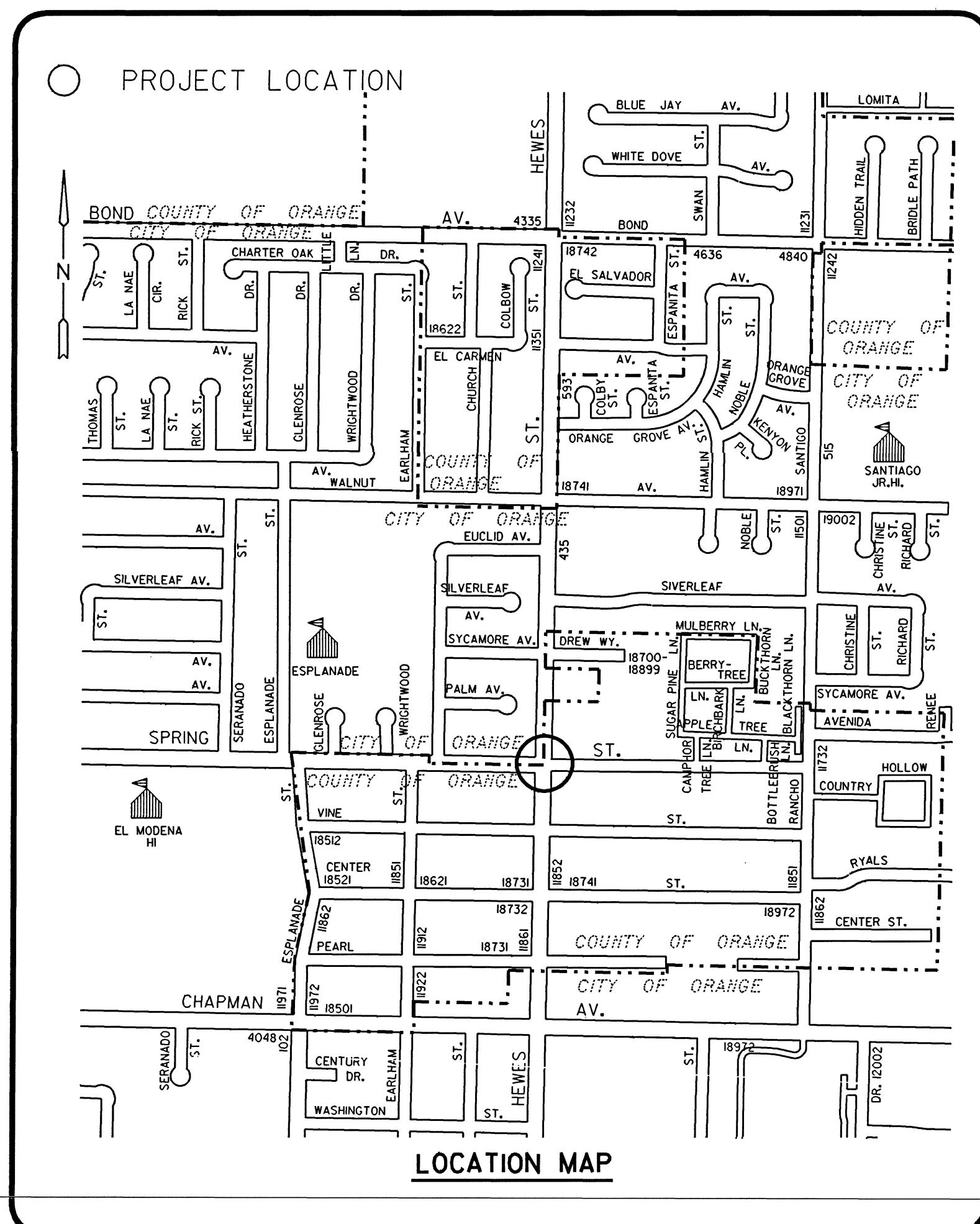


SHEET 1 OF 3



H50.2

REV 24

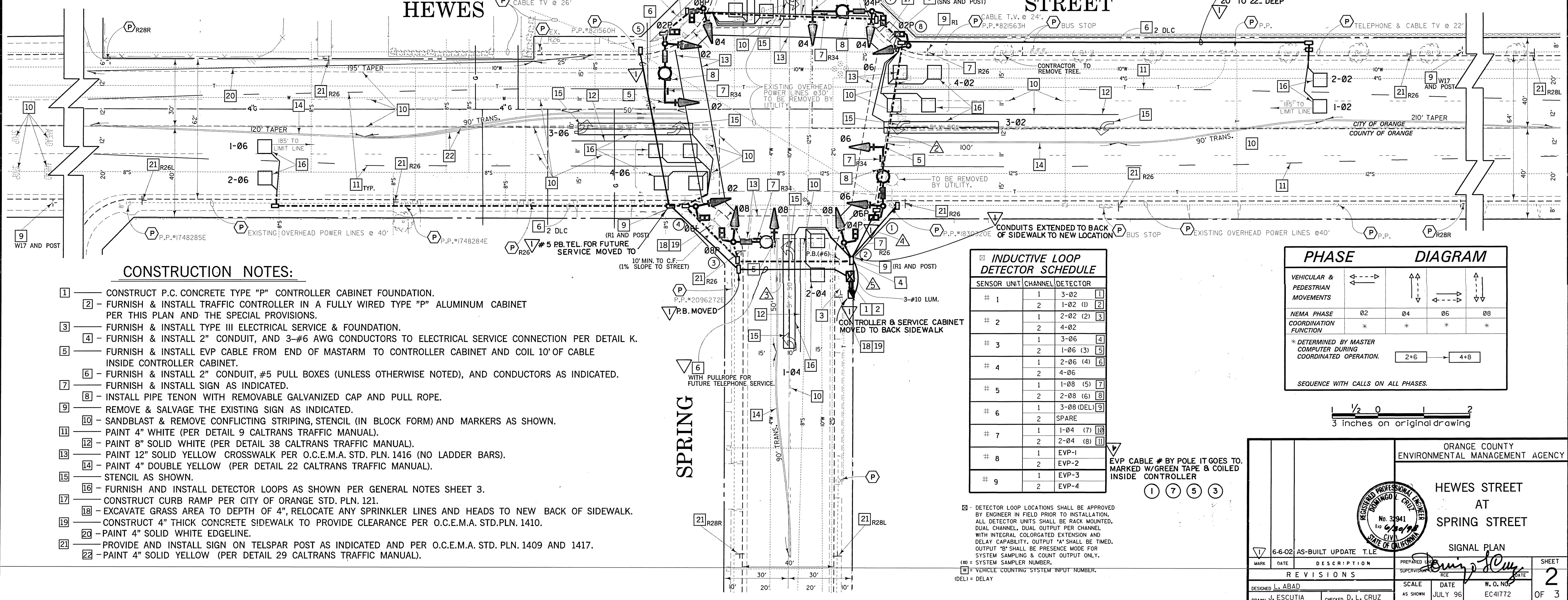
I CORP. IRVINE, CA

HEWES @ SPRING

CONDUCTOR SCHEDULE						CONDUCTOR SCHEDULE												
AWG	CIRCUIT	RUN					AWG	CIRCUIT	RUN									
		1	2	3	4	5			1	2	3	4	5					
# 14	02	3	3	3	3	6	3 #20	EVP	1	2	1	3	4					
	04	3	6	—	6	6		SIGNAL COMMON LUMINAIRE	1	1	1	2	3					
	06	—	3	—	6	6	2		2	2	2	4						
	08	—	—	3	—	6	TOTAL		3	3	3	4	7					
	02P	2	4	—	4	4	DLC	02	—	4	4	—	4					
	04P	—	2	—	2	4		04	—	—	—	—	2					
	06P	—	—	2	2	4		06	—	—	4	—	4					
	08P	2	2	2	2	4		08	3	3	—	3	3					
	02PPB	1	1	—	1	2		TOTAL	3	7	8	3	13					
	04PPB	—	1	—	1	1	CONDUIT SIZE			3"	3"	3"	3"	2-3"				
	06PPB	—	—	1	—	2	DEPTH OF CONDUIT RUNS							32"	30"	30"	34"	30"
	08PPB	1	1	1	1	2												
	PPB COMMON	1	1	1	1	3												
	SPARES	6	6	3	6	9												
	TOTAL	19	30	16	35	59												

LEGEND

P PROTECT IN PLACE



CONSTRUCTION NOTES:

- CONSTRUCT P.C. CONCRETE TYPE "P" CONTROLLER CABINET FOUNDATION.
- FURNISH & INSTALL TRAFFIC CONTROLLER IN A FULLY WIRED TYPE "P" ALUMINUM CABINET PER THIS PLAN AND THE SPECIAL PROVISIONS.
- FURNISH & INSTALL TYPE III ELECTRICAL SERVICE & FOUNDATION.
