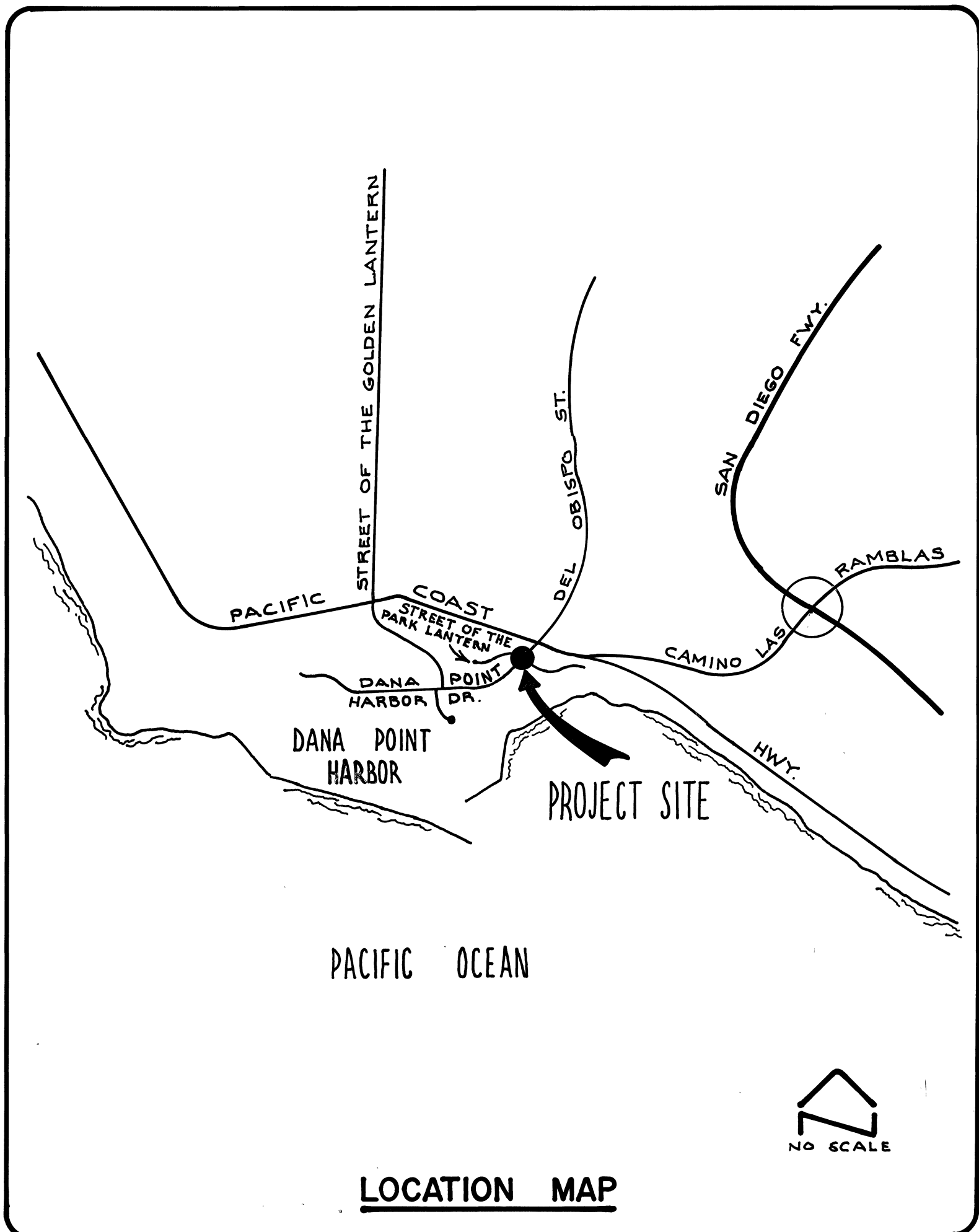
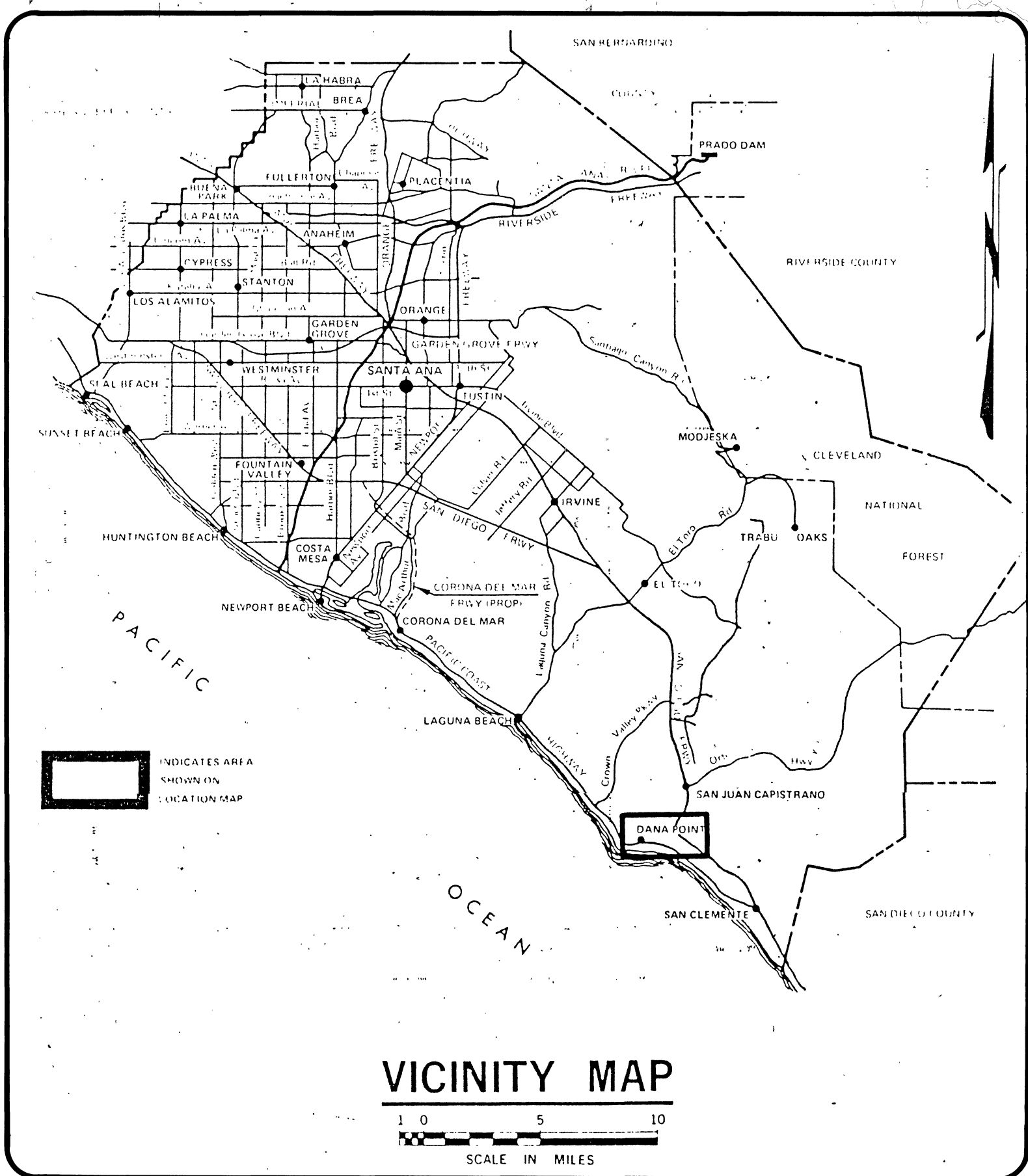


DRAWING NUMBER
PT HARBOR DR/
THE PARK LANTERN

DRAWING NUMBER
D40.1

DRAWING NUMBER

DRAWING NUMBER



PLANS FOR CONSTRUCTION OF
TRAFFIC SIGNAL & HIGHWAY LIGHTING FACILITIES
ON
DANA POINT HARBOR DRIVE
AT
STREET OF THE PARK LANTERN

PREPARED FOR
DANA POINT ASSOCIATES
937 FIRST STREET, SUITE 208
ENCINITAS, CA. 92024

COUNTY OF ORANGE
E.M.A. TRAFFIC ENGINEERING DIV.
THIS PLAN IS SIGNED BY E.M.A. TRAFFIC ENGINEERING DIV. FOR
CONCEPT AND ADHERENCE TO COUNTY TRAFFIC SIGNAL
STANDARDS AND REQUIREMENTS ONLY. E.M.A./T.E.D. IS NOT
RESPONSIBLE FOR DESIGN ASSUMPTIONS OR ACCURACY.
APPROVED: *Steven M. Hogan* 29268 7/3/77
R.C.E. DATE

PREPARED BY
KE krueper engineering
& associates, inc.
civil engineering • land surveying
568 north mountain view, suite 230
san bernardino, california 92401
884-2159

