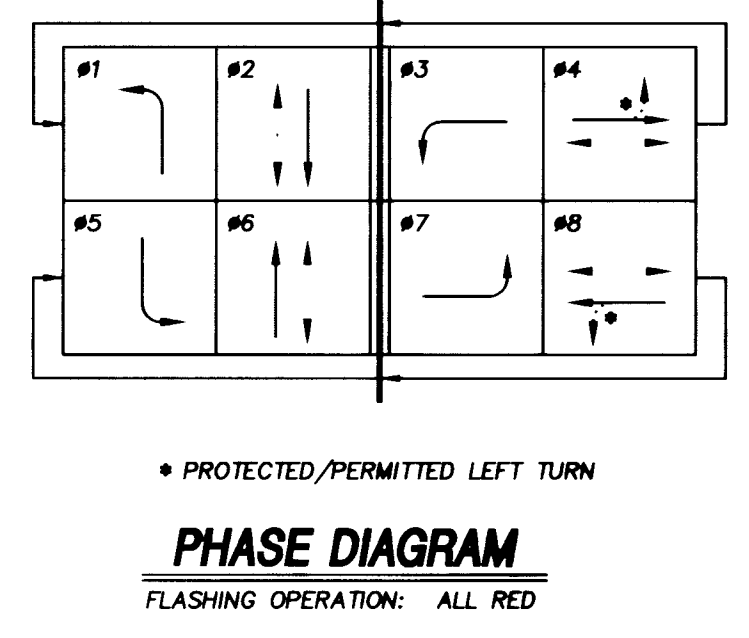
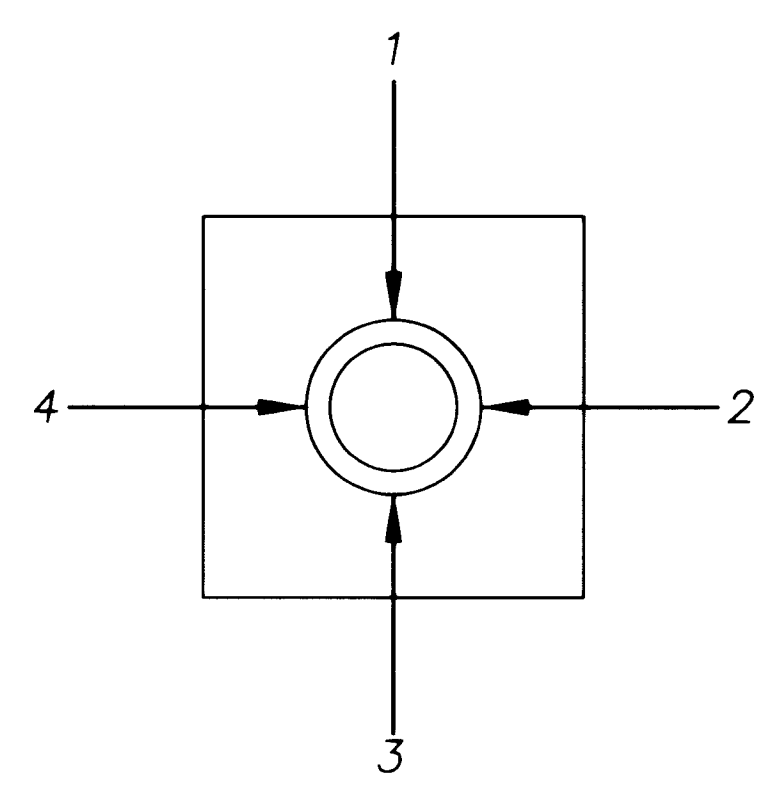


CONDUIT AND CABLE SCHEDULE			VIA CONDUIT																			
WIRE & CABLE	FROM	TO	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PER CLV REQUIREMENTS	TRANSFORMER	SERVICE PEDESTAL																				
4-No. 4 THW 1-No. 8 THW	SERVICE PEDESTAL	CONTROLLER																				
15 COND. #14 2-#10 THW	CONTROLLER	POLE A																				
25 COND. #14 2-#10 THW	CONTROLLER	POLE B																				
15 COND. #14 2-#10 THW	CONTROLLER	POLE C																				
25 COND. #14 2-#10 THW	CONTROLLER	POLE D																				
25 COND. #14 2-#10 THW	CONTROLLER	POLE E																				
25 COND. #14 2-#10 THW	CONTROLLER	POLE F																				
3 COND. #16 COAXIAL	CONTROLLER	VIDEO POLE B																				
3 COND. #16 COAXIAL	CONTROLLER	VIDEO POLE D																				
3 COND. #16 COAXIAL	CONTROLLER	VIDEO POLE E																				
3 COND. #16 COAXIAL	CONTROLLER	VIDEO POLE F																				
3 COND. #16 COAXIAL	CONTROLLER	VIDEO POLE D																				
3 COND. #16 COAXIAL	CONTROLLER	VIDEO POLE E																				
OPTICOM 3 PAIR #20	CONTROLLER	POLE D																				
OPTICOM 3 PAIR #20	CONTROLLER	POLE E																				
INTERCONNECT																						
CONDUIT SIZE			(4)(2) 3" 2"	(4)(2) 3" 2"	(2) 3"	(2) 3"	(2) 3"	(2) 3"	(2) 3"	(2) 3"	(2) 3"	(2) 3"	(2) 3"	(2) 3"	(2) 3"	(2) 3"	(2) 3"	(2) 3"	(2) 3"	(2) 3"	(2) 3"	(2) 3"
"N" = NEW, "E" = EXISTING			N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N

