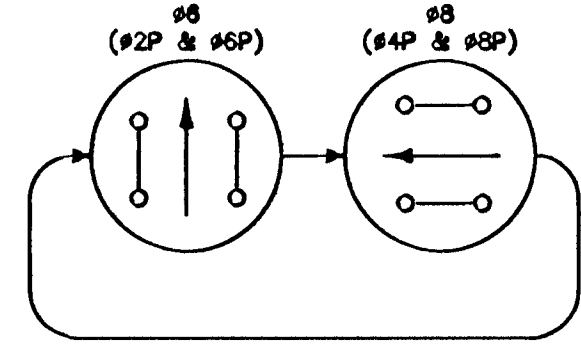


PHASE DIAGRAM



FLASH OPERATIONS - ALL RED OPTICOM PREEMPTION - #6, #8

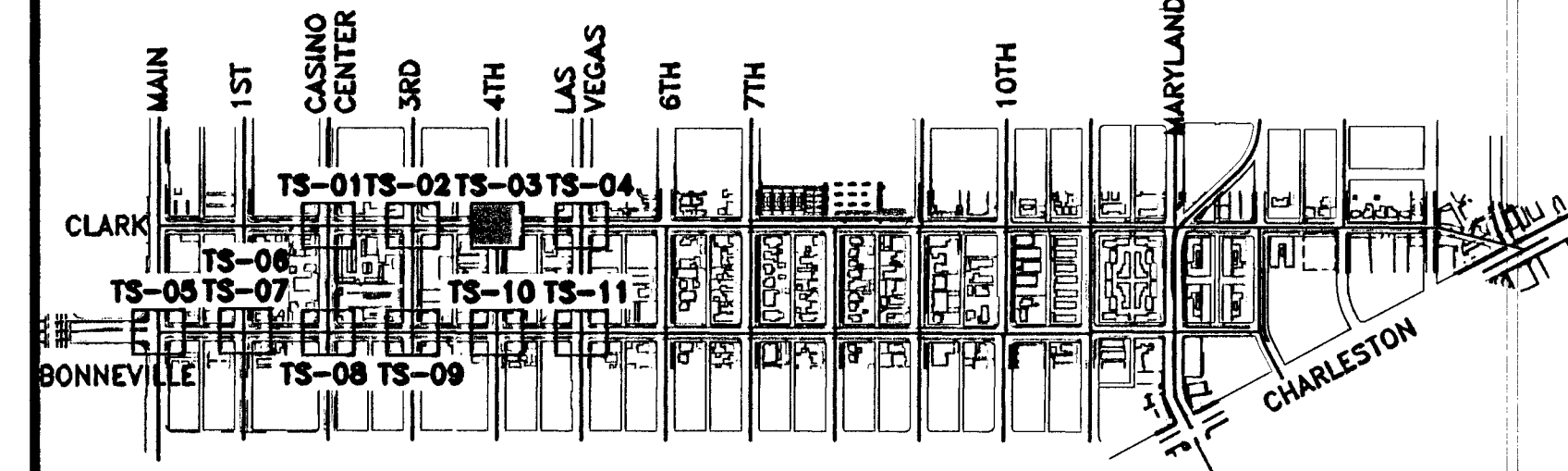
STREET NAME SIGN SCHEDULE

POLE	ORDINAL	STREET NAME	SUFFIX	BLOCK	DOUBLE SIDED	NEW/EXISTING
(A)	S	4TH	ST	400	YES	EXISTING
(B)	E	CLARK	AVE	400	YES	EXISTING