INDEX OF SHEETS	
SHEET	DESCRIPTION
1.	TITLE SHEET
2.	TRAFFIC SIGNAL PLAN
3.	TRAFFIC SIGNING AND STRIPING PLAN
4.	DETAIL SHEET (SIGNAL)
5.	ISLAND DESIGN

UTILITY	PHONE NO.
1. SAN DIEGO GAS & ELEC. CHRIS NUENER	(714) 361-8043
2. CAPO BEACH COUNTY WATER DIST. JOHN SERENCES	(714) 496-5261
3. SO. CAL. GAS CO. DON JONES, OR JOE MORENO	(714) 634-3122
4. DIMENSION CABLE SERVICE LINDA TESSIER	(714) 240-1212 EXT. 346
5. UNDERGROUND SERVICE ALERT (PAC-TEL)	1-800-422-4133
6. DANA POINT SANITATION DIST. SHERMAN SALONEN	(714) 496-9322

NO.	DESCRIPTION	SHT.	APPROVED	DATE
REVISIONS				

W. O. NO. _____
DWG. NO. _____
SHEET 1 OF 5

DRAWING NUMBER
BOR DR/
LANTERN
ST OF
DANA
PLAN NO. 102-0-000
DATE 11/86

DRAWING NUMBER
D40.2
PLAN NO. 102-0-000
DATE 11/86

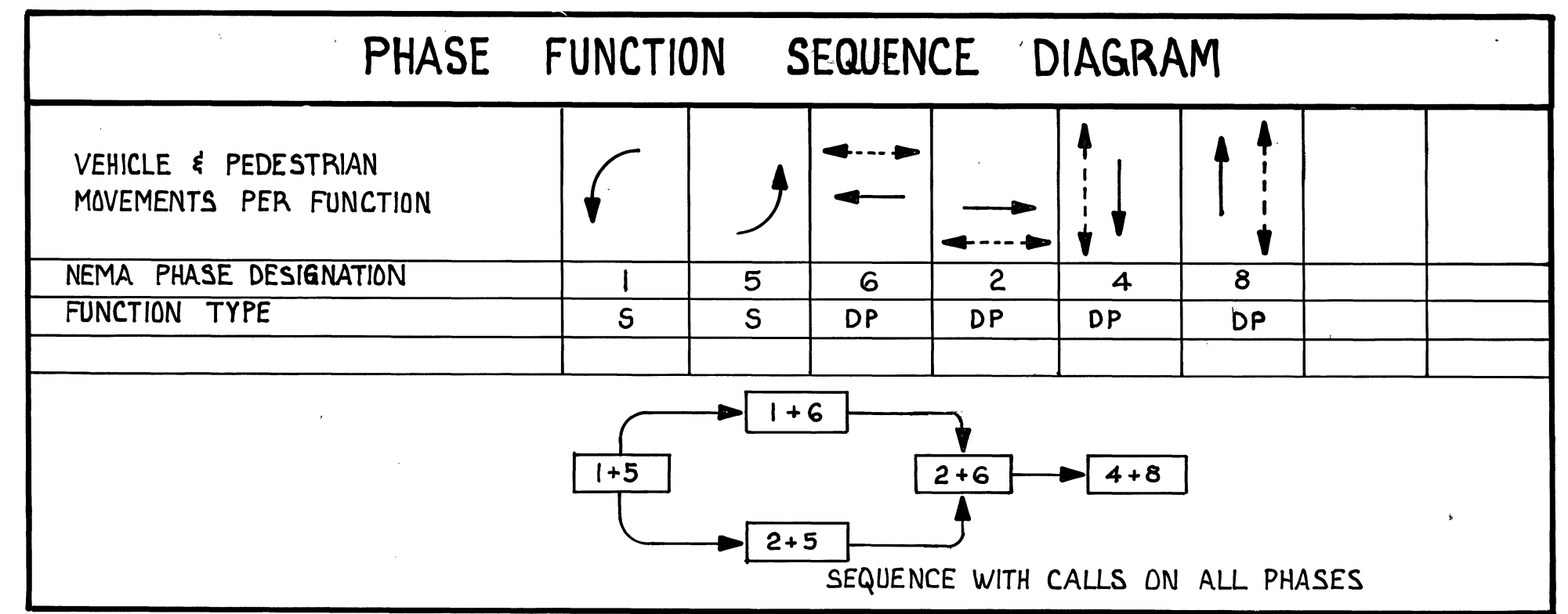
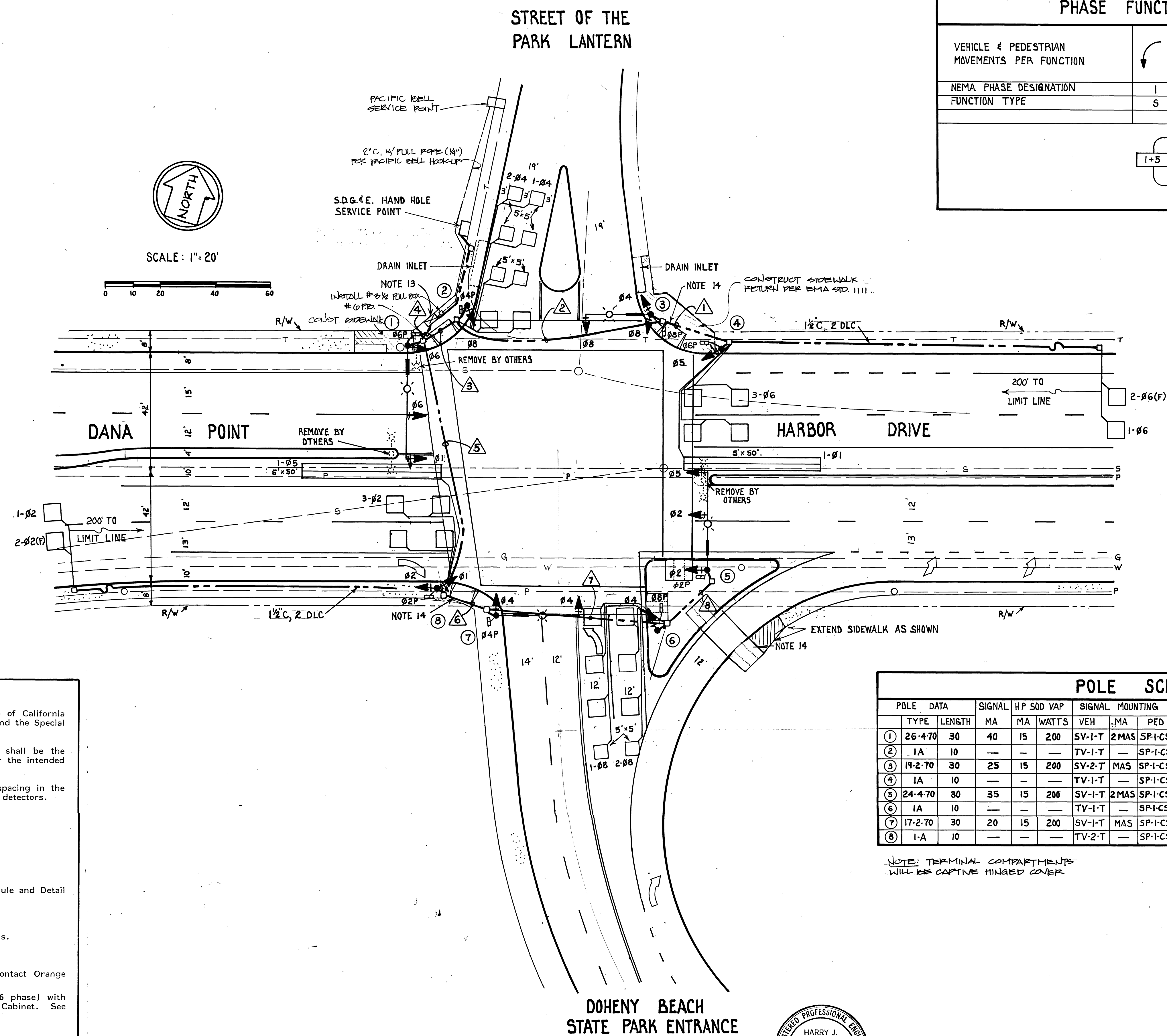
DRAWING NUMBER
D40.2
PLAN NO. 102-0-000
DATE 11/86