- FURNISH & INSTALL 2" CONDUIT, AND 3-#6 AWG CONDUCTORS TO ELECTRICAL SERVICE CONNECTION PER DETAIL K.
- FURNISH & INSTALL EVP CABLE FROM END OF MASTARM TO CONTROLLER CABINET AND COIL 10' OF CABLE INSIDE CONTROLLER CABINET.
- FURNISH & INSTALL 2" CONDUIT, #5 PULL BOXES (UNLESS OTHERWISE NOTED), AND CONDUCTORS AS INDICATED.
- FURNISH & INSTALL SIGN 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 4" WHITE (PER DETAIL 9 CALTRANS TRAFFIC MANUAL).
- PAINT 8" SOLID WHITE (PER DETAIL 38 CALTRANS TRAFFIC MANUAL).
- PAINT 12" SOLID YELLOW CROSSWALK PER O.C.E.M.A. STD. PLN. 1416 (NO LADDER BARS).
- PAINT 4" DOUBLE YELLOW (PER DETAIL 22 CALTRANS TRAFFIC MANUAL).
- STENCIL AS SHOWN.
- FURNISH AND INSTALL DETECTOR LOOPS AS SHOWN PER GENERAL NOTES SHEET 3.
- CONSTRUCT CURB RAMP PER CITY OF ORANGE STD. PLN. 121.
- EXCAVATE GRASS AREA TO DEPTH OF 4", RELOCATE ANY SPRINKLER LINES AND HEADS TO NEW BACK OF SIDEWALK.
- CONSTRUCT 4" THICK CONCRETE SIDEWALK TO PROVIDE CLEARANCE PER O.C.E.M.A. STD. PLN. 1410.
- PAINT 4" SOLID WHITE EDGELINE.
- PROVIDE AND INSTALL SIGN ON TELSPAR POST AS INDICATED AND PER O.C.E.M.A. STD. PLN. 1409 AND 1417.
- PAINT 4" SOLID YELLOW (PER DETAIL 29 CALTRANS TRAFFIC MANUAL).

