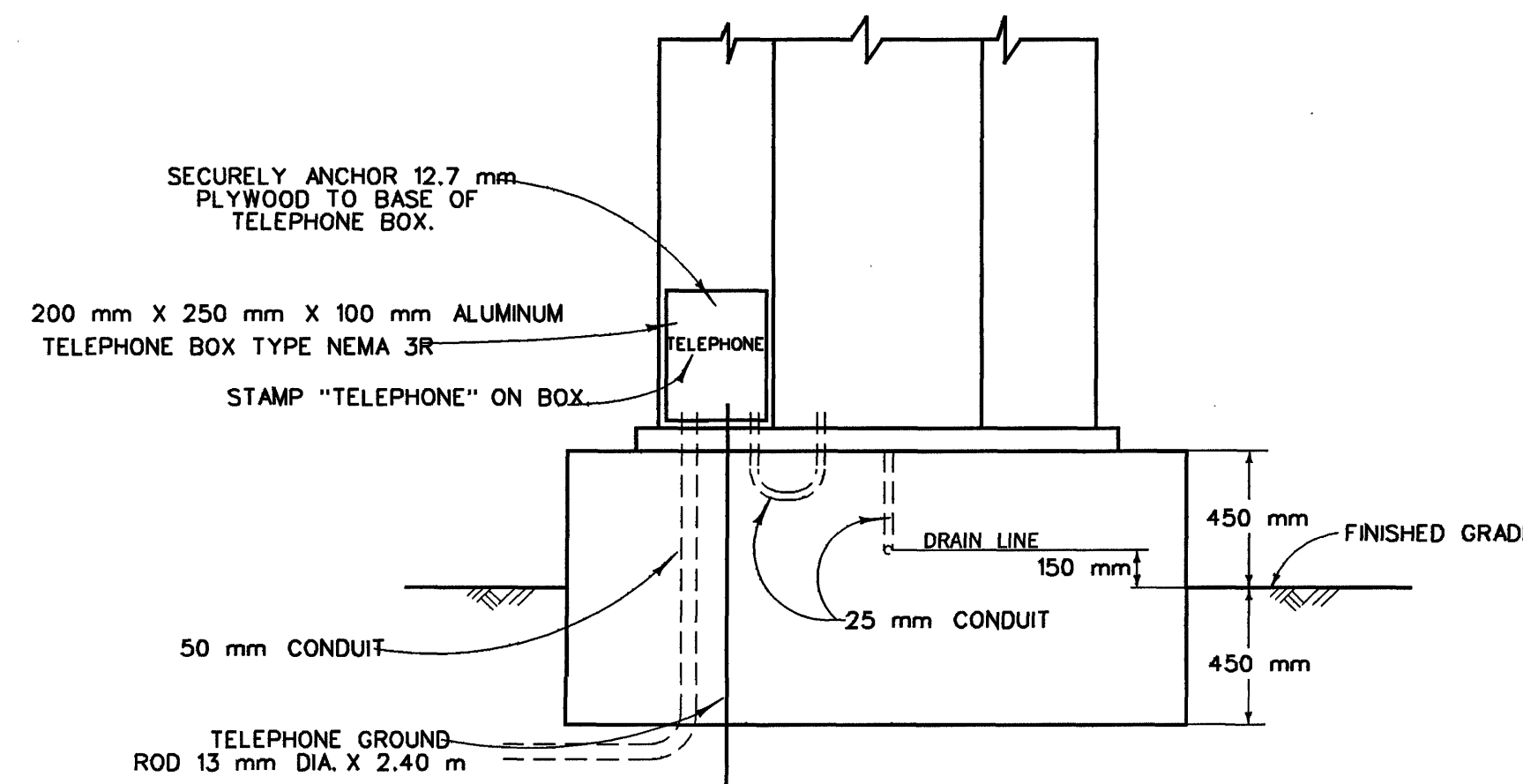


NOTES - DETAIL C

- A 450 mm (450 mm x 1800 mm SIGN); 600 mm (450 mm x 2400 mm SIGN)
- B 3.20 m CENTERLINE OF SIGN TO FACE OF POLE