DRAWING NUMBER
D40.2
PLAN NO. 102-0-000
DATE 11/86

CONDUCTOR		SCHEDULE							
AWG	CIRCUIT	1	2	3	4	5	6	7	8
#14	Ø1			3	3				
	Ø2			3	3	3	3	3	3
	Ø4		3	3	6	3	3	3	3
	Ø5	3	3	3	6	3	3	3	3
	Ø6			3					
	Ø8		3	3	3				
	Ø2P			2	2	2	2	2	2
	Ø4P			2	4	2	2		
	Ø6P	2	2	2	2				
	Ø8P		2	2	4	2	2	2	2
	Ø2PPB			1	1	1	1		
	Ø4PPB			1	2	1			
	Ø6PPB		1	1	1				
	Ø8PPB	1	1	1	2	1	1	1	1
#10	PPB COMMON	1	1	1	2	1	1	1	1
	ILLUM. ST. NAME SIGN	1	1	2	1	1	1	1	1
TYPE "D"	SPARES	3	3	3	6	3	3	3	3
	TOTAL	10	20	23	52	26	22	20	16
LOOP DET CABLE	SIGNAL & SIGN COMMON	1	1	1	2	1	1	1	1
	LUMINAIRE	2	2	4	2	2	2	2	2
	TOTAL	1	3	3	6	3	3	3	3
	Ø1	1	1	1	1				
	Ø2				3	3			
	Ø4			2	2				
	Ø5	1	1	1	1				
CONDUIT SIZE	Ø6	3	3	3	3				
	Ø8			2	2	2	2		
	TOTAL	5	5	7	12	5	2	2	
	CONDUIT SIZE	2 1/2"	2 1/2"	3"	2 3/4"	3"	2"	2"	2"

- GENERAL NOTES
- Traffic signal and highway lighting construction shall conform to State of California Standard Specifications Section 86 and Standard Plans (dated July 1984) and the Special Provisions.
 - 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.
 - Unless shown otherwise, inductive loops shall be 6' x 6' with 10 foot spacing in the direction of travel. Necessary striping shall be located prior to installing detectors.
 - All conduit shall be 2 inches unless shown otherwise.
 - All pullboxes shall be #5 unless shown otherwise.
 - Pedestrian indications shall be Type "C" (see Special Provisions).
 - Contractor shall avoid damaging existing utilities.
 - Install Type "A" internally illuminated street name sign. See Pole Schedule and Detail "C", Sheet 3 of 4.
 - All vehicle indications shall be 12 inches.
 - All luminaires shall have integral ballast and Type IV Photoelectric Controls.
 - All signing and striping by contractor per Sheet 4 of 4.
 - 48 hours prior to the beginning of construction the contractor shall contact Orange County EMA for inspection. (714 834-7089)
 - Install 8 phase Multisonics 820 System Controller Assembly (to operate 6 phase) with detection as shown, and integral coordination telemetry, in Type "P" Cabinet. See Details "F" and "G", Sheet 3 of 4.
 - Construct sidewalk access ramp per Orange County EMA Standard Plan 102-0-000
 - Install modified Type II service.
 - All left turn signal heads per Detail "E", Sheet 3 of 4.
 - All lenses and Reflectors shall be glass.

NOTE: LOOPS ARE 6'x6' UNLESS NOTED OTHERWISE



INDUCTIVE LOOP DETECTOR SCHEDULE *

SENSOR UNIT	CHANNEL	DETECTOR
#1	1	▲ 1-Ø2
	2	● 1-Ø2
#2(F)	1	▲ 1-Ø6
	2	● 1-Ø6
#3(F)	1	▲ 2-Ø2
	2	● 2-Ø2
#4	1	▲ 2-Ø6
	2	● 2-Ø6
#5	1	3-Ø2
	2	3-Ø6
	3	2-Ø8
	4	2-Ø4
#6	1	1-Ø8
	2	1-Ø4
	3	1-Ø1
	4	1-Ø5

- ▲ SYSTEM SAMPLING - NO OUTPUT TO PHASE
- INTEGRAL CALL HOLD CAPABILITY (0.5 SEC. MIN.)
- * DETECTOR LOCATIONS SHALL BE APPROVED BY ENGINEER IN THE FIELD PRIOR TO INSTALLATION.
- (F) FUTURE DETECTOR - INSTALL CABLES ONLY.
- DELAY

POLE SCHEDULE

POLE DATA		SIGNAL		HP SOD VAP		SIGNAL MOUNTING		PED PUSH BUTTON		FOUNDATION		ILLUMINATED SIGN	
TYPE	LENGTH	MA	MA	WATTS	VEH	MA	PED	PHASE	POLE QUAD	TYPE	SIZE	MESSAGE	(dbl. face)
①	26'-4.70	30	40	15	200	SV-1-T	2MAS	SP-1-CS	Ø4	EAST	C	3'-6"x8'-0"	PARK LANTERN
②	1A	10				TV-1-T		SP-1-CS	Ø6	SOUTH	S	2'-0"x3'-0"	
③	19'-2.70	30	25	15	200	SV-2-T	MAS	SP-1-CS	Ø6	SOUTH	C	2'-6"x6'-0"	DANA POINT HARBOR
④	1A	10				TV-1-T		SP-1-CS	Ø8/Ø6	WEST/SOUTH	S	2'-0"x3'-0"	
⑤	24'-4.70	30	35	15	200	SV-1-T	2MAS	SP-1-CS	Ø8	WEST	C	2'-6"x8'-0"	PARK LANTERN
⑥	1A	10				TV-1-T		SP-1-CS	Ø2	NORTH	S	2'-0"x3'-0"	
⑦	17'-2.70	30	20	15	200	SV-1-T	MAS	SP-1-CS	Ø2	NORTH	C	2'-6"x6'-0"	DANA POINT HARBOR
⑧	1A	10				TV-2-T		SP-1-CS	Ø4/Ø2	EAST/NORTH	S	2'-0"x3'-0"	

NOTE: TERMINAL COMPARTMENTS WILL BE CAPTIVE HINGED COVER

* INDICATES BICYCLE PUSH BUTTON W/ BICYCLE SYMBOL RATE

NOTE: THE ILLUMINATED SIGNS FOR DANA POINT HARBOR ARE Ø SIGNS

COUNTY OF ORANGE
E.M.A. TRAFFIC ENGINEERING DIV.
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APPROVED _____ R.C.E. _____ DATE _____

REFERENCE PLANS	
DESCRIPTION	DATE
STREET IMPROVEMENT PLANS	
TRACT NO. 11153	

PREPARED UNDER THE SUPERVISION OF
Harry J. Krueper, Jr. DATE 2/3/87
R.C.E. NO. 12222
TR. NO. 240

KE krueper engineering & associates
civil engineering • land surveying
568 north mountain view, suite 230
san bernardino, california 92401
884-2159

APPROVED	
DATE	DESIGNED P.T.
CHECKED F.J.B.	DATE 11/86
REVISIONS	
DATE	BY
DESCRIPTION	
APP'D	

TRAFFIC SIGNAL PLAN
DANA POINT HARBOR DR. @
ST. OF THE PARK LANTERN

ORANGE COUNTY
E.M.A.