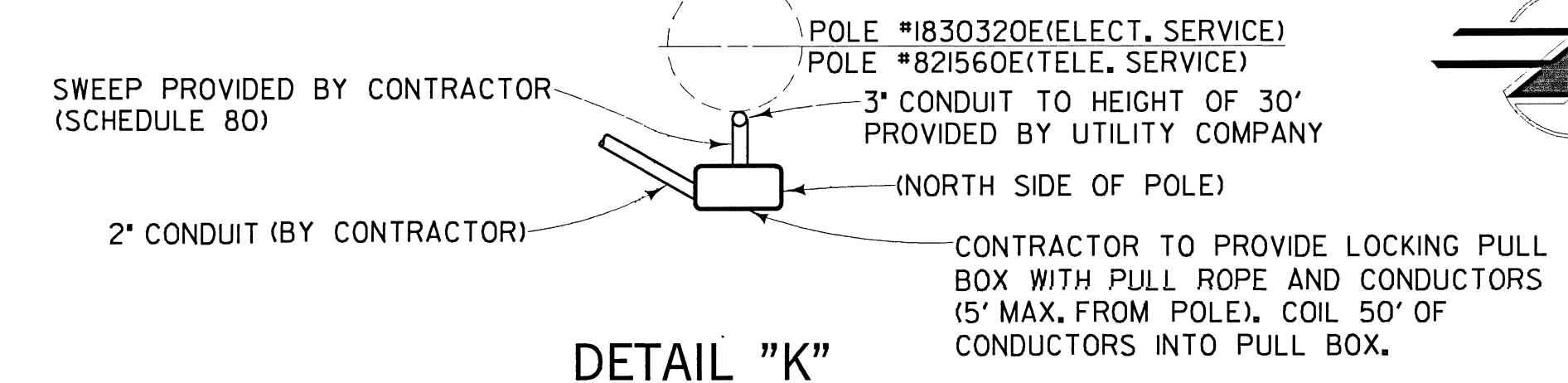
POLE SCHEDULE

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	24-4-70	30'-0"	25'-0" (FUT. 35')	15'-0"	200	SV-I-T	IMAS	SP-I-CS	Ø4	S	C	2'-6"X 8'-0"	Spring	
2	I-A	10'-0"	—	—	—	TV-I-T	—	SP-I-CS	Ø6	W	S	2'-0"X 3'-0"		
3	17-3-70	30'-0"	15'-0"	12'-0"	150	SV-I-T	IMAS	SP-I-CS	Ø6	W	C	2'-6"X 7'-0"	Hewes	
4	I-A	10'-0"	—	—	—	TV-I-T	—	SP-I-CS	Ø8	N	S	2'-0"X 3'-0"		
5	24-4-70	30'-0"	25'-0" (FUT. 35')	15'-0"	200	SV-I-T	IMAS	SP-I-CS	Ø8	N	C	2'-6"X 8'-0"	Spring	
6	I-A	10'-0"	—	—	—	TV-I-T	—	SP-I-CS	Ø2	E	S	2'-0"X 3'-0"		
7	19-4-70	30'-0"	25'-0"	15'-0"	200	SV-I-T	IMAS	SP-I-CS	Ø2	E	C	2'-6"X 8'-0"	Hewes	
8	I-A	10'-0"	—	—	—	TV-I-T	—	SP-I-CS	Ø4	S	S	2'-0"X 3'-0"		

EXACT POLE LOCATIONS DETERMINED BY ENGINEER IN THE FIELD. POTHOLE POLE FOUNDATION LOCATIONS PRIOR TO ORDERING POLES. Ø = PROVIDE AND INSTALL EXTERIOR MOUNTED GLARE SHIELD. Δ = SIGNAL ARM CONNECTION TO POLE SHALL MATCH THE 35' PROJECTED LENGTH DATA.

C = C.I.D.H.
S = SQUARE.

DETAIL "K"

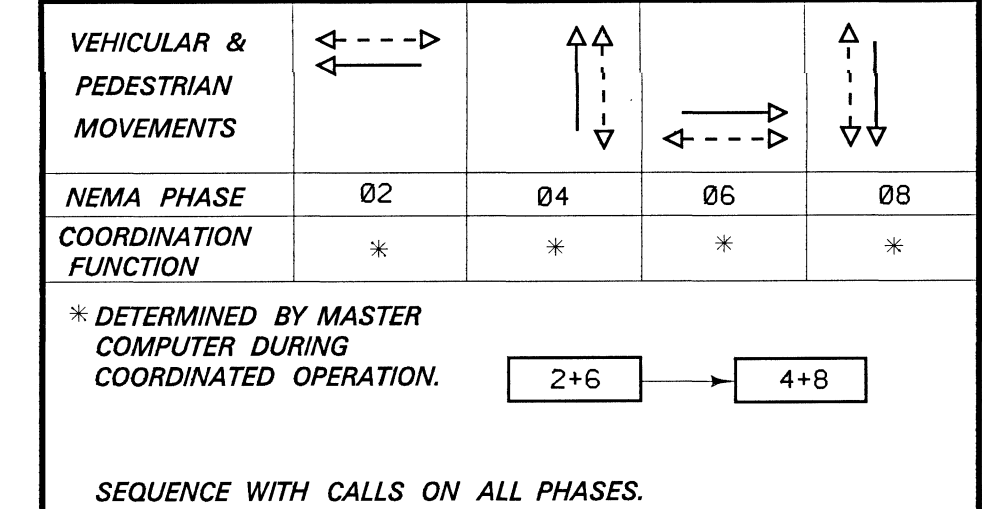


INDUCTIVE LOOP DETECTOR SCHEDULE

SENSOR UNIT	CHANNEL	DETECTOR
# 1	1	3-02
	2	1-02 (1)
# 2	1	2-02 (2)
	2	4-02
# 3	1	3-06
	2	1-06 (3)
# 4	1	2-06 (4)
	2	4-06
# 5	1	1-08 (5)
	2	2-08 (6)
# 6	1	3-08 (DEL)
	2	SPARE
# 7	1	1-04 (7)
	2	2-04 (8)
# 8	1	EVP-1
	2	EVP-2
# 9	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. (H) = SYSTEM SAMPLER NUMBER. (V) = VEHICLE COUNTING SYSTEM INPUT NUMBER. (DEL) = DELAY