CONDUIT AND WIRE SCHEDULE

WIRE & CABLE	FROM	TO	CONDUIT *																
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
3 No. 3/0 AWG	SERVICE POINT	SERVICE METER																(E)	(E)**
2 No. 4 AWG	SERVICE METER	CONTROLLER																	
1 No. 4 AWG	SERVICE METER	T100 VAULT (INT. LIGHTING)																	
1 No. 8 AWG	SERVICE METER	T100 VAULT (INT. LIGHTING)																	
1-25 COND. No. 14	OPTICOM CABLE	CONTROLLER POLE A																	
1-25 COND. No. 14	OPTICOM CABLE	CONTROLLER POLE B	(E)														(E)	(E)	
1-25 COND. No. 14	CONTROLLER	POLE C																	
2-No. 10 COND.	T100 VAULT	POLE A																	
2-No. 10 COND.	T100 VAULT	POLE B															(E)	(E)	
2-No. 10 COND.	T100 VAULT	POLE C																	
LOOP LEAD-IN CABLE (#8)	CONTROLLER	DET PULLBOX	1	1	1	1													
LOOP LEAD-IN CABLE (#14)	CONTROLLER	DET PULLBOX	1	1	1	1													
1-15 COND. No. 14	CONTROLLER	POLE E																	
1-25 COND. No. 14	POLE B	POLE F															(E)	(E)	
1-15 COND. No. 14	CONTROLLER	POLE D	(E)	(E)													(E)	(E)	
1-No. 8 (GREEN)	T100 VAULT TO POLES		(E)	2	-	2	2	1	-	1	1	(E)	(E)	(E)	(E)	(E)	(E)**	1	
PULL ROPE	(NUMBER AS SHOWN)		(E)	3	1	5	3	1	1	3	1	(E)	(E)	(E)	(E)	(E)	(E)**	1	

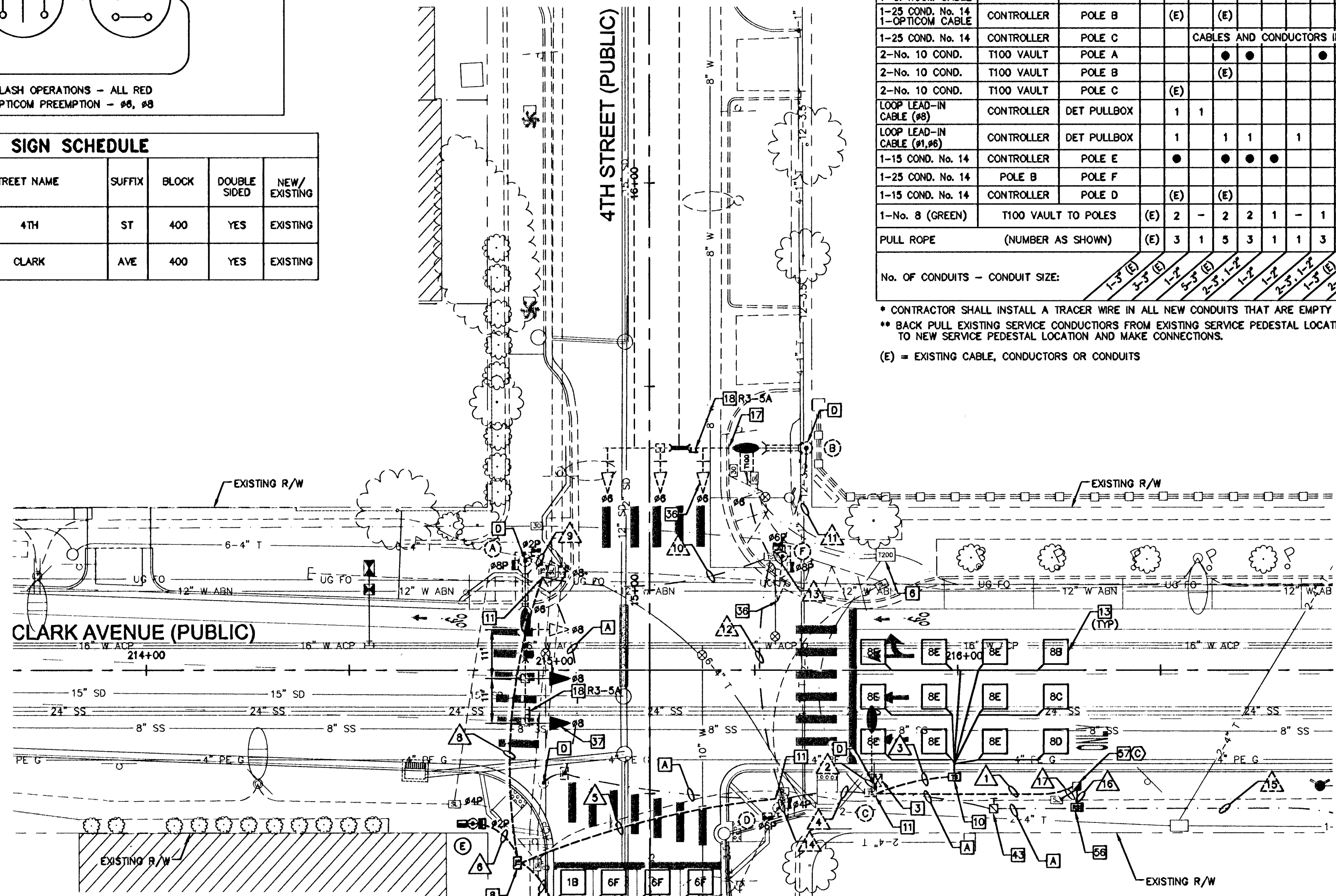
No. of Conduits - Conduit Size:
 * CONTRACTOR SHALL INSTALL A TRACER WIRE IN ALL NEW CONDUITS THAT ARE EMPTY (NO CONDUCTORS/CABLING).
 ** BACK PULL EXISTING SERVICE CONDUCTORS FROM EXISTING SERVICE PEDESTAL LOCATION AND REPULL CONDUCTORS IN NEW CONDUIT TO NEW SERVICE PEDESTAL LOCATION AND MAKE CONNECTIONS.
 (E) = EXISTING CABLE, CONDUCTORS OR CONDUITS