SHEET 2 OF 3

DRAWING NUMBER
PT HARBOR DR /
PARK LANTERN

DRAWING NUMBER
D40.3

DRAWING NUMBER

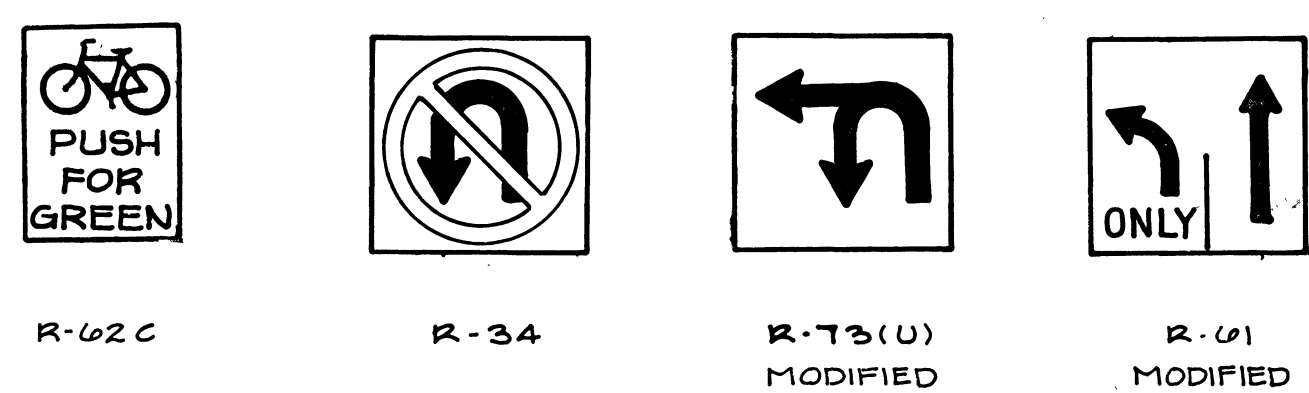
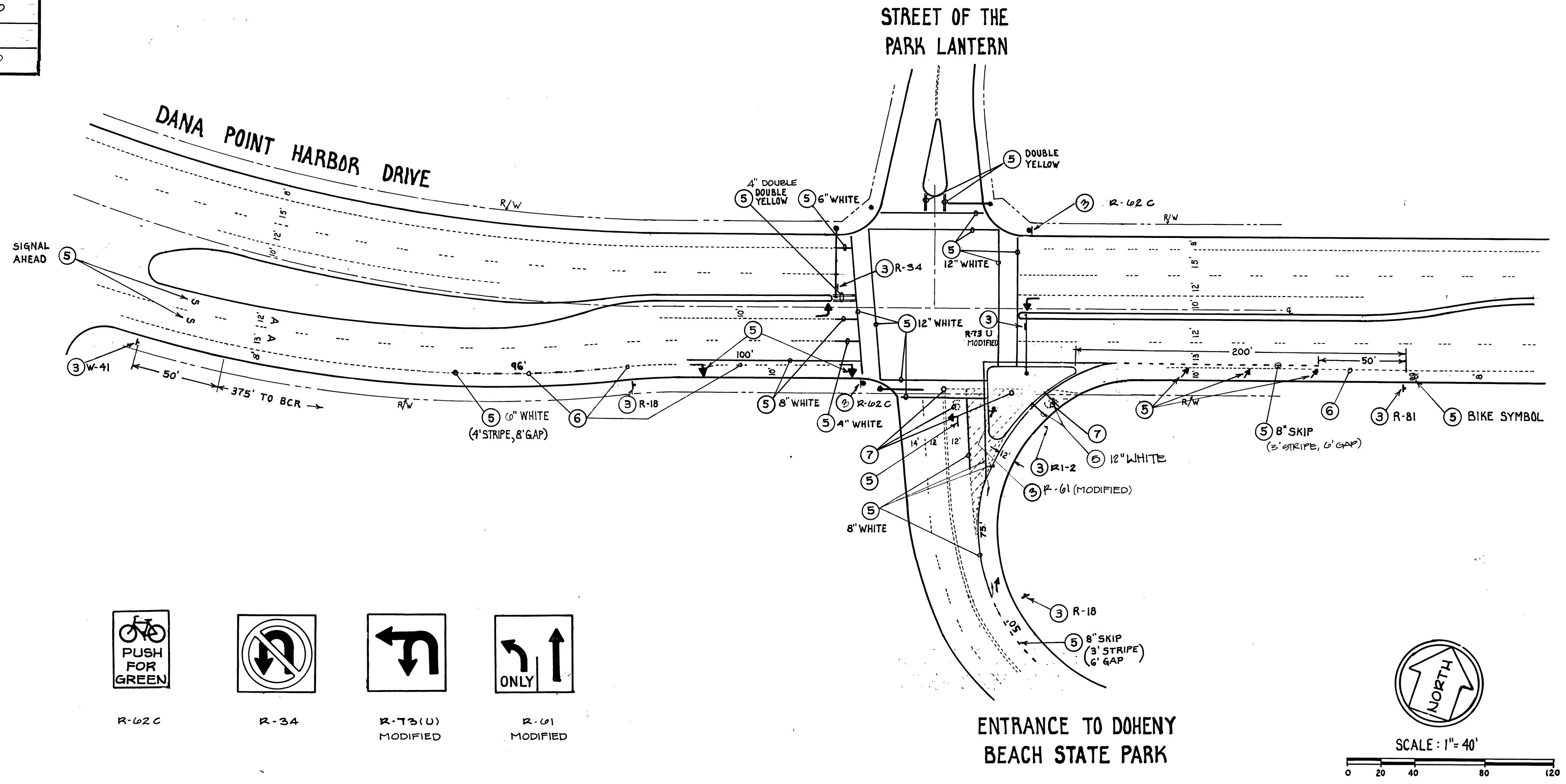
DRAWING NUMBER

SIGN & PAVEMENT MARKING SCHEDULE

DESCRIPTION	QUANTITY	EQUIV. S.F.
SANDBLAST 8" WHITE	340 L.F.	240
SANDBLAST DOUBLE YELLOW	24 L.F.	24
FURNISH, INSTALL SIGN & POST	6 EA.	—
PAINT 6" SOLID	50 L.F.	25
PAINT 8" SOLID	480 L.F.	325
PAINT 12" SOLID	710 L.F.	710
PAINT "SIGNAL AHEAD"	2 EA.	140
PAINT 8" SKIP	160 L.F.	110
PAINT ARROWS	8 EA.	100
PAINT 6" SKIP	96 L.F.	60
PAINT BIKE SYMBOL	1 EA.	15
SANDBLAST 6" WHITE (SOLID/SKIP)	300 L.F.	180

CONSTRUCTION NOTES

- 1 Signing and striping shall conform to latest Caltrans Traffic Manual, these Plans, and the Special Provisions.
- 2 Prior to final acceptance of street improvements, all street striping and stenciling within the perimeter of construction project will be restored to "like new" condition, in a manner meeting the approval of the Director, EMA Public Works.
- 3 Furnish and install sign(s).
- 4 Furnish and install sign and post. New post shall be 2" perforated steel tubing and installed per ORA Co. EMA Standard Plan #402. Where possible, signs shall be mounted on luminaires or traffic signal poles.
- 5 Paint striping as shown. New striping and stenciling shall be according to Standard Detail #1801, Note 17.
- 6 Sandblast striping as shown and remove raised pavement markers as necessary.
- 7 Sandblast all existing "stop" legends, 12" white limit lines, and lane striping within crosswalk area.



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APPROVED _____ R.C.E. _____ DATE _____

REFERENCE PLANS	
DESCRIPTION	DATE
STREET IMPROVEMENT PLANS TRACT NO. 11153	

PREPARED UNDER THE SUPERVISION OF
Harry J. Krueper, Jr. DATE 2/3/87
R.C.E. NO. 12952
T.R. No. 240

KE krueper engineering & associates
civil engineering • land surveying
568 north mountain view, suite 230
san bernardino, california 92401
884-2159

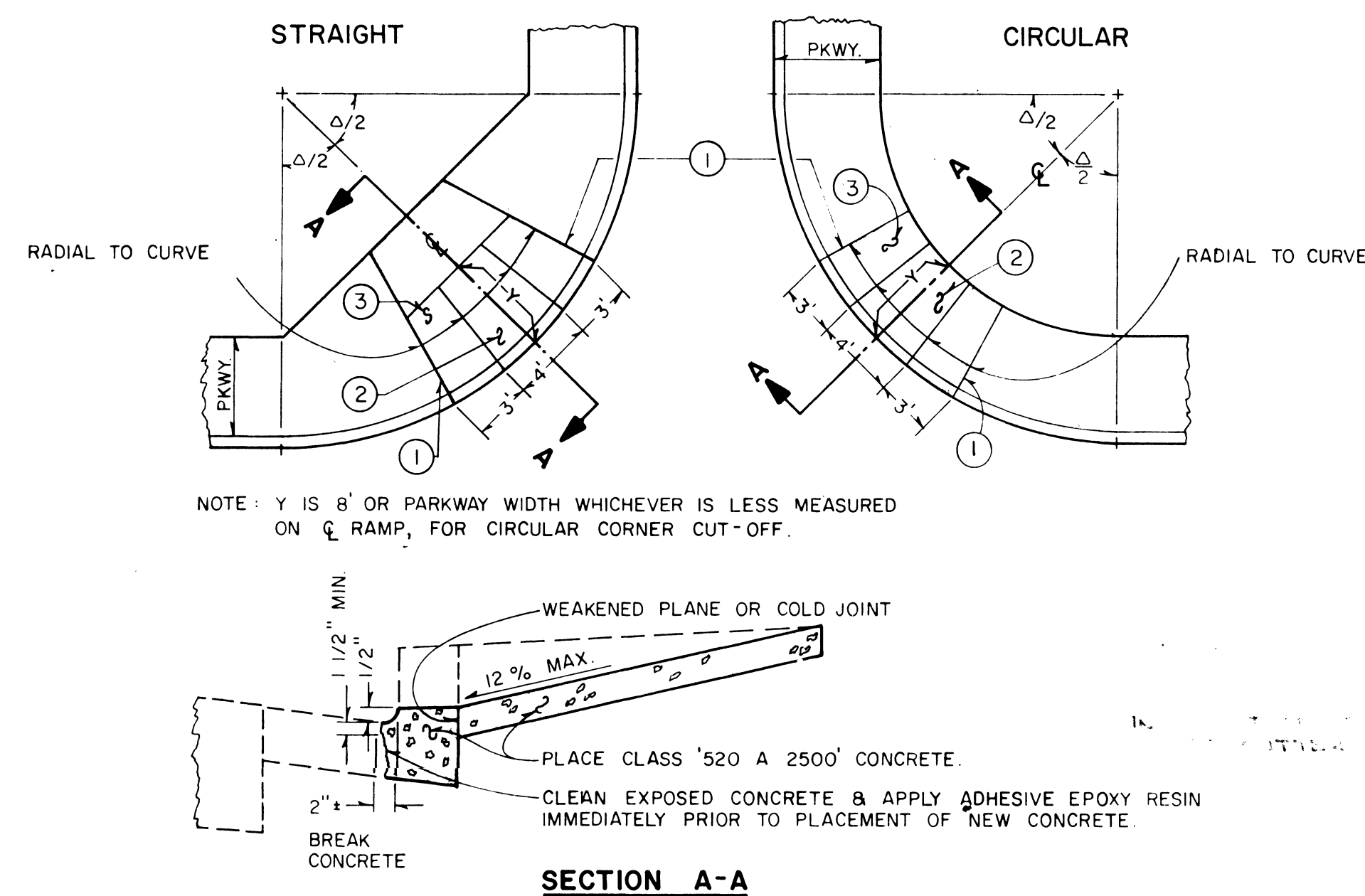
REVISIONS			
DATE	BY	DESCRIPTION	APP'D.