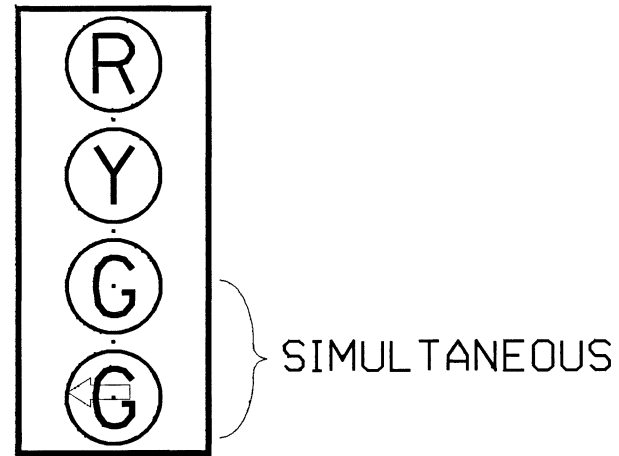
PHASE DIAGRAM



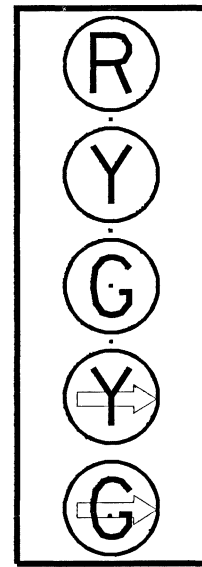
1/2 0 1 2
3 inches on original drawing

ORANGE COUNTY ENVIRONMENTAL MANAGEMENT AGENCY	
HEWES STREET AT SPRING STREET	
SIGNAL PLAN	
6-6-02 AS-BUILT UPDATE T.L.E.	PREPARED BY [Signature]
REVISIONS	SCALE DATE W.O. NO.
DESIGNED L. ABAD	AS SHOWN JULY 96 EC41772
DRAWN J. ESCUTIA	CHECKED D. L. CRUZ
SHEET 2 OF 3	

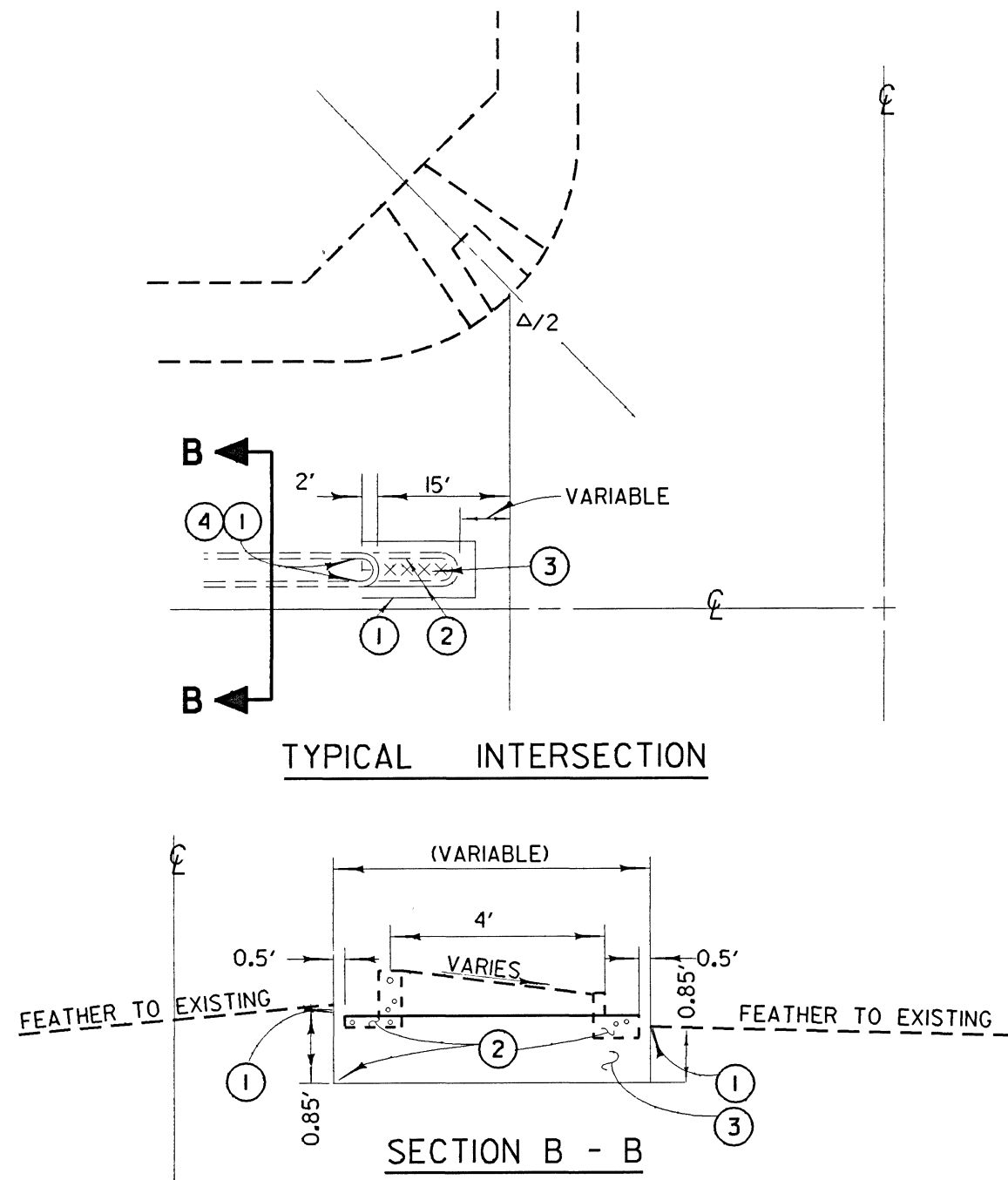
DETAIL A
4-SECTION SIGNAL HEAD
12" LENSES