NOTE: A NO. 8 GREEN WIRE SHALL RUN FROM THE BASE OF EACH TRAFFIC SIGNAL POLE TO THE CONTROLLER CABINET AND FROM THE CONTROLLER TO THE SERVICE PEDESTAL.

CONDUIT RUN CARRIES EX. INTERCONNECT CABLE FROM CHARLESTON BLVD ALONG THE EAST SIDE OF RANCHO DRIVE TO THE CONTROLLER FOR THE TRAFFIC SIGNAL OF ALTA DR. AND RANCHO DR. THEN THE INTERCONNECT CONTINUE NORTH TO THE INTERSECTION OF RANCHO DR. AND RANCHO CIR. THROUGH CONDUIT RUN . ANOTHER INTERCONNECT WILL PROCEED EAST ALONG THE SOUTH SIDE OF ALTA DR. THROUGH CONDUIT RUN . REFER TO STRIPING, SIGNING AND LIGHTING PLANS (T1-T6) FOR INTERCONNECT INFORMATION.

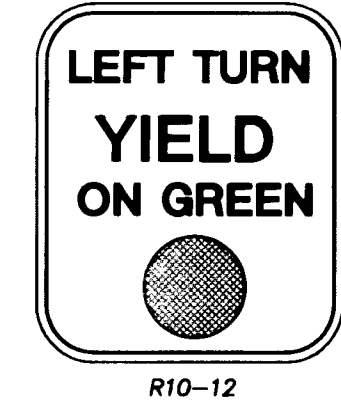


TRAFFIC SIGNAL NOTES:

