■ CONDUCTOR SCHEDULE

AWG	CIRCUIT		1	2	3	4	5	6	7
12 CSC	POLE 1	ø1, ø2, ø2P			1	1	1	1	1
	POLE 2	ø1, ø4, ø6	1					2	2
	POLE 3	ø4, ø5, ø6, ø4P						2	2
	POLE 4	ø2, ø5, ø4P					1	1	1
	POLE 5	ø4, ø2P				1	1	1	1
	POLE 6	future							
	TOTAL		1		1	2	3	7	7
3 CSC	POLE 1	ø2 PPB			1	1	1	1	1
	POLE 2	–							
	POLE 3	ø4 PPB						1	1
	POLE 4	ø4 PPB					1	1	1
	POLE 5	ø2 PPB				1	1	1	1
	POLE 6	future							
	TOTAL				1	2	3	4	4
#12	IISNS		2				2		
#10	LUMINAIRE		2			2	2		
DLC	ø2				1	1	1	1	1
	ø6							1	1
	TOTAL				1	1	1	2	2
VIDEO DETECTION CABLE			1				1	3	3
VIDEO DETECTION POWER CABLE			1				1	3	3
EVP CABLE (3M MODEL 138 CABLE)			1				1	3	3
CONDUIT SIZE			3"	2"	3"	3.5"	2-3"	2-4"	2-4"
PERCENT FILL			11	0	7	11	12	15	15

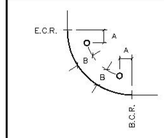
■ No. 3 & 12 CONDUCTOR CABLE SHALL NOT BE SPLICED IN PULL BOXES.

PHASE DIAGRAM

		NOT USED	
ø1	ø2	ø3	ø4
		NOT USED	NOT USED
* ø5	ø6	ø7	ø8

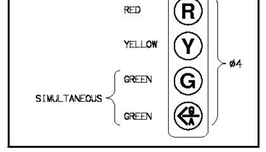
AVENIDA VISTA HERMOSA
DETECTOR DESIGN SPEED = 45 MPH
* = U-TURN MOVEMENT

POLE LOCATION DETAIL



EXACT LOCATION APPROVED BY ENGINEER IN THE FIELD

DETAIL "A"



DETAIL "B"
CUSTOM SIGN

NOTE
1. 36"X36" SIGN W/ BLACK LETTERING ON WHITE.
2. 4" BLOCK LETTERING.