TRAFFIC SIGNAL PLAN
DANA POINT HARBOR DR. @
ST. OF THE PARK LANTERN

ORANGE COUNTY
E.M.A.

SHEET 3 OF 5

DETAIL A
CORNER CUT-OFF

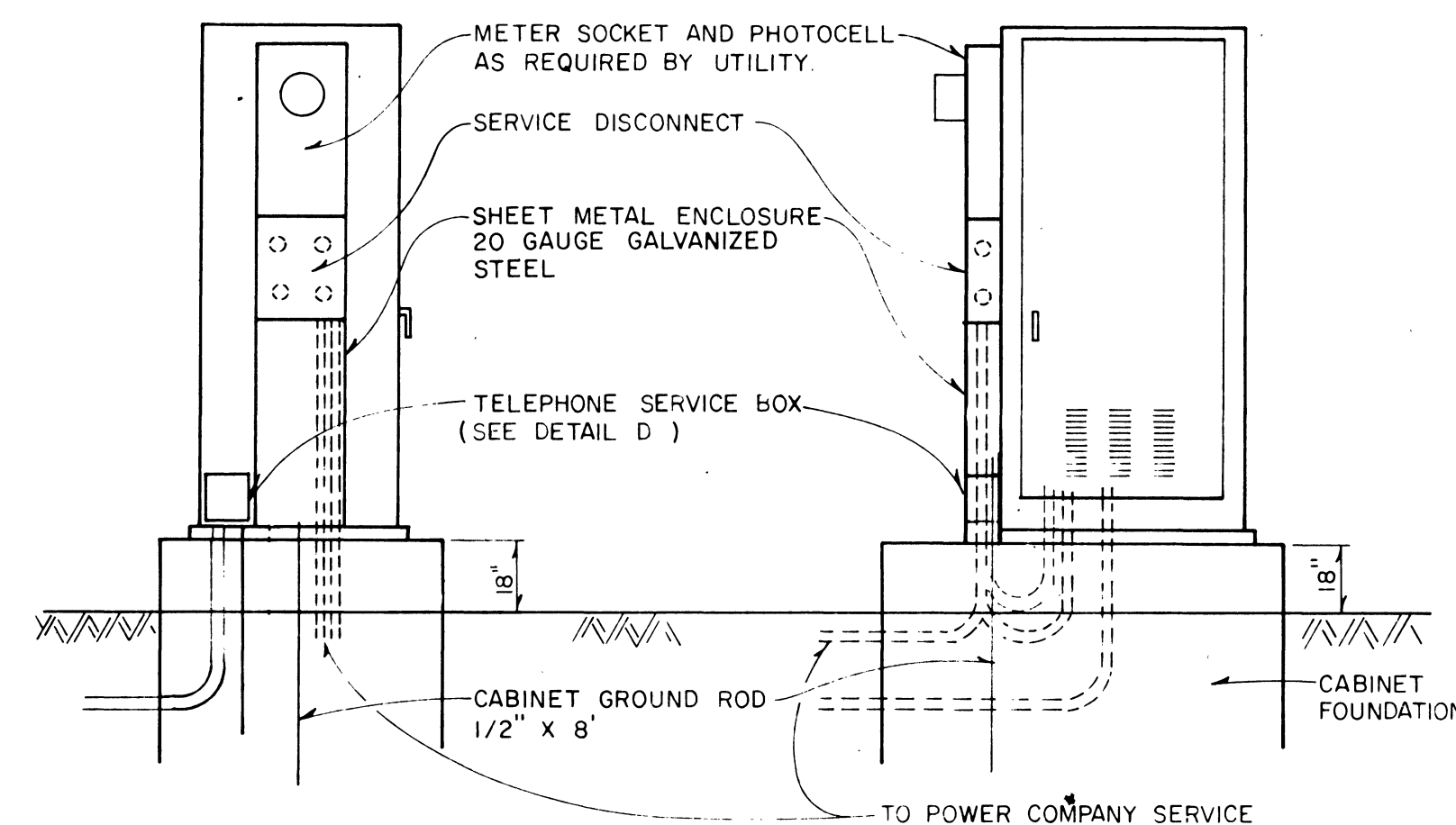


NOTES · DETAIL A

1. GRADE ON RAMP SHALL NOT EXCEED 12.5% AT CENTERLINE.
2. ALL EXISTING CONCRETE TO BE REMOVED SHALL BE SAWCUT AS DIRECTED AND ANY EXISTING SIDEWALK THAT IS DAMAGED OR CRACKED DURING CONSTRUCTION SHALL BE REPLACED WITH 4" THICK CLASS 520 A 2500' PORTLAND CEMENT CONCRETE.
3. ACCESS RAMP SHALL BE CONSTRUCTED WITH 4" THICK PORTLAND CEMENT CONCRETE.
4. RAMPS LOCATED OTHER THAN SHOWN ABOVE SHALL BE APPROVED BY THE ENGINEER.
5. SEE ORANGE COUNTY STD. PLAN III FOR SIDEWALK RETURN AND ACCESS RAMP DETAILS.
6. SAWCUTS SHALL NOT BE MADE AT FLOWLINE.
7. IN SPANDREL AREAS, GUTTER SHALL BE SAWCUT AND THE CURB REMOVED AS SHOWN ABOVE. IN NON-SPANDREL AREAS HAVING GUTTERS 2'-0" OR LESS IN WIDTH, THE ENTIRE GUTTER SHALL BE REMOVED.