DETAIL D

TELEPHONE SERVICE BOX

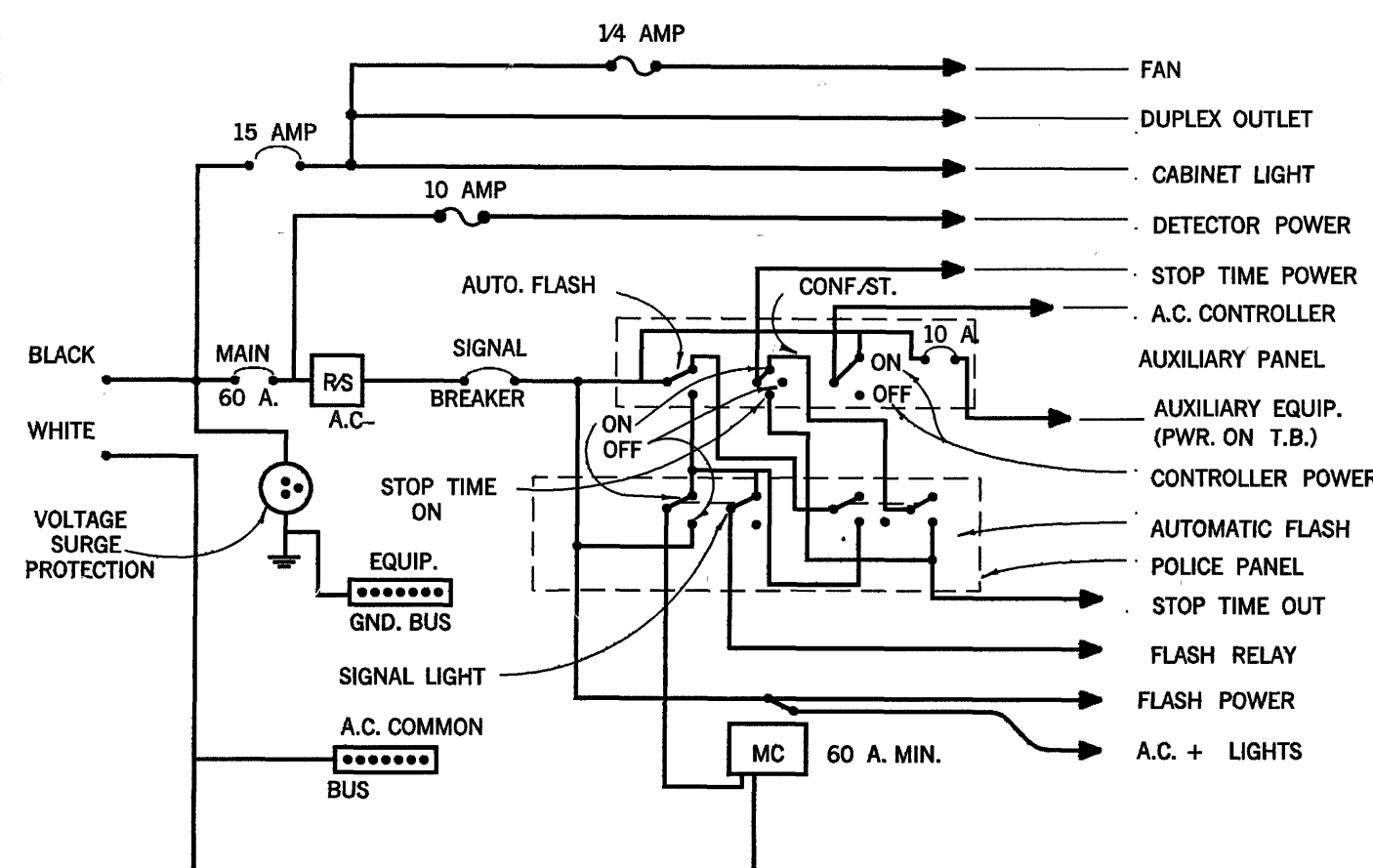


GENERAL NOTES :