LEGEND

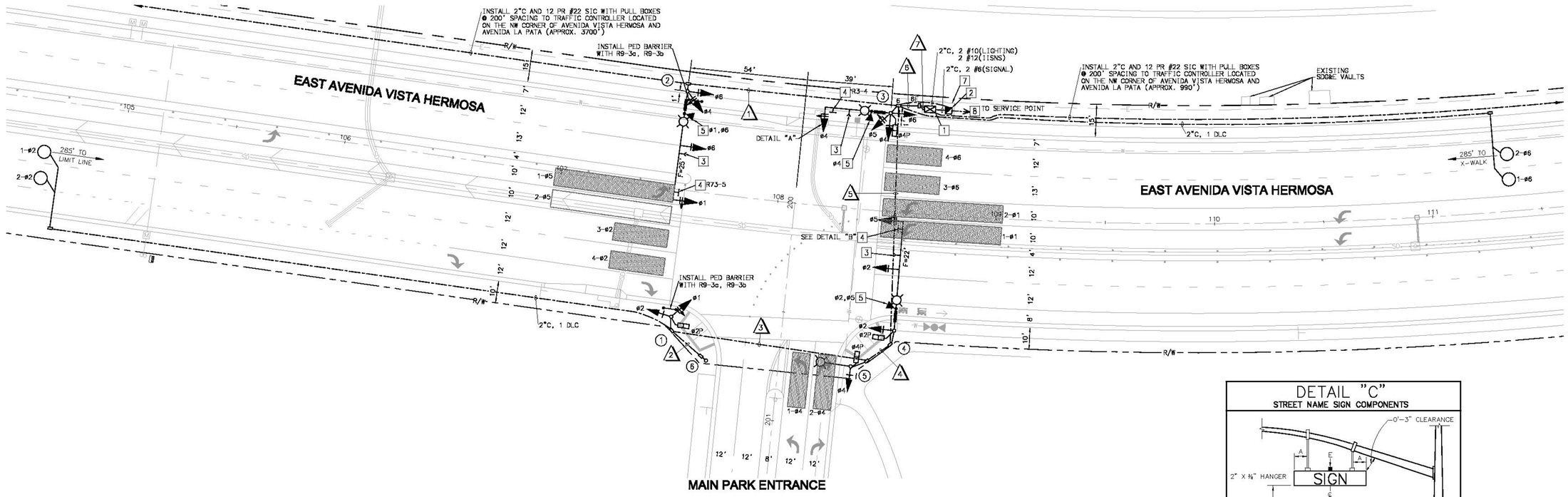
- VIDEO DETECTION ZONE
- VIDEO DETECTION CAMERA
- EVPE

POLE SCHEDULE

No	POLE DATA TYPE	HEIGHT	SIGNAL MA	H.P.S.V. LUM MA	WATTS	SIGNAL MOUNTING VEH	MA	PED	PED PUSH BUTTON PHASE	POLE QUAD	*POLE LOCATION A	B	▲TYPE "A" IISNS (DOUBLE FACE)
①	1A	10'	–	–	–	TV–2–T	–	SP–1–CS	2	N	1.5'	5'	–
②	29A–5–100	35'	50'	15'	310	SV–2–T	2–MAS	–	–	–	SEE PLAN		+Main Entry
③	19A–4–100	35'	30'	15'	310	SV–3–T	1–MAS	SP–1–CS	4	W	SEE PLAN		●EAST Avenida Vista Hermosa
④	29A–5–100	35'	50'	15'	310	SV–1–T	2–MAS	SP–1–CS	4	W	1.25'	5'	+Main Entry
⑤	15	30'	–	–	310	SV–1–T	–	SP–1–CS	2	N	5.6'	5'	–
⑥	■19A–4–100	–	–	–	–	–	–	–	–	–	1.5'	5'	–

POTHOLE ALL MAST ARM POLE LOCATIONS PRIOR TO ORDERING POLES.

* SEE POLE LOCATION DETAIL.
▲ PER CITY'S REQUIREMENTS
● SINGLE PANEL
■ INSTALL CONDUIT AND FOUNDATION ONLY.
+ STREET NAME SIGN TO BE DETERMINED AND APPROVED BY THE CITY PRIOR TO INSTALLATION



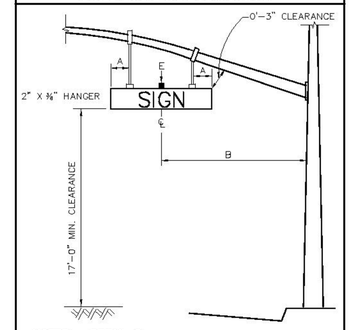
CONSTRUCTION NOTES (THIS SHEET):

1. INSTALL MULTISONICS 820A/OSAM 8 PHASE CONTROLLER, 3M OPTICOM(TM) EMERGENCY VEHICLE PRE-EMPTION SYSTEM, ITERIS EDGE 2 VIDEO DETECTION SYSTEM, 4EDGE 2 VIDEO PROCESSORS, 2 EXTENSION MODULES AND ALL OTHER MISCELLANEOUS AUXILIARY EQUIPMENT AND OPERATIONAL SOFTWARE FOR THE INTENDED OPERATION IN TYPE "P" STAINLESS STEEL CABINET (MODEL P44). CONTROLLER SHALL BE CAPABLE OF OPERATING IN A TIMED BASED COORDINATION MODE. CABINET DOOR SHALL FACE THE STREET. PLACE TOP OF FOUNDATION AT 18" ABOVE GRADE. ALL CABINET APPURTENANCES AND CABINET HARDWARE SHALL BE STAINLESS STEEL, INCLUDING FRAMES, BOLTS, ETC., AND
2. INSTALL TYPE III-CF STAINLESS STEEL SERVICE EQUIPMENT ENCLOSURE COMPLETE WITH MYERS POWER BACK SYSTEM 2000 (FULL OPERATION CAPABLE, TO BE INSTALLED FOR FLASH OPERATION) BATTERY BACK-UP SYSTEM AND THE FOLLOWING CIRCUIT BREAKERS: ONE 120V-100A (MAIN), ONE 120V-50A (METERED SIGNALS), ONE 120V-30A (UNMETERED LIGHTING), ONE 120V-15A (METERED IISNS) AND TWO 15A (SPARES). ALL CABINET HARDWARE SHALL BE STAINLESS STEEL, INCLUDING FRAMES, BOLTS, ETC.
3. INSTALL OPTICOM DETECTOR (MODEL 711 OR 712) WITH MAST ARM CLAMP FOR PHASE INDICATED.
4. INSTALL SIGN AS NOTED.
5. INSTALL ITERIS EDGE 2 VIDEO DETECTION CAMERA ON MAST ARM WITH CABLE FROM VIDEO DETECTION CONTROLLER TO EACH CAMERA AS SPECIFIED BY THE MANUFACTURER. INSTALL 6' EXTENSION BRACKET FOR CAMERA.
6. CONTRACTOR SHALL COORDINATE WITH SDG&E PRIOR TO INSTALLATION OF CONDUIT AND CONDUCTORS.
7. CONSTRUCT 4" P.C.C PAD AROUND CONTROLLER CABINET (APPROX. 7' x 4.5') AND SERVICE ENCLOSURE CABINET (APPROX. 4' x 3.5'). PROVIDE 2' OF P.C.C. PAD BEHIND CABINETS.
8. FURNISH AND INSTALL 2" SERVICE CONDUIT AND PULLROPE (FROM THE SERVICE POINT TO THE ELECTRIC METER PEDESTAL) PER S.D.G.&E. REQUIRMENTS.