DETAIL E
5-SECTION SIGNAL HEAD
12" LENSES



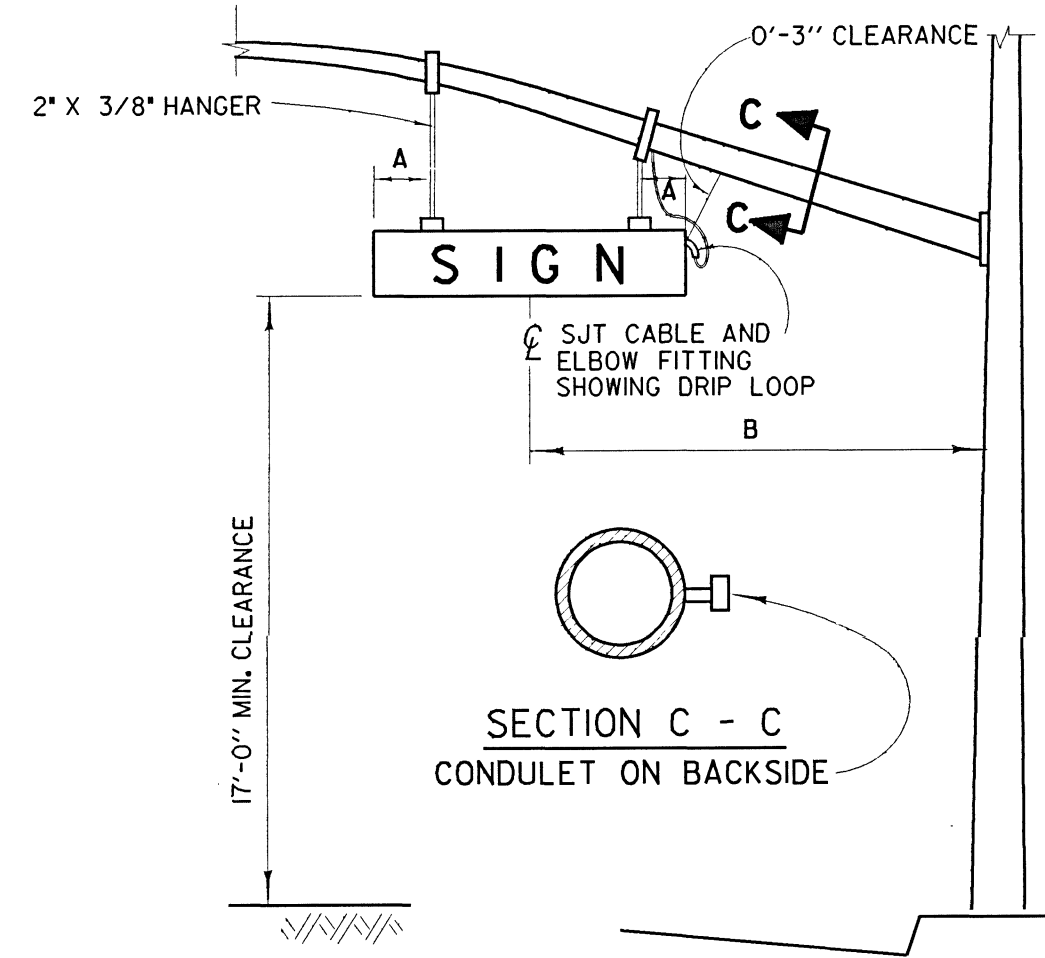
DETAIL B
INTERSECTIONS RAISED MEDIAN



NOTES - DETAILS B

1. SAWCUT AND JOIN EXISTING
2. REMOVE CONCRETE
3. CONSTRUCT 0.85' AC OVER NATIVE SOIL
4. CONSTRUCT TYPE CI-8 CONCRETE CURB PER EMA STD. PLAN 104-0-0.C.