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO ALL EXISTING UTILITIES. THE LOCATIONS OF UNDERGROUND UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES TO VERIFY IN THE FIELD THE LOCATIONS OF THEIR INSTALLATIONS 72 HOURS PRIOR TO CONSTRUCTION.
- ALL TRAFFIC SIGNAL INSTALLATIONS SHALL CONFORM TO THE UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS' CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA, VOLUME I AND II, ADOPTED BY THE REGIONAL TRANSPORTATION COMMISSION APRIL 8, 1992 WITH ALL SUBSEQUENT REVISIONS. (REVISIONS THRU JUNE 1997)
- SERVICE SHALL HAVE 1-60 AMP SINGLE POLE BREAKER FOR SIGNAL, AND ONE 40 AMP SINGLE POLE BREAKERS FOR STREET LIGHTS. SERVICE SHALL BE 200 AMP PADMOUNT.
- LINE SIDE OF METER TO BE WIRED WITH THREE #3/0 AWG THW. LOAD SIDE SHALL BE WIRED WITH FOUR #4 AWG THW (2 BLACK, 2 WHITE) AND ONE #8 AWG THW (GREEN).
- LUMINAIRES ON ALL SIGNAL POLES SHALL BE 400 WATT HIGH PRESSURE SODIUM CUTOFF (G.E. M400A) WITH MC-111 DISTRIBUTION. EACH LUMINAIRE SHALL HAVE AN INDIVIDUAL 1000 WATT P.E. CONTROL. FOR LUMINAIRES THERE SHALL BE 2(TWO)-#4 AWG THW CONDUCTOR FROM THE SERVICE TO THE CABINET. IN THE CABINET, THE #4 AWG THW CONDUCTORS SHALL BRANCH OFF INTO #10 AWG THW CONDUCTORS INDIVIDUALLY FUSED WITH 10 AMP FUSES. THERE SHALL BE NO SPLICES BETWEEN THE CABINET AND LUMINAIRES FIXTURES.
- THE INTERNALLY ILLUMINATED STREET NAME SIGNS SHALL BE WIRED TO THE LUMINAIRES PHOTO CELL FOR CONTROL WITH #10 AWG THW COPPER STRANDED WIRE (TYPICAL). IN THE EVENT THERE IS NO LUMINAIRE ON THE TRAFFIC SIGNAL POLE, THE 1000 WATT P.E. CONTROL SHALL BE MOUNTED ON THE POLE CAP.
- CHECK CONDUIT AND CABLE SCHEDULE FOR CONDUIT, CABLE, AND WIRE SIZE.
- PULLBOXES SHALL BE IN ACCORDANCE WITH UNIFORM STANDARD DRAWINGS NO. 404.110, NO. 404.120 AND NO. 404.130.
- TRAFFIC SIGNAL CABLE SHALL BE 15 OR 25 CONDUCTOR #14 AWG SOLID (TYPICAL) CABLE AND SHALL CONFORM TO IMSA SPEC. NO. 20-1. ALL VEHICLE DETECTION WILL BE BY VIDEO IMAGE DETECTION.
- ALL PEDESTRIAN PUSH BUTTON SIGNS SHALL BE 9" X 12" WITH FULL MOUNTING BRACKETS. ALL PUSH BUTTONS TO BE MOUNTED 36" ABOVE SIDEWALK. THE MAXIMUM HORIZONTAL REACH DISTANCE IS TO BE 24". PUSH BUTTONS ARE TO BE IN COMPLIANCE WITH ADA PER SUPPLEMENTAL SPECIFICATIONS 623.102.12. SIDEWALK RAMPS WILL BE ACCORDING TO U.S.D. NO. 235 (1-4) DATED 6-13-96.
- THE ROUTING AND TERMINATION OF CONDUITS AND THE PLACING OF POLES AND CABINETS SHALL BE AS INDICATED ON THE PLANS. ALL CHANGES SHALL BE APPROVED BY THE ENGINEER.
- MAST ARM R10-12 SIGNS TO BE ADJACENT (NO GAP) TO THE M-5 SIGNAL HEAD.
- INSTALL 8-PHASE CONTROLLER IN TYPE VII, "R" CABINET BUILT TO UNIFORM STANDARD SPECIFICATIONS, AND SPECIAL PROVISIONS. INSTALL CABINET NEAR R.O.W. LINE AS SHOWN ON THE PLANS.
- EITHER OETICS VANTAGE PLUS, VIDEOTRAC 900 SERIES OR AUTO SCOPE 2004 VIDEO DETECTION SYSTEM MUST BE INSTALLED. EACH VIDEO CAMERA WILL HAVE POWER (3/16 COND. PVC JACKETED) AND 8281 COAXIAL CABLE DIRECTLY FROM THE CABINET. CAMERAS WILL BE MOUNTED PER THE MANUFACTURER'S RECOMMENDATIONS AND PER CLV TRAFFIC ENGINEER APPROVAL. "BNC" CONNECTORS ARE THE ONLY ACCEPTABLE TERMINATION OF CABLES.
- IF THE IMPROVEMENTS NECESSITATE THE OBLITERATION, TEMPORARY CONSTRUCTION, TEMPORARY REMOVAL, OR RELOCATION OF ANY EXISTING TRAFFIC PAVEMENT MARKING, SUCH PAVEMENT MARKING SHALL BE RESTORED OR REPLACED AT THE CONTRACTORS EXPENSE TO THE SATISFACTION OF THE CITY.
- INTERCONNECT CABLE SHALL BE 25 PAIR OF #22 AWG SHIELD SPECIFICATION REA PE 39.
- THE CONTRACTOR SHALL INSTALL CROSSWALKS, STOP BARS AND SIGNS AS IDENTIFIED ON THE PLANS.
- PRIOR TO CONSTRUCTION, CONTRACTOR SHALL OBTAIN CURRENT STREET NAMES AND BLOCK NUMBERING FROM THE CITY OF LAS VEGAS COMMUNITY DEVELOPMENT.
- ALL PEDESTRIAN SIGNAL HEADS SHALL BE THE INCANDESCENT TYPE.
- TRAFFIC SIGNAL HEAD - RED, RED ARROW AND PEDESTRIAN "DON'T WALK" SHALL BE LED DIALIGHT, ECOLUX OR APPROVED EQUIVALENT
- ALL TRAFFIC SIGNAL POLES SHALL BE HOT-DIP GALVANIZED PER ASTM A.123 AND UNPAINTED.
- DUE TO THE INTERSECTION WIDENING, ABANDON AND REMOVE THE ENTIRE EXISTING TRAFFIC SIGNAL INCLUDING SIGNAL POLES, PULLBOXES AND UNDERGROUND CONDUITS.
- RETURN ALL REMOVED EQUIPMENT AND SIGNS TO CITY OF LAS VEGAS TRAFFIC/ELECTRIC FIELD OPERATION AT 3014 E. BONANZA ROAD. PROVIDE 24 HOURS ADVANCE NOTICE PRIOR TO DELIVERY.