KEY MAP

CONSTRUCTION NOTES (TS SHEETS ONLY)

- EXISTING 200 AMP 120/240 VAC SERVICE PEDESTAL (SEE SHEET TS-13).
- EXISTING POLE-MOUNTED TRAFFIC SIGNAL CABINET ASSEMBLY. CONTRACTOR SHALL PREPARE AS-BUILT DRAWINGS UPON COMPLETION OF PROJECT DETAILING ANY CHANGES TO THE CONTROLLER CABINET OR OPERATION.
- TYPE 200 VAULT MARKED "FIBER OPTIC" (SEE SL SHEETS FOR INTERCONNECT AND STREET LIGHTING EQUIPMENT AND DETAILS).
- FURNISH AND INSTALL No. 7 PULL BOX MARKED "TRAFFIC SIGNAL" IN ACCORDANCE WITH CCAUSD No. 404.130 AND 404.140.
- FURNISH AND INSTALL No. 5 PULL BOX MARKED "TRAFFIC SIGNAL" IN ACCORDANCE WITH CCAUSD No. 404.120 AND 404.140.
- INTERCEPT EXISTING CONDUIT OR PULL BOX AND INSTALL NEW CONDUIT.
- ALL VEHICLE SIGNAL INDICATIONS AND PEDESTRIAN SIGNAL INDICATIONS SHALL BE SUPPLIED AND INSTALLED WITH LIGHT EMITTING DIODE (LED) SIGNAL MODULES.
- FURNISH AND INSTALL 6"x6" MULTIPLE LOOP SYSTEM (SEE SHEET TS-13 FOR LOOP LAYOUT AND DETAILS).
- FURNISH AND INSTALL INTERNALLY-ILLUMINATED "ONE WAY" SIGN ON MAST ARM. SEE "ONE WAY" SIGN DETAIL (SHEET TS-12) AND SIGN SCHEDULE (THIS SHEET) FOR DETAILS.
- FURNISH AND INSTALL SIGN ON MAST ARM. SEE SIGN SCHEDULE (THIS SHEET) FOR SIGN DESIGNATION AND SIZE.
- PEDESTRIAN PUSH BUTTONS SHALL BE AUDIBLE/TACTILE TYPE.
- PEDESTRIAN SIGNAL HEADS SHALL BE COUNTDOWN TYPE.
- REPLACE GREEN BALL INDICATION WITH GREEN UP ARROW INDICATION (SEE SHEET TS-12 FOR DETAIL).
- FURNISH AND INSTALL NEW SIGNAL HEAD WITH GREEN UP ARROW INDICATION (SEE SHEET TS-12 FOR DETAIL).
- RELOCATE AND REINSTALL 200 AMP 120/240 VAC SERVICE PEDESTAL IN ACCORDANCE WITH CLV AND NV ENERGY REQUIREMENTS (SEE SHEETS DM-05 AND TS-13).
- INTERCEPT EXISTING SERVICE CONDUIT AND INSTALL NV ENERGY RS-1 PULL BOX PER NV ENERGY REQUIREMENTS.
- REINSTALL SERVICE PEDESTAL ON NEW FOUNDATION (SEE SHEET TS-13 FOR PEDESTAL EQUIPMENT).
- ABANDON EXISTING.
- SEE DEMOLITION SHEETS (DM) FOR DEMOLISHED, RELOCATED AND/OR SALVAGED EQUIPMENT.