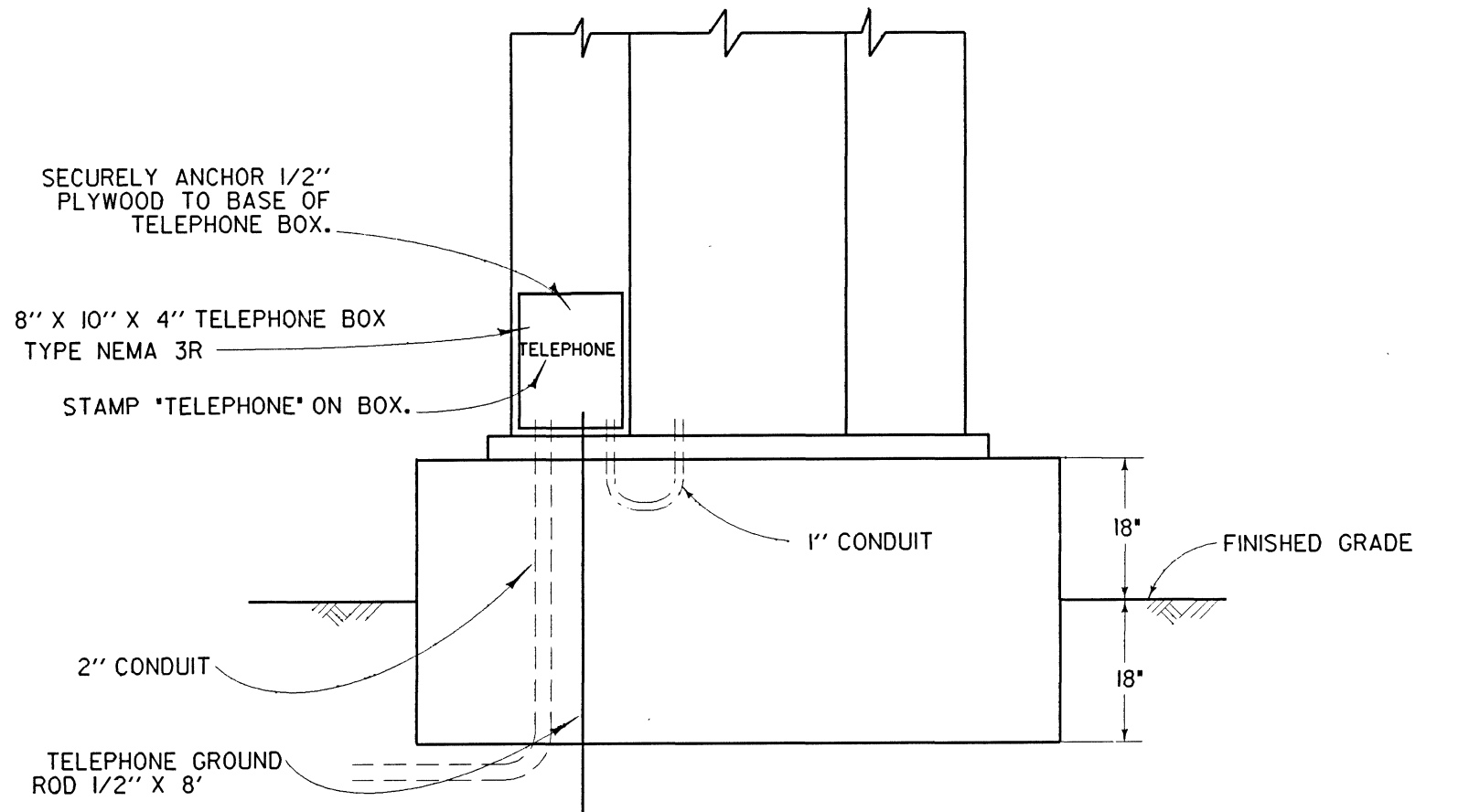
DETAIL C
STREET NAME SIGN COMPONENTS



NOTES - DETAIL C

- A 1'-6" MINIMUM
B 10'-6" CENTERLINE OF SIGN TO FACE OF POLE

DETAIL D
TELEPHONE SERVICE BOX

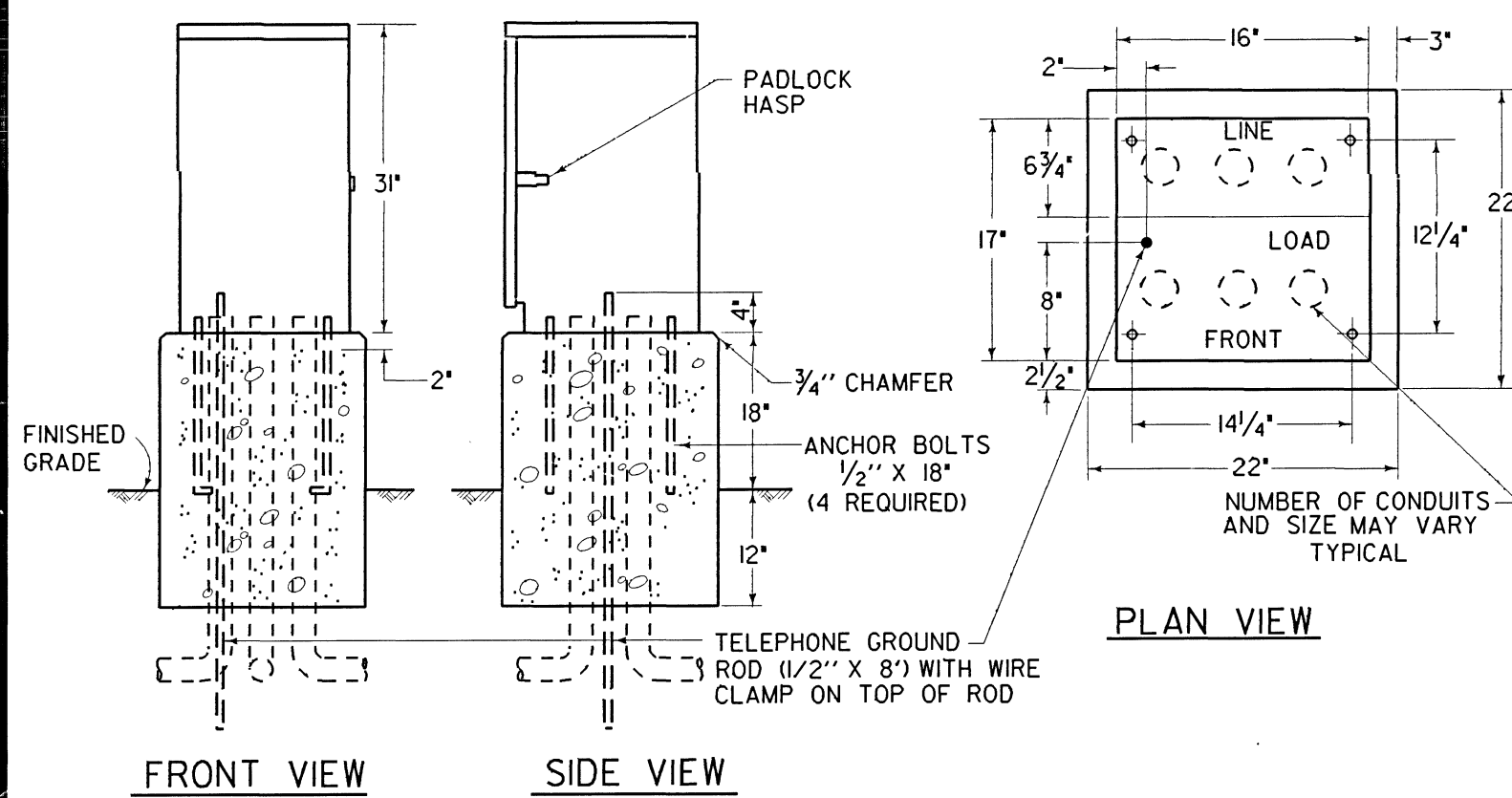


GENERAL NOTES: Δ

1. ALL WORK, MATERIALS AND EQUIPMENT SHALL CONFORM TO THE REQUIREMENTS OF THE CALIFORNIA, DEPT. OF TRANSPORTATION, STANDARD PLANS AND STANDARD SPECIFICATIONS DATED JULY 1992 AND THE SPECIAL PROVISIONS FOR THIS PROJECT.
2. 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.
3. 48 HOURS PRIOR TO BEGINNING OF CONSTRUCTION, THE CONTRACTOR SHALL CONTACT ORANGE COUNTY E.M.A. FOR INSPECTION AT 567-7800.
4. THE ENGINEER SHALL APPROVE POLE AND LOOP DETECTION PLACEMENT IN THE FIELD PRIOR TO INSTALLATION.
5. ALL CONDUIT SHALL BE 2" UNLESS OTHERWISE NOTED.
6. ALL PULL BOXES SHALL BE #5 UNLESS OTHERWISE NOTED.
7. 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.