POLE SCHEDULE

No.	LOCATION "A" STATION	POLE TYPE	SIG. ARM.		LUM. ARM.		SIGNALS (VEH.)		SIGNALS (PED.)		PED. PUSH BUTTON	REMARKS	
			QUAD.	LNG.	QUAD.	LNG.	TYPE	QUADRANT	TYPE	QUADRANT			QUADRANT
A	STA 9+28.77 44.69 LT	1-B							W-1T	3	3	RT	7' POLE
B	STA 9+04.04 26.99 LT	XX	3	25'	3	15'	(1)M-5 MAST ARM (1)M-2 MAST ARM (1)B-2T		W-OT	1	2	LT	#1 WITH ARROW LENSES INSTALL VELCO LOUVERS ON GREEN BALLS OF M-5 AND M-2 SIGNAL HEADS
C	STA 9+03.40 40.77 RT	1-A					(1)A-7 POST TOP		W-OT	2	2	RT	
D	STA 9+29.95 64.60 RT	SPECIAL	2	65'	2	15'	(4)M-2 MAST ARM (1)B-14T	4	W-OT	4	1	LT	#5 WITH ARROW LENSES SEE MANUFACTURER'S SPECIFICATIONS FOR POLE AND FOUNDATION DETAIL.
E	STA 10+76.37 59.54 RT	XX-A	1	50'	1	15'	(1)M-5 MAST ARM (1)M-2 MAST ARM (1)B-2T	3	W-3T	3	4	LT	#5 WITH ARROW LENSES
F	STA 10+66.85 46.17 LT	XX-A	4	60'	4	15'	(4)M-2 MAST ARM (1)B-14T	2	W-3T	2	3	LT	#1 WITH ARROW LENSES



STREET NAME SIGN NOTES:

- CONTRACTOR SHALL PROVIDE FOUR (4) INTERNALLY ILLUMINATED STREET NAME SIGNS WITH WIDE ANGLE PRISMATIC SIGN FACES, ALL CAPITAL LETTERS WITH CORRECT SIZE MOUNTING BRACKETS.
- TWO (2) "ALTA" 8' LENGTH, POLES D AND F, DOUBLE-FACED.
- TWO (2) "RANCHO" 8' LENGTH, POLES B AND E, DOUBLE-FACED.
- INSTALL STREET NAME SIGN PER CLV NEW STREET NAME SIGN STANDARD. THE HOT LEAD SHALL BE CONNECTED TO THE LEAD SIDE OF THE LUMINAIRE PHOTOELECTRIC CONTROL OF THE RELATED STREETLIGHT. NEUTRAL WIRE SHALL BE CONNECTED TO THE STREETLIGHT NEUTRAL AT THE HANDHOLE. USE No.12 THWN.



PANEL SIZE: 96" X 17.5"
IMAGE AREA IS 1" SMALLER TO ALLOW FOR THE SIGN FRAME
BACKGROUND COLOR: GREEN
LARGE TEXT IS 8" SERIES D UPPER
SMALL TEXT IS 5" SERIES C

CONSTRUCTION NOTES

- INSTALL No. 5 PULLBOX
- INSTALL No. 7 PULLBOX
- INSTALL EMERGENCY VEHICLE DETECTOR ON M-5 HEAD
- INSTALL R10-12 "LEFT TURN YIELD ON GREEN" SIGN
- INSTALL R3-BL MODIFIED SIGN AS SHOWN

Department of Public Works
ALTA/RANCHO IMPROVEMENTS PHASE II
ALTA / RANCHO TRAFFIC SIGNAL PLAN

REVISIONS

NO.	DATE	DESCRIPTION

ENGINEERING DESIGN SECTION
DESIGNED BY: WHORLACHER
CHECKED BY: WHORLACHER
DATE: DECEMBER 05, 2000
51736

901 N. Green Valley Pkwy.
Henderson, Nevada 89014
Telephone: 702/80-7275
Fax: 702/80-7280

PBS&J
ENGINEERING, PLANNING, SURVEYING, CONSTRUCTION SERVICES

PROFESSIONAL ENGINEER-STATE OF NEVADA
WAYNE HERLACHER
No. 10,739

DRAWING No. 55
T8
PLAN# 107-V3114 56