DETAIL F
MODIFIED TYPE II SERVICE

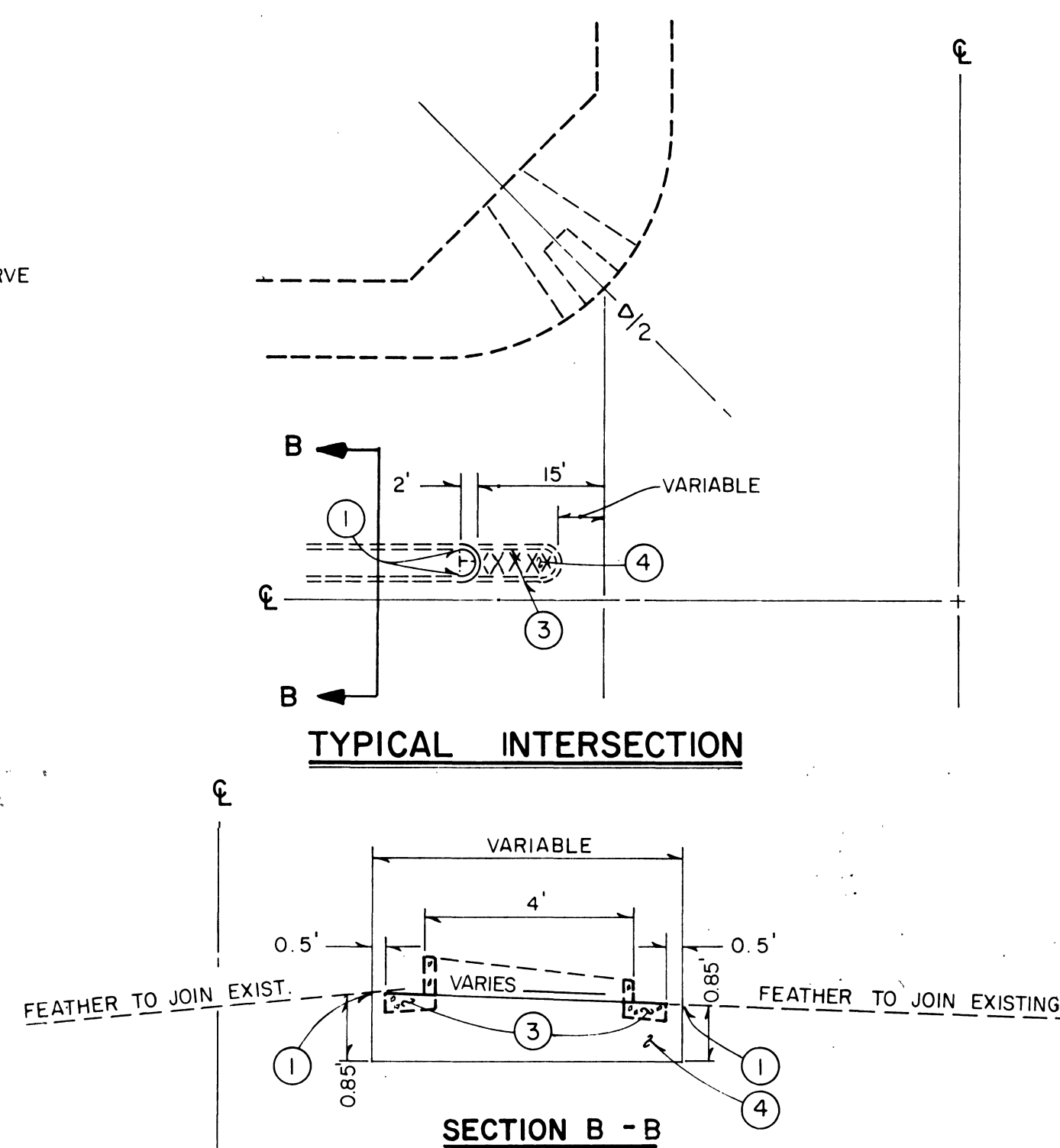
TYPE M & P CABINETS



NOTE • DETAIL F

- 1 ALL SERVICE CABINETS AND SHEET METAL ENCLOSURES SHALL BE PAINTED THE
SAME COLOR AS THE CONTROLLER CABINET

DETAIL B
INTERSECTIONS RAISED MEDIAN

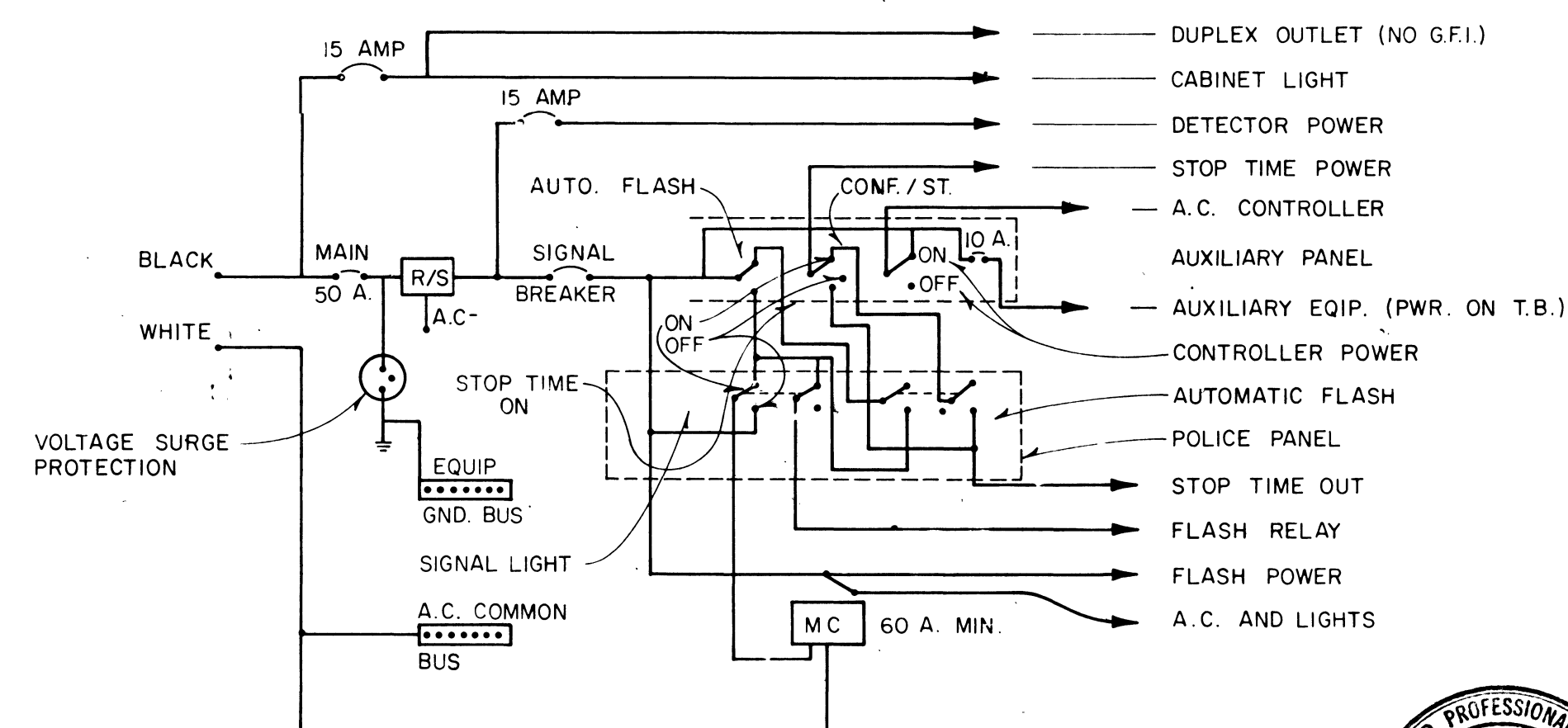


CONSTRUCTION NOTES · DETAILS A & B

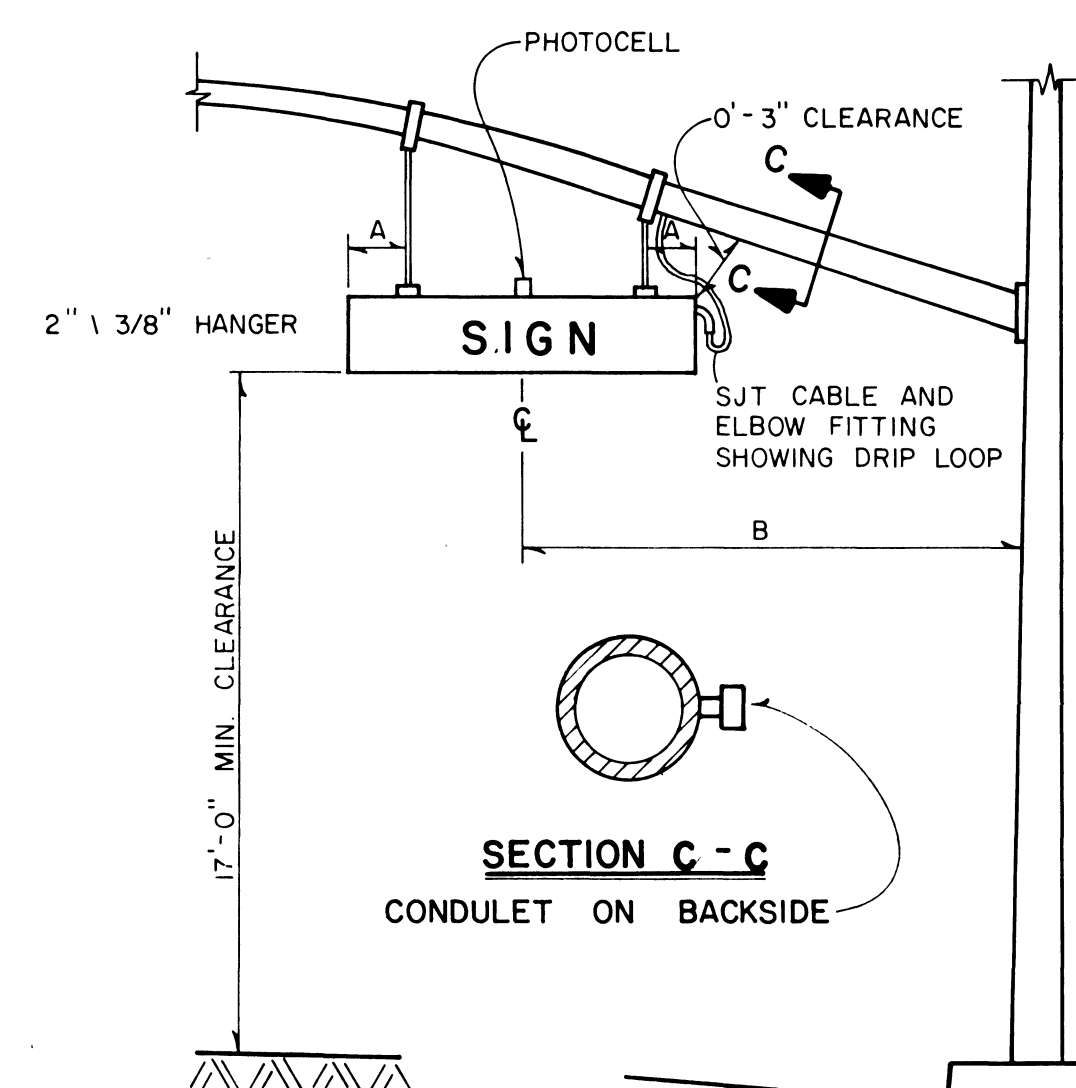
- ① SAWCUT AND JOIN EXISTING
- ② CONSTRUCT SIDEWALK ACCESS RAMP.
- ③ REMOVE CONCRETE
- ④ CONSTRUCT 0.85' AC OVER NATIVE SOIL