SIGN SCHEDULE

CONSTRUCTION NOTE	18	17
SIGN ILLUSTRATION		
SIGN DESIGNATION DIMENSIONS	R3-5A 30"x36"	SPECIAL (RIGHT) 72"x17.5"
POLE*	(A) (B)	(B)

* (X) = EXISTING SIGN, (N) = NEW SIGN

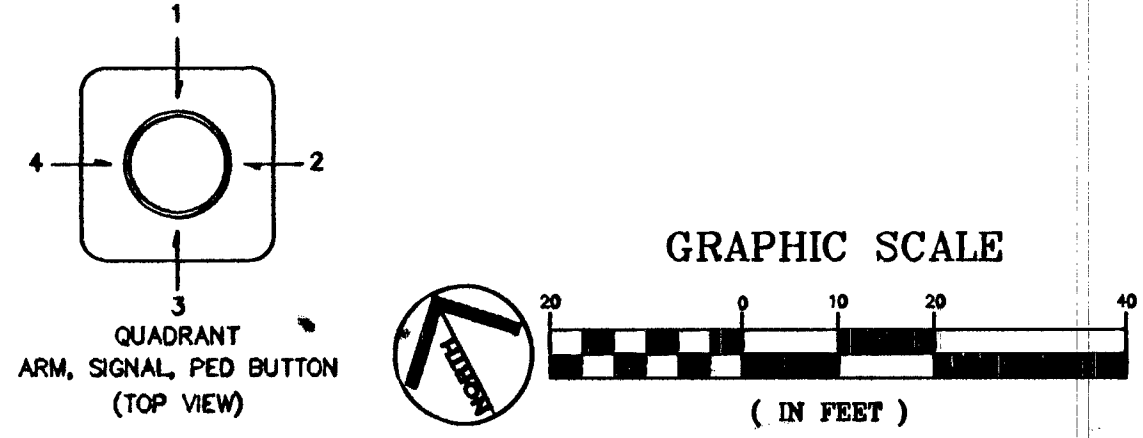
POLE AND EQUIPMENT SCHEDULE

POLE	STATION AND OFFSET	TYPE FOUND	MAST ARM		LUMINAIRE		VEHICLE SIGNALS		PEDESTRIAN SIGNALS		PEDESTRIAN PUSH BUTTON		EMERGENCY VEHICLE DETECTOR	REMARKS
			QUAD	LENGTH	QUAD	LENGTH	TYPE	QUAD	TYPE	QUAD	PHASE	ARROW		
(A)	4TH STREET EXISTING	XX 30' (E)	3	40' (E)	3	15' (E)	M-2 (R) (2) M-2 (N) B-2T (E)	MA 1	W-3T (E)	1	#2 R (E) #8 L (E)	3	1	ONE-WAY (E) [D] [12] [18] [57]
(B)	4TH STREET EXISTING	XX 30' (E)	4	45' (E)	4	15' (E)	(3) M-2 (R)	MA	-	-	-	-	-	ONE-WAY (E) [D] [12] [17] [18] [30] [33]
(C)	4TH STREET EXISTING	XX-A 30' (E)	-	-	1	15' (E)	-	-	-	-	-	-	-	[D] [3]
(D)	4TH STREET EXISTING	I-B 7' (E)	-	-	-	-	-	-	W-2T (E)	3	#4 R (E) #8 L (E)	1	4	-
(E)	4TH STREET STA 14+43, 44± LT **	I-B 7' (E)	-	-	-	-	-	-	W-2T (N)	TOP	#2 R (N) #4 L (N)	2	1	[12] [20] [21]
(F)	4TH STREET EXISTING	I-A 10' (E)	-	-	-	-	A-2T (E)	-	W-2T (E)	2	#8 R (E) #8 L (E)	4	3	-

