CONDUCTOR SCHEDULE								
AWG CIRCUITS		RUNS 1	2	3	4	5	6	7
12 CSC / 3 CSC		1/1	2/2	2/3	2/2	1/1	5/6	5/6
LOOP LEAD-IN TYPE B	Ø1 DETECTOR						1	1
	Ø2 DETECTOR				5	5	5	5
	Ø4 DETECTOR		3	3			3	3
	Ø5 DETECTOR				1	1	1	1
	Ø6 DETECTOR						5	5
	TOTAL DLC'S	0	3	3	6	6	15	15
# 10	LUMINAIRE	2(E)	2(E)	2(E)	2(E)	2(E)	4(E)	–
	SIGNAL COMMON	1	1	1	1	1	2	2
	TOTAL	3	3	3	3	3	6	2
3 #20 EVP CABLE		1	1	1	1	1	3	3
1-12PR #22 I.C.		1(E)	1(E)				1(E)	2(E)
CONDUIT SIZE		1-2" (E)	1-3" (E)	1-3" (E)	1-3" (E)	1-3" (E)	2-4" (E)	2-4" (E)

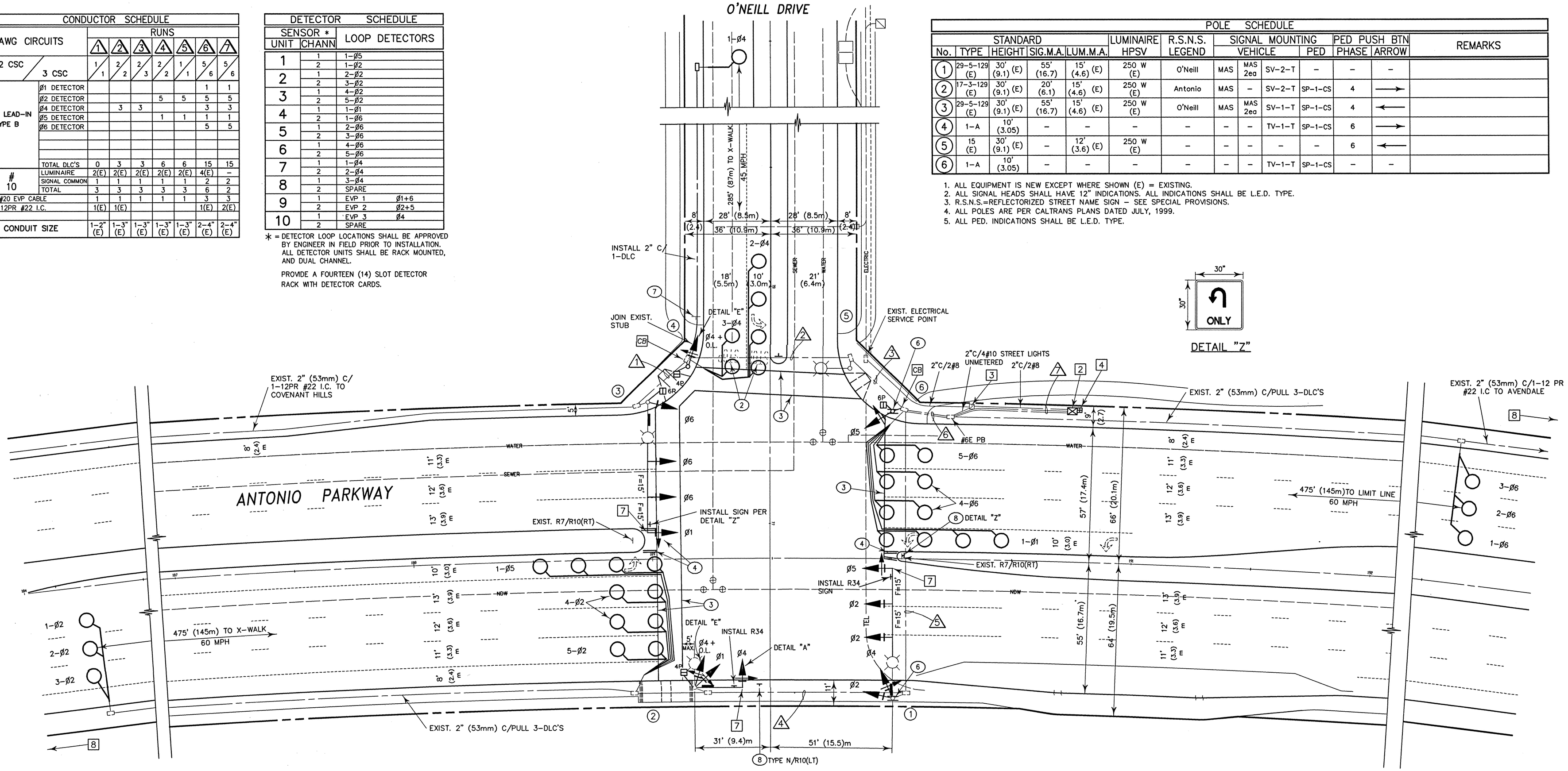
DETECTOR SCHEDULE			
SENSOR * UNIT	CHANN	LOOP DETECTORS	
1	1	1-Ø5	
	2	1-Ø2	
2	1	2-Ø2	
	2	3-Ø2	
3	1	4-Ø2	
	2	5-Ø2	
4	1	1-Ø1	
	2	1-Ø6	
5	1	2-Ø6	
	2	3-Ø6	
6	1	4-Ø6	
	2	5-Ø6	
7	1	1-Ø4	
	2	2-Ø4	
8	1	3-Ø4	
	2	SPARE	
9	1	EVP 1	Ø1+6
	2	EVP 2	Ø2+5
10	1	EVP 3	Ø4
	2	SPARE	