8. CONTRACTOR SHALL PROVIDE ALL NECESSARY TELEPHONE AND ELECTRICAL SERVICE LINES AND INTERCONNECT HOOK-UPS BETWEEN THE LOCAL CONTROLLER AND THE SYSTEM MASTER.
9. PEDESTRIAN INDICATION SHALL BE INTERNATIONAL SYMBOL.
10. PEDESTRIAN PUSH BUTTON SHALL BE TYPE B WITH INTERNATIONAL SYMBOL PLATE.
11. ALL VEHICLE INDICATIONS SHALL BE 12" DIAMETER WITH BACKPLATES, GLASS REFLECTORS, AND GLASS LENSES, UNLESS SHOWN OTHERWISE.
12. CONTRACTOR SHALL POTHOLE CONFLICTING UTILITIES AS DIRECTED BY ENGINEER.
13. CONTRACTOR SHALL AVOID DAMAGING EXISTING UTILITIES. (SEE SPECIAL PROVISIONS).
14. INDUCTIVE LOOPS SHALL BE 6' X 6' WITH 9' SPACING IN THE DIRECTION OF TRAVEL UNLESS OTHERWISE NOTED.
15. ALL DETECTOR CABLE HOMERUNS SHALL BE IN THE CROSSWALK AREA.
16. ALL 6' X 6' DETECTOR LOOPS SHALL BE FOUR(4) TURNS.
17. ALL QUADRUPOLE DETECTOR LOOPS SHALL BE TWO (2-4-2) TURNS.
18. TRAFFIC CONTROLLER CABINET FOUNDATION SHALL BE 18" ABOVE AND BELOW FINISHED GRADE (SEE DETAIL D).
19. INSTALL "CABINET DOOR OPEN" CIRCUIT IN CONTROLLER CABINET PER MANUFACTURES SPECIFICATIONS.