GENERAL NOTES (THIS SHEET):

1. ALL WORK, MATERIALS AND EQUIPMENT SHALL CONFORM TO THE REQUIREMENTS OF CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), THE CALIFORNIA DEPT. OF TRANSPORTATION, STANDARD PLANS AND STANDARD SPECIFICATIONS DATED MAY 2006 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 THEY MAY DAMAGE SUCH FACILITIES OR INTERFERE WITH THEIR SERVICE.
3. 48 HOURS PRIOR TO BEGINNING OF CONSTRUCTION, THE CONTRACTOR SHALL CONTACT CITY OF SAN CLEMENTE FOR INSPECTION AT 949-361-6131.
4. THE ENGINEER (CITY) SHALL APPROVE THE EXACT LOCATION OF ALL PULL BOXES, POLES, CONTROLLER AND LOOP DETECTION PLACEMENT IN THE FIELD PRIOR TO INSTALLATION.
5. ALL NEW CONDUIT BETWEEN ADJOINING PULL BOXES SHALL BE 2" SCHEDULE 40 PVC UNLESS SHOWN OTHERWISE.
6. ALL NEW PULL BOXES SHALL BE #5 UNLESS OTHERWISE NOTED AND SHALL BE INSTALLED AT A MAXIMUM OF 200' SPACING. COVERS SHALL BE FIBERLYTE TYPE AND MARKED "TRAFFIC SIGNAL."
7. A MINIMUM VERTICAL CLEARANCE FOR TEMPORARY OVERHEAD WIRING OF 18 FEET AND 10 FEET SHALL BE PROVIDED FOR VEHICLES AND PEDESTRIANS, RESPECTIVELY.
8. CONTRACTOR SHALL PROVIDE ALL NECESSARY TELEPHONE AND ELECTRICAL SERVICE LINES AND INTERCONNECT HOOK-UPS BETWEEN THE LOCAL CONTROLLER AND THE SYSTEM MASTER.
9. ALL PEDESTRIAN SIGNALS SHALL BE METAL TYPE "C" WITH TYPE "A" L.E.D. INDICATIONS WITH EGG-CRATE VISORS AND CLAMSHELL MOUNTINGS. SEE SPECIAL PROVISIONS.
10. PEDESTRIAN PUSH BUTTON SHALL BE TYPE B WITH 2" ACTUATOR BUTTON.
11. ALL VEHICLE INDICATIONS SHALL BE 12" WITH BACKPLATES. ALL RED, YELLOW AND GREEN INDICATIONS SHALL HAVE L.E.D. DISPLAY.
12. CONTRACTOR SHALL POTHOLE ALL UTILITIES AS DIRECTED BY ENGINEER.
13. CONTRACTOR SHALL AVOID DAMAGING EXISTING UTILITIES AND SHALL PROTECT IN PLACE EXISTING CONSTRUCTION. (SEE SPECIAL PROVISIONS)
14. TRAFFIC CONTROLLER CABINET FOUNDATION SHALL BE 18" ABOVE AND BELOW FINISHED GRADE.
15. INSTALL "CABINET DOOR OPEN" CIRCUIT IN CONTROLLER CABINET PER MANUFACTURERS SPECIFICATIONS.
16. THERE SHALL BE A MINIMUM 4.5' CLEARANCE BETWEEN CURB FACE AND CABINET BASE. WHERE SIDEWALK EXISTS, THE BACK OF CABINET SHALL BE AT THE BACK OF SIDEWALK.
17. THE CONTRACTOR SHALL CONTACT S.D.G.&E. (949) 361-8047 SIX(6) WEEKS PRIOR TO THE START OF CONSTRUCTION TO COORDINATE INSTALLATION OF SERVICE EQUIPMENT AND CONDUCTORS.
18. ALL EXISTING STREET LIGHTS AND MATERIAL SHALL BE SALVAGED TO CITY YARD: 390 AVE PICO, BLDG A, (949) 361-8347.