- ALL WORK, MATERIALS AND EQUIPMENT SHALL CONFORM TO THE REQUIREMENTS OF THE CALIFORNIA, DEPARTMENT OF TRANSPORTATION, STANDARD PLANS DATED JULY 1997 AND STANDARD SPECIFICATIONS DATED JULY 1995 AND THE SPECIAL PROVISIONS FOR THIS PROJECT.
- UTILITIES SHOWN ON THESE PLANS ARE CORRECT AND ACCURATE TO THE EXTENT OF AVAILABLE RECORDS AND KNOWLEDGE. THE CONTRACTOR, HOWEVER, IS REQUIRED TO ASCERTAIN THE EXACT LOCATION OF UNDERGROUND FACILITIES PRIOR TO DOING WORK THAT MAY DAMAGE SUCH FACILITIES OR INTERFERE WITH THEIR SERVICE.
- 48 HOURS PRIOR TO BEGINNING OF CONSTRUCTION, THE CONTRACTOR SHALL CONTACT ORANGE COUNTY PUBLIC FACILITIES & RESOURCES DEPARTMENT FOR INSPECTION AT 567-7800.
- THE ENGINEER SHALL APPROVE POLE AND LOOP DETECTION PLACEMENT IN THE FIELD PRIOR TO INSTALLATION.
- ALL CONDUITS SHALL BE 50 mm (2") UNLESS OTHERWISE NOTED.
- ALL PULL BOXES SHALL BE #5 UNLESS OTHERWISE NOTED.
- ALL SALVAGED EQUIPMENT SHALL BE DELIVERED BY CONTRACTOR TO ORANGE COUNTY YARD AT 1152 EAST FRUIT ST., SANTA ANA, CA. CONTRACTOR SHALL GIVE A 48-HOUR NOTICE TO THE COUNTY PRIOR TO THE DELIVERY DATE.
- CONTRACTOR SHALL PROVIDE ALL NECESSARY TELEPHONE AND ELECTRICAL SERVICE LINES AND INTERCONNECT HOOK-UPS BETWEEN THE LOCAL CONTROLLER AND THE SYSTEM MASTER.
- PEDESTRIAN INDICATION SHALL BE INTERNATIONAL SYMBOL.
- PEDESTRIAN PUSH BUTTON SHALL BE TYPE B WITH INTERNATIONAL SYMBOL PLATE.
- ALL VEHICLE INDICATIONS SHALL BE 300 mm (12") DIAMETER WITH BACKPLATES, GLASS REFLECTORS, AND GLASS LENSES, UNLESS SHOWN OTHERWISE.
- CONTRACTOR SHALL POTHOLE CONFLICTING UTILITIES AS DIRECTED BY ENGINEER.
- CONTRACTOR SHALL AVOID DAMAGING EXISTING UTILITIES. (SEE SPECIAL PROVISIONS).
- DETECTOR LOOPS SHALL BE CIRCULAR (1.80 m DIAMETER) OR 1.80 m X 1.80 m WITH 2.7 m (9') SPACING IN THE DIRECTION OF TRAVEL UNLESS OTHERWISE NOTED.
- ALL DETECTOR CABLE HOMERUNS SHALL BE IN THE CROSSWALK AREA.
- ALL DETECTOR LOOPS SHALL HAVE FOUR (4) TURNS AND SHALL BE WIRED IN SERIES.
- ALL QUADRUPOLE DETECTOR LOOPS SHALL BE TWO (2-4-2) TURNS.
- TRAFFIC CONTROLLER CABINET FOUNDATION SHALL BE 460 mm ABOVE AND BELOW FINISHED GRADE (SEE DETAIL D).
- INSTALL "CABINET DOOR OPEN" CIRCUIT IN CONTROLLER CABINET PER MANUFACTURES SPECIFICATIONS.
- CONCRETE REPLACEMENT TO MATCH EXISTING.

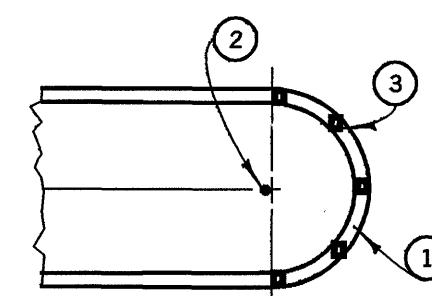
DETAIL G

CONTROLLER CABINET WIRING



DETAIL H

RAISED MEDIAN MARKING



NOTES - DETAIL H

- PAINT MEDIAN NOSE WITH HIGHLY REFLECTIVE PREMIXED WHITE TRAFFIC PAINT WITH GLASS BEADS.
- INSTALL FLEXIBLE VERTICAL TYPE K MARKER, R7, R10 OR TYPE N-1 ON TELESPORE POST AS INDICATED ON PLAN.
- INSTALL YELLOW REFLECTIVE PAVEMENT MARKERS ON TOP SURFACE OF MEDIAN CURB NOSE AT 600 mm C.C. SPACING (MINIMUM 5 MARKERS). PLACE REFLECTIVE SURFACE OF MARKERS PERPENDICULAR TO C OF ROADWAY.

MARK		DATE	DESCRIPTION	PREPARED UNDER	SHEET
				SUPERVISION OF	DATE
REVISIONS					
DESIGNED				SCALE	DATE
DRAWN				NOT TO SCALE (METRIC)	DATE
				W. O. NO.	
				ER10149 & ER10150	OF 5

SIGNAL DETAIL SHEET

ORANGE COUNTY
PUBLIC FACILITIES & RESOURCES DEPARTMENT

5