DETAIL G

CONTROLLER CABINET WIRING



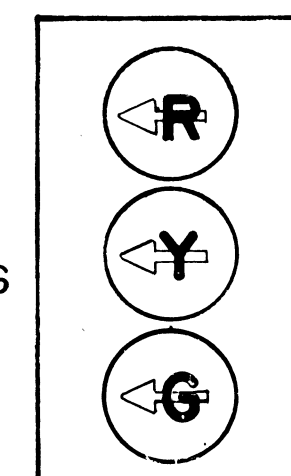
DETAIL C
STREET NAME SIGN COMPONENTS



NOTES · DETAIL C

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

DETAIL E
ALL ARROW SECTION HEAD

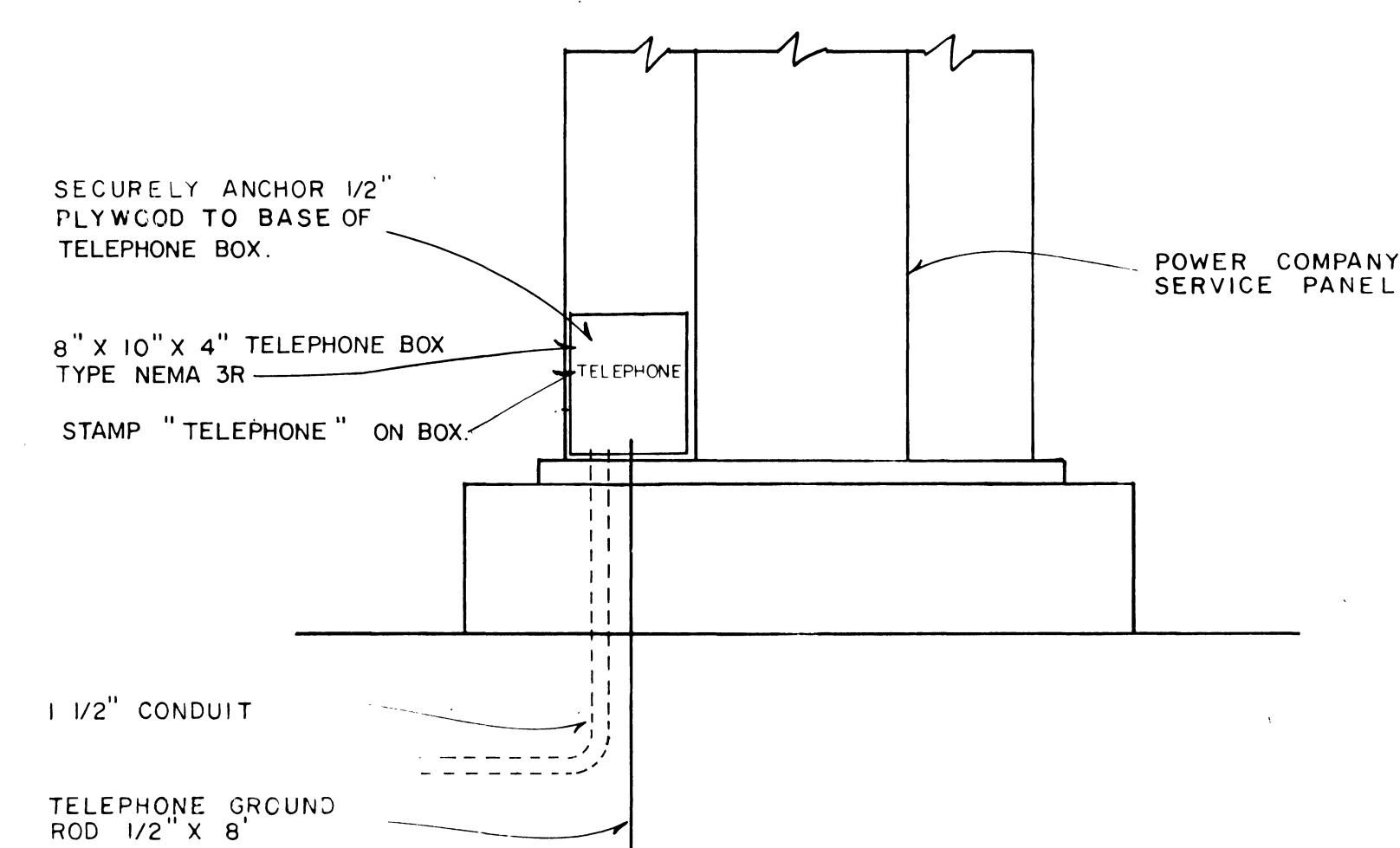


DETAIL C

NAME SIGN COMPONENTS

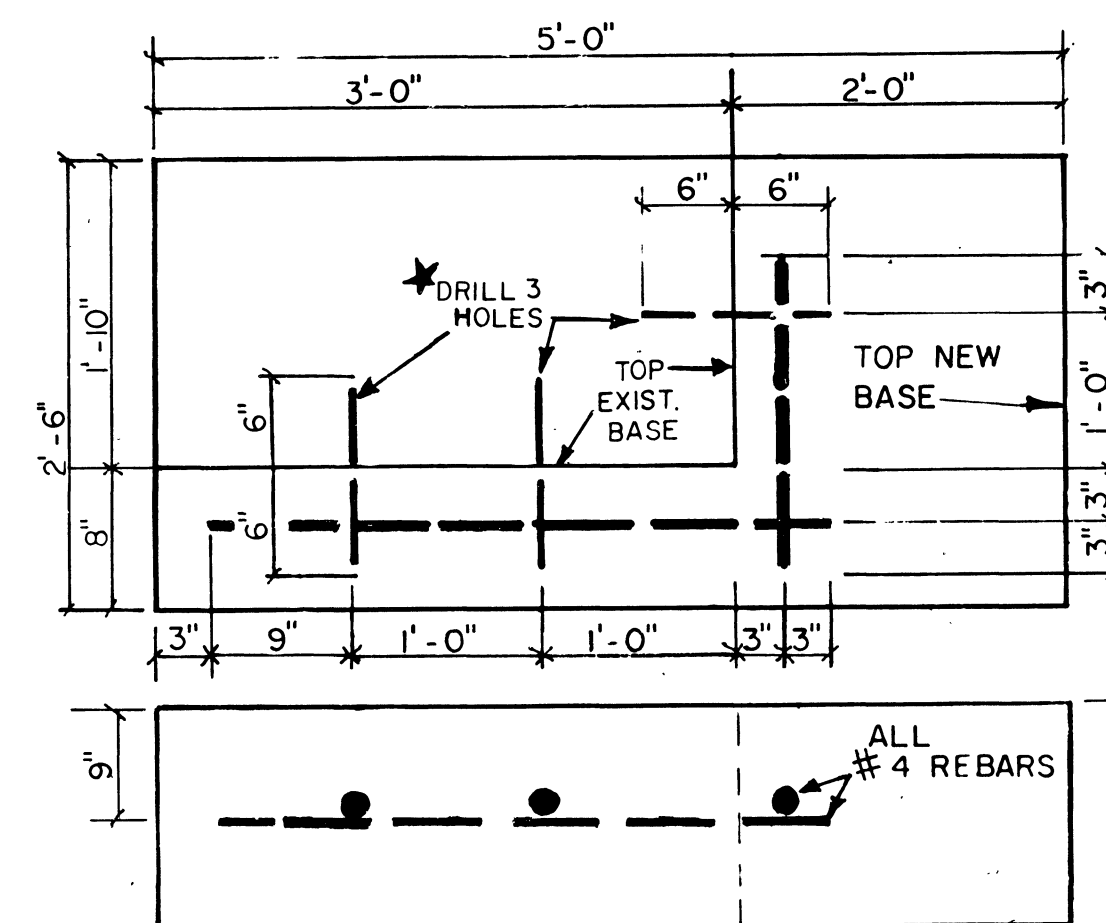
DETAIL D

TELEPHONE SERVICE



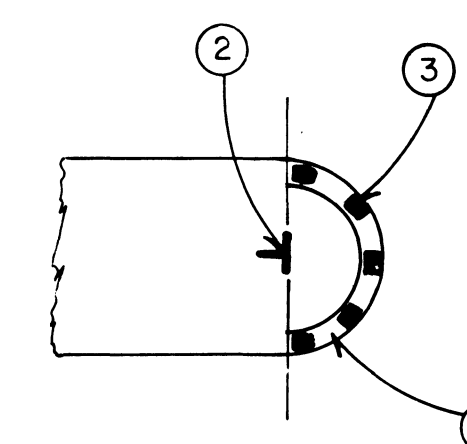
DETAIL I

"M" TO "P" CABINET BASE CONVERSION



- ★ 3 HOLES FOR #4 REBAR
SEAL BARS IN PLACE
WITH GROUT OR EPOXY.

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-1 ON 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 PARALLEL TO C/C OF ROADWAY.