DETAIL F ΔΔΔ

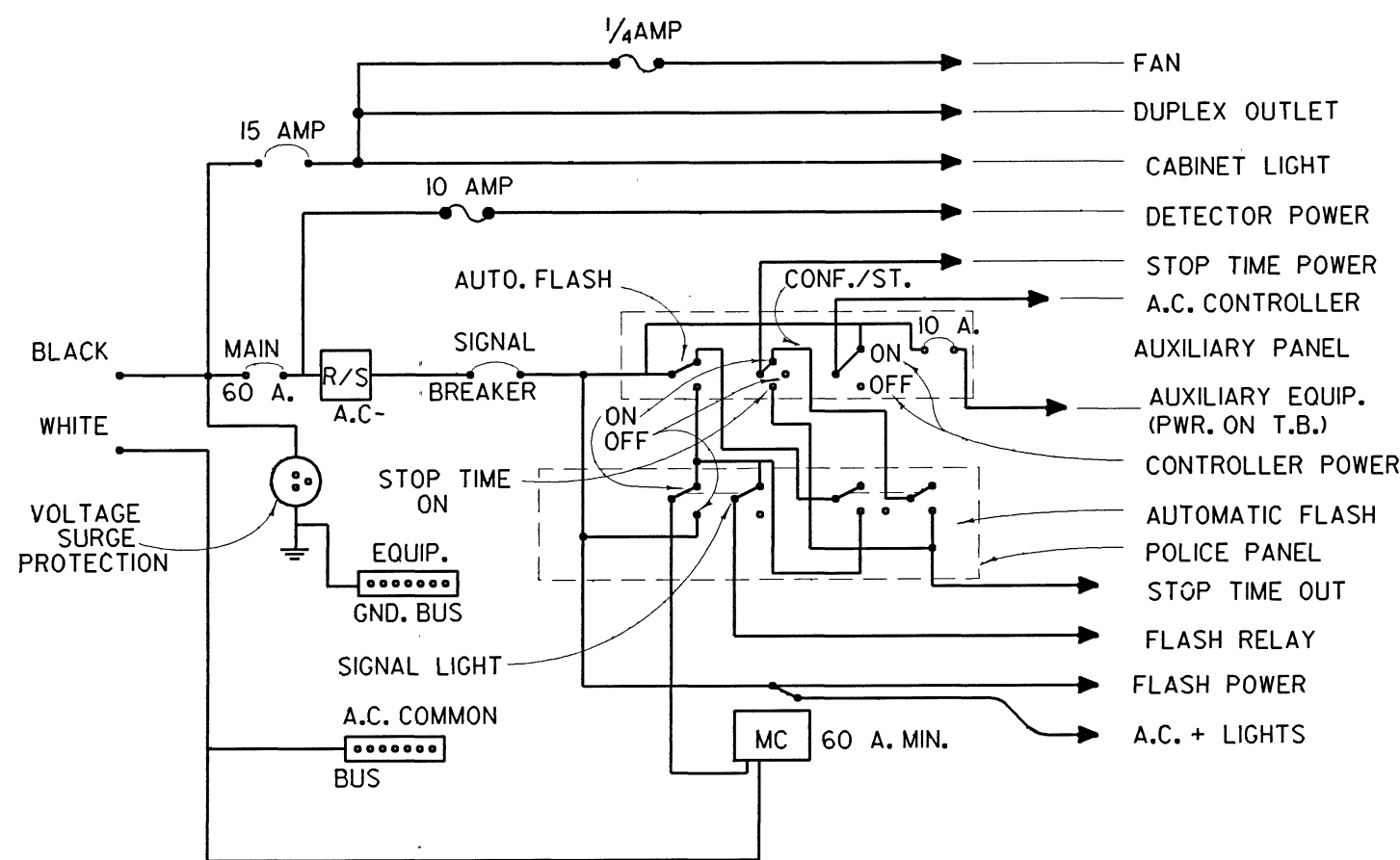
INTERCONNECT SPLICE CABINET



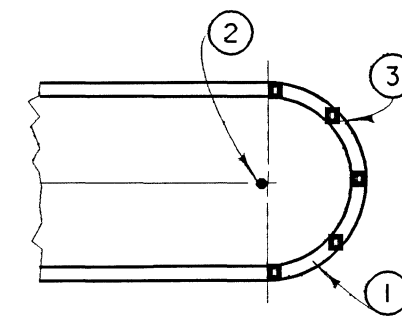
NOTES - DETAIL F

1. FOUNDATION TO BE 22" X 22". ANCHOR BOLT PLACEMENT PER CABINET MFG. TEMPLATE.
2. ENCLOSURE SHALL BE FURNISHED WITH A DETACHABLE MOUNTING BASE.
3. ALL FACTORY INSTALLED COMPONENTS SHALL BE U.L. LISTED OR PER PUBLISHED N.E.C. STANDARDS.
4. A 3/4" CONSTRUCTION GRADE PLYWOOD PANEL SHALL BE FASTENED TO THE REAR WALL. PANEL SHALL BE 12" X 24" AND SHALL HAVE A No. MI-25 AND R-841 STANDOFF FASTENED IN THE CENTER OF THE PANEL.
5. ENCLOSURE FINISH SHALL CONFORM TO A.S.T.M. B-117. COLOR SHALL BE PORCELAIN WHITE.
6. PROVIDE 1/2" CONDUIT FOR FUTURE HS VAC SERVICE.
7. PROVIDE GROUND BUS INSIDE SPLICE CABINET.

DETAIL G Δ
CONTROLLER CABINET WIRING



DETAIL H
RAISED MEDIAN MARKING



NOTES - DETAIL H

1. PAINT MEDIAN NOSE WITH HIGHLY REFLECTIVE PREMIXED WHITE TRAFFIC PAINT WITH GLASS BEADS.
2. INSTALL FLEXIBLE VERTICAL TYPE K MARKER, R7, R10 OR TYPE N-10N TELESAR POST AS INDICATED ON PLAN.
3. INSTALL YELLOW REFLECTIVE PAVEMENT MARKERS ON TOP SURFACE OF MEDIAN CURB NOSE AT 2' C.C. SPACING (MINIMUM 5 MARKERS). PLACE REFLECTIVE SURFACE OF MARKERS PERPENDICULAR TO C OF ROADWAY.

1 1/2 0 1 2
3 inches on original drawing

ORANGE COUNTY ENVIRONMENTAL MANAGEMENT AGENCY			
SIGNAL DETAIL SHEET			
MARK	DATE	DESCRIPTION	PREPARED UNDER SUPERVISION OF
DESIGNED		SCALE	DATE
DRAWN		CHECKED	DATE
SHEET 3 OF 3		W. O. NO. EC41712	