* = DETECTOR LOOP LOCATIONS SHALL BE APPROVED BY ENGINEER IN FIELD PRIOR TO INSTALLATION. ALL DETECTOR UNITS SHALL BE RACK MOUNTED, AND DUAL CHANNEL.

PROVIDE A FOURTEEN (14) SLOT DETECTOR RACK WITH DETECTOR CARDS.

POLE SCHEDULE												
STANDARD					LUMINAIRE	R.S.N.S.	SIGNAL MOUNTING			PED PUSH BTN		REMARKS
No.	TYPE	HEIGHT	SIG.M.A.	LUM.M.A.	HPSV	LEGEND	VEHICLE		PED	PHASE	ARROW	
1	29-5-129 (E)	30' (9.1) (E)	55' (16.7)	15' (4.6) (E)	250 W (E)	O'Neill	MAS	MAS 2ea	SV-2-T	–	–	–
2	17-3-129 (E)	30' (9.1) (E)	20' (6.1)	15' (4.6) (E)	250 W (E)	Antonio	MAS	–	SV-2-T	SP-1-CS	4	→
3	29-5-129 (E)	30' (9.1) (E)	55' (16.7)	15' (4.6) (E)	250 W (E)	O'Neill	MAS	MAS 2ea	SV-1-T	SP-1-CS	4	←
4	1-A	10' (3.05)	–	–	–	–	–	–	TV-1-T	SP-1-CS	6	→
5	15 (E)	30' (9.1) (E)	–	12' (3.6) (E)	250 W (E)	–	–	–	–	–	6	←
6	1-A	10' (3.05)	–	–	–	–	–	–	TV-1-T	SP-1-CS	–	–

1. ALL EQUIPMENT IS NEW EXCEPT WHERE SHOWN (E) = EXISTING.
2. ALL SIGNAL HEADS SHALL HAVE 12" INDICATIONS. ALL INDICATIONS SHALL BE L.E.D. TYPE.
3. R.S.N.S.=REFLECTORIZED STREET NAME SIGN – SEE SPECIAL PROVISIONS.
4. ALL POLES ARE PER CALTRANS PLANS DATED JULY, 1999.
5. ALL PED. INDICATIONS SHALL BE L.E.D. TYPE.