COUNTY OF ORANGE
E.M.A. TRAFFIC ENGINEERING DIV.
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APPROVED	R.C.E.	DATE
----------	--------	------

REFERENCE PLANS	
DESCRIPTION	DATE
STREET IMPROVEMENT PLANS TRACT NO. 11153	

PREPARED UNDER THE SUPERVISION OF
Hoy J. Kruger DATE 2/3/87
R.C.E. NO. 12955
T.R. No. 240

				APPROVED	
				DATE _____	
DATE	BY	DESCRIPTION	APP'D.	DESIGNED	DRAWN
REVISIONS				CHECKED	DATE

TRAFFIC SIGNAL PLAN DANA POINT HARBOR DR. @ ST. OF THE PARK LANTERN	
ORANGE COUNTY E.M.A.	SHEET 4 OF 5

DRAWING NUMBER
HARBOR DRIVE
ARK LANTERN

D40.4

DRAWING NUMBER

DRAWING NUMBER

CONSTRUCTION NOTES

1	Install transition cross gutter Per OCEMA STD No. 106-0-0C	450	SF
2	Install access ramp Per OCEMA STD No. 102-0-0C	4	EA
3	Install 8" concrete curb Type A Per OCEMA STD No. 104-0-0C	150	LF
4	Install AC pavement	80	SF
5	Install AC island pavement Concrete	675	SF
6	Install sidewalk Per OCEMA STD No. 1205	63	SF
7	Install modified parkway culvert Per OCEMA STD No. 1309	38	LF
8	Remove cross gutter	625	SF



SCALE 1"=10'

BENCH MARK: 3P-24-68
Standard O.C.S. aluminum cap monument located at about 245 feet north-east of the centerline of Pacific Coast Highway and 38 feet southeast of the centerline of Del Obispo Street 91.3 feet northeast of Power Pole No. 22507, southwest 49 feet of Street Light Pole No. 222499, about 50 feet southwest of the southwest side of House No. 34271 and across the street set in the northwest corner of a concrete catch basin, 1-foot higher than gutter. Elevation 13.66 feet (adjusted 1976).

BASIS OF BEARINGS:
North 43°36'03" East for the centerline of Dana Point Harbor Drive as shown on MM Book 509, Page 19, Records of Orange County.

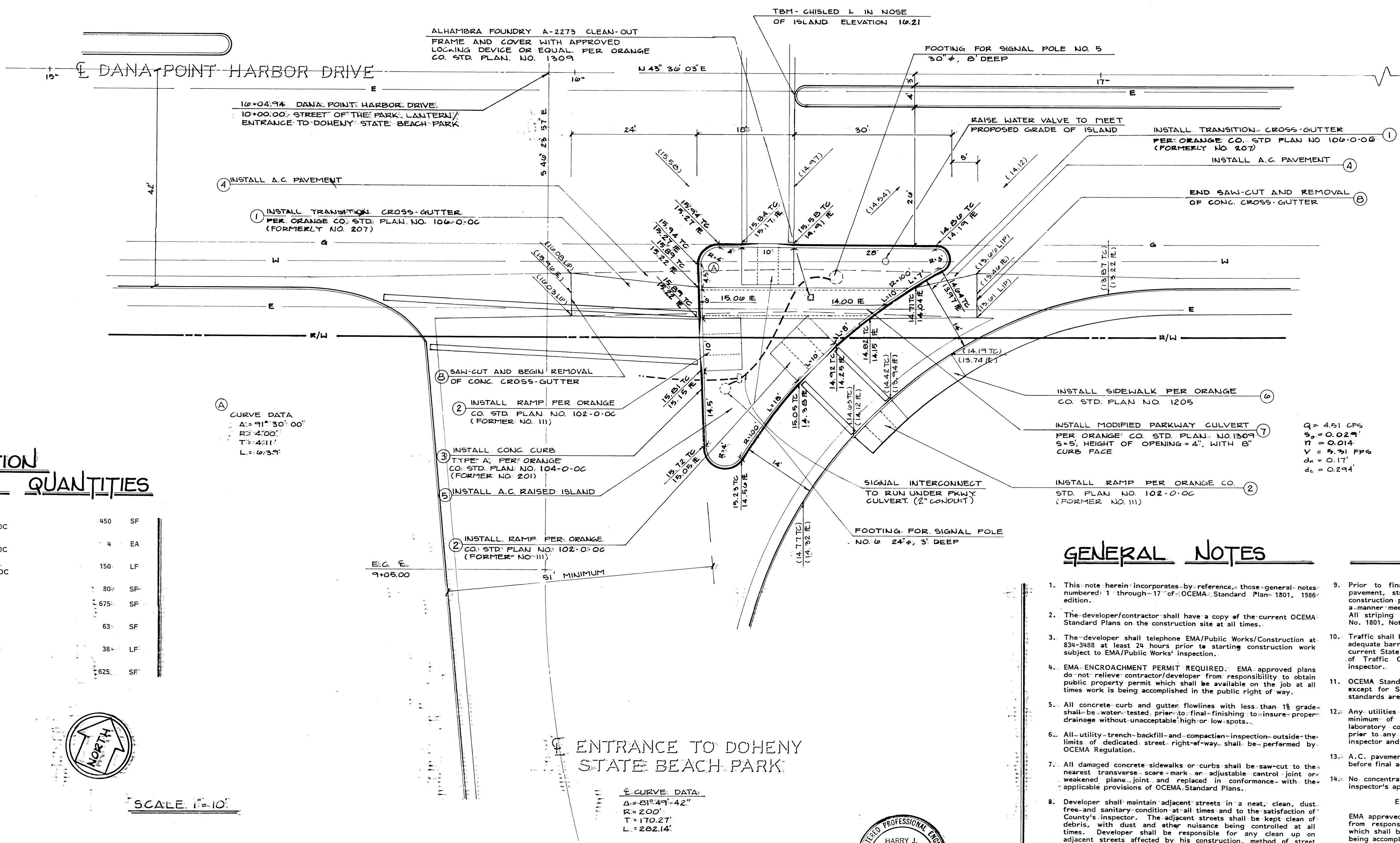
COUNTY OF ORANGE E.M.A. REGULATION DIVISION	
THIS PLAN IS SIGNED BY OCEMA REGULATION FOR CONCEPT AND ADHERENCE TO COUNTY STANDARDS AND REQUIREMENTS ONLY. OCEMA REGULATION IS NOT RESPONSIBLE FOR DESIGN, ASSUMPTIONS AND ACCURACY.	
APPROVED	DATE

REFERENCE PLANS	DESCRIPTION	DATE
STREET IMPROVEMENT PLANS	TRACT NO. 11153	3-20-82

PREPARED UNDER THE SUPERVISION OF	DATE 6/8/87
HARRY J. KRUEPER, JR.	R.C.E. NO. 12553
KE	T.R. NO. 270
krueper engineering & associates civil engineering • land surveying 568 north mountain view, suite 230 san bernardino, california 92401 884-2159	

DATE	BY	DESCRIPTION	APPRD	DESIGNED	DRAWN
REVISIONS					

ISLAND DESIGN	
TRAFFIC SIGNAL PLAN	
DANA POINT HARBOR DRIVE @ ST. OF THE PARK LANTERN	
ORANGE COUNTY E.M.A.	SHEET 5 OF 15



GENERAL NOTES

- This note herein incorporates by reference, those general notes numbered 1 through 17 of OCEMA Standard Plan 1801, 1986 edition.
- The developer/contractor shall have a copy of the current OCEMA Standard Plans on the construction site at all times.
- The developer shall telephone EMA/Public Works/Construction at 834-3488 at least 24 hours prior to starting construction work subject to EMA/Public Works' inspection.
- EMA ENCROACHMENT PERMIT REQUIRED. EMA approved plans do not relieve contractor/developer from responsibility to obtain public property permit which shall be available on the job at all times work is being accomplished in the public right of way.
- All concrete curb and gutter, flowlines with less than 18 grade shall be water tested prior to final finishing to insure proper drainage without unacceptable high or low spots.
- All utility trench backfill and compaction inspection outside the limits of dedicated street right-of-way shall be performed by OCEMA Regulation.
- All damaged concrete sidewalks or curbs shall be saw-cut to the nearest transverse score mark or adjustable control joint or weakened plane joint and replaced in conformance with the applicable provisions of OCEMA Standard Plans.
- Developer shall maintain adjacent streets in a neat, clean, dust-free and sanitary condition at all times and to the satisfaction of County's inspector. The adjacent streets shall be kept clean of debris, with dust and other nuisance being controlled at all times. Developer shall be responsible for any clean up on adjacent streets affected by his construction, method of street cleaning shall be by dry sweeping of all paved areas. No stockpiling of building materials within the County right-of-way without the permission of County's inspector.
- Prior to final acceptance of street improvements, all street pavement, striping and stenciling within the perimeter of the construction project will be restored to a "like new" condition, in a manner meeting the approval of the Director of Public Works. All striping and stenciling shall be according to Standard Plan No. 1801, Note 17.
- Traffic shall be maintained at all times and shall be protected with adequate barricades, lights, signs and warning devices as per the current State of California, Department of Transportation, Manual of Traffic Controls, and to the directions of the County's inspector.
- OCEMA Standard Plans shall take precedence over any conflicts except for Standard Plans affecting utility companies, if their standards are more stringent.
- Any utilities under paved areas of private streets shall have a minimum of 30" cover and developer shall provide private laboratory compaction certification for all underground utilities prior to any paving. Developer shall set up a meeting with the inspector and the private laboratory prior to any testing.
- A.C. pavement placed under carports/roofs shall be slurry sealed before final acceptance.
- No concentrated flows across asphalt pavement without County inspector's approval.

ENCROACHMENT PERMIT NO. 01-02100-RC

EMA approved plans do not relieve contractor/developer from responsibility to obtain public property permit which shall be available on the job at all times work is being accomplished in public right of way.