DETAIL "C"
STREET NAME SIGN COMPONENTS



NOTES – DETAIL C
A. 1'–6" MINIMUM
B. 10'–6" CENTERLINE OF SIGN TO FACE OF POLE (MINIMUM)
C. ALL SIGN MOUNTING HARDWARE TO BE STAINLESS STEEL.
D. STREET NAME SIGN AND MOUNTING HARDWARE SHALL BE PER CITY'S REQUIREMENTS.
E. PHOTOCELL
F. ALL STREET NAMES SHALL BE APPROVED BY THE CITY PRIOR TO FABRICATION.

SCALE: 1"=20'

IMPORTANT NOTICE
SECTION 4216–4217 OF THE GOVERNMENT CODE REQUIRES A DIG ALERT IDENTIFICATION NUMBER BE ISSUED BEFORE A PERMIT TO EXCAVATE WILL BE VALID FOR YOUR DIG ALERT ID NUMBER, CALL UNDERGROUND UTILITY NOTIFICATION **TOLL FREE 1–800–422–4133** TWO WORKING DAYS BEFORE YOU DIG.

UNDERGROUND STRUCTURES
ALL UNDERGROUND UTILITIES OR STRUCTURES REPORTED BY THE OWNER OR OTHERS AND THOSE SHOWN ON THE RECORDS EXAMINED ARE INDICATED WITH THEIR APPROXIMATE LOCATION AND EXTENT, THE OWNER BY ACCEPTING THESE PLANS OR PROCEEDING WITH IMPROVEMENTS PURSUANT THERETO AGREES TO ASSUME LIABILITY AND TO HOLD UNDERSIGNED HARMLESS FOR ANY DAMAGES RESULTING FROM THE EXISTENCE OF UNDERGROUND UTILITIES OR STRUCTURES NOT REPORTED TO THE UNDERSIGNED, NOT INDICATED ON THE PUBLIC RECORDS EXAMINED, THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITIES OF STRUCTURES SHOWN AND ANY OTHER UTILITIES OR STRUCTURES FOUND AT THE SITE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE OWNERS OF THE UTILITIES OF STRUCTURES CONCERNED BEFORE STARTING WORK.

APPROVED BY:

WILLIAM E. CAMERON, CITY ENGINEER DATE

PLAN CHECKED BY:

REVISIONS

NO.	DESCRIPTION	REVISED	APPROVED	DATE

JOB NO.: 55-100467
SCALE: AS SHOWN
DESIGNED BY: NWM

REGISTERED PROFESSIONAL ENGINEER — LAURIE S. EISENHART — No. 68233 Exp. 09-30-09 — CIVIL — STATE OF CALIFORNIA

PLANS PREPARED BY:
RBF CONSULTING — PLANNING ■ DESIGN ■ CONSTRUCTION
5050 AVENIDA ENCINAS, SUITE 260
CARLSBAD, CALIFORNIA 92008-4366
760.476.0950 • FAX 760.476.0958 • www.RBF.com
PREPARED UNDER THE SUPERVISION OF:
L. SCOTT EISENHART R.C.E. # 68233 DATE:

CITY OF SAN CLEMENTE
DEPARTMENT OF BEACHES, PARKS, & RECREATION

EAST AVENIDA VISTA HERMOSA
AT
LA PATA PARK MAIN ENTRY
TRAFFIC SIGNAL PLAN

DRAWING NO.:
SHEET NO.: 143 OF 178

BID SET

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