PHASE DIAGRAM				
O.L.	O.L.			
PHASE 1+5	PHASE 2+5	OR PHASE 1+6	PHASE 2+6	PHASE 4

NOTES

1. REFER TO DETAIL SHEET FOR GENERAL NOTES.
2. FURNISH AND INSTALL A 16 PHASE ECONOLITE ASC/2S-2100 TYPE 90 CONTROLLER AND UPS SYSTEM IN A FULLY WIRED NEMA TS2 TYPE 1 SIZE 6 ALUMINUM CABINET AND FOUNDATION. PLACE CONTROLLER ON TOP SHELF.
3. EXISTING TYPE III-BF SERVICE WITH 30A LIGHTING BREAKER. ADD 50A SIGNAL BREAKER AND TYPE V PHOTOELECTRIC CIRCUIT WITH DELAY TYPE PHOTOCELL. REPLACE EXISTING PHOTOCELLS ON LUMINAIRES WITH SHORTING CAPS. REPAINT CABINET & RESTENCIL SERVICE ADDRESS ON CABINET. COLOR TO MATCH CONTROLLER CABINET.
4. FURNISH AND INSTALL AN EXTERIOR MOUNTED ALUMINUM CABINET FOR UPS BATTERIES.
5. STREET PAINTING INSTALLATION AND REMOVALS SHALL BE COMPLETED BY THE CONTRACTOR.
6. STRIPING SHOWN (------) IS EXISTING. PROPOSED STRIPING AND PAVEMENT MARKINGS ARE SHOWN WITH SOLID LINES.
7. INSTALL EVP CABLE FROM END OF MAST ARM TO CONTROLLER CABINET. COIL 10 FEET OF CABLE IN CABINET.
8. INSTALL W41 SIGN 500' TO CROSSWALK BETWEEN CURB AND R/W AND STENCIL ON PAVEMENT "SIGNAL AHEAD" IN EACH LANE.
9. EXACT LOCATION AND CONDITION OF EXISTING CONDUITS IS UNKNOWN. THE CONTRACTOR SHALL VERIFY EXISTING CONDUIT STATUS. DAMAGED OR MISSING CONDUITS SHALL BE REPLACED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER. EXISTING DAMAGED PULLBOXES AND/OR LIDS SHALL ALSO BE REPLACED.

STRIPING AND SIGNING NOTES

1. ALL WORK AND MATERIAL SHALL CONFORM TO THE STATE STANDARD PLANS AND SPECIFICATIONS DATED JAN. 1999 AND THE CURRENT TRAFFIC MANUAL.
2. REMOVE CONFLICTING STRIPING BY SANDBLASTING.
3. PAINT 12" WHITE CROSSWALK OR LIMIT LINE PER PFRD STD. 1416.
4. PAINT 4" DOUBLE YELLOW / DET. 29
5. INSTALL "BIKE LANE → " MARKING
6. INSTALL 2-R96 SIGNS 8' ABOVE SIDEWALK.
7. REMOVE R1 SIGN AT SIGNAL TURN ON.
8. INSTALL SIGN AND POST AS SHOWN.

DR. 15 (16631) Sheet 3 of 4

0 1/2 1 2 3
3 inches on original drawing
SCALE: 1"=20'

LADERA3/12822AON

WILLDAN Serving Public Agencies
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County of Orange
PFRD/ROAD DIVISION- TRAFFIC ENGINEERING

Approved By: Date:

I. G. OCHOA, County Traffic Engineer

THIS PLAN IS SIGNED BY PFRD/T. E. FOR CONCEPT AND ADHERENCE TO COUNTY TRAFFIC SIGNALS, SIGNING AND STRIPING STANDARDS AND REQUIREMENTS ONLY. PFRD/T. E. IS NOT RESPONSIBLE FOR DESIGN ASSUMPTIONS OR ACCURACY.

MARK	DATE	DESCRIPTION

REVISIONS

PREPARED UNDER RESPONSIBLE CHARGE OF:

DATE

ORANGE COUNTY
PUBLIC FACILITIES AND RESOURCES DEPARTMENT

TRAFFIC SIGNAL INSTALLATION PLAN

ANTONIO PKWY. AND O'NEILL DRIVE

DESIGNED: McELHATTAN
DRAWN: McELHATTAN CHECKED: SOMMERS

SCALE	DATE	DRAWING NO.	SHEET
1"=20'	1/24/02		3 OF 4

DR. 15 (16631)