SEE CLARK COUNTY AREA UNIFORM STANDARD DRAWINGS (CCAUSD) FOR POLE, POLE FOUNDATION, SIGNAL MOUNTING HARDWARE AND OTHER DETAILS RELATED TO SIGNAL POLE INSTALLATION.
 * ALL POLES, MAST ARMS, AND LUMINAIRES SHALL CONFORM TO THE CITY OF LAS VEGAS CENTENNIAL STANDARDS.
 ** CONTRACTOR TO STAKE FOUNDATION LOCATIONS FOR APPROVAL BY RESIDENT ENGINEER PRIOR TO CONSTRUCTION. CONTRACTOR TO POTHOLE NEW FOUNDATION LOCATIONS PRIOR TO CONSTRUCTION TO IDENTIFY ALL SUBSURFACE CONFLICTS. IF CONFLICTS ARE IDENTIFIED THE CONTRACTOR SHALL WORK WITH THE RESIDENT ENGINEER TO DETERMINE AN ALTERNATIVE FOUNDATION LOCATION.
 (E) - EXISTING EQUIPMENT
 (N) - NEW EQUIPMENT
 (R) - EQUIPMENT TO BE RELOCATED OR REVISED ACCORDING TO THIS PLAN.

GENERAL NOTES

- CONTRACTOR SHALL VERIFY TYPE AND LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTING SIGNAL POLE FOUNDATIONS.
- CONTRACTOR SHALL INSTALL RED MARKING TAPE 18" BELOW GRADE, ABOVE ALL PROPOSED CONDUITS.
- CONTRACTOR SHALL VERIFY ALL UTILITY CONFLICTS AND OBSTACLES PRIOR TO TRENCHING OR DIGGING.
- THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT EXISTING IMPROVEMENTS, INCLUDING LANDSCAPING FROM DAMAGE. ALL IMPROVEMENTS OR STRUCTURES DAMAGED BY THE CONTRACTOR'S OPERATION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE RESIDENT ENGINEER AT THE EXPENSE OF THE CONTRACTOR.
- CONTRACTOR TO COORDINATE LOCATIONS OF PROPOSED PULL BOXES TO BE ADJACENT TO SIDEWALK JOINTS AND SCORING PATTERN LINES. SEE LANDSCAPE SHEETS (LA) FOR SIDEWALK SCORING PATTERN.
- SEE SL SHEETS FOR SERVICE PEDESTAL, STREET LIGHTING AND INTERCONNECT DESIGN.
- EXISTING TRAFFIC SIGNALS MUST REMAIN OPERATIONAL AT ALL TIMES. THE CONTRACTOR SHALL PROVIDE UNIFORMED TRAFFIC CONTROL OFFICERS AT ALL TIMES WHEN THE TRAFFIC SIGNAL CANNOT REMAIN OPERATIONAL UNLESS ANOTHER METHOD IS APPROVED BY THE CITY OF LAS VEGAS TRAFFIC ENGINEER.
- AS PART OF THE TRAFFIC SIGNAL INSTALLATION THE CONTRACTOR SHALL REMOVE AND SALVAGE ALL EXISTING TRAFFIC SIGNAL EQUIPMENT (POLES, MAST ARMS, INTERSECTION LIGHTING, CONTROLLER CABINET, ETC.) AS IDENTIFIED ON THE PLANS. SUB-SURFACE AND SURFACE CONDITIONS SHALL BE REPAIRED OR REPLACED TO MATCH THE SURROUNDING AREA. ALL STREET LIGHT AND TRAFFIC SIGNAL EQUIPMENT THAT IS SALVAGED SHALL BE RETURNED TO THE CLV EAST SERVICE YARD. PROVIDE 24 HOUR NOTICE PRIOR TO DELIVERY. CALL 702-228-3661 TO SCHEDULE DELIVERY TIME. CONTRACTOR MUST HAVE A MEANS TO UNLOAD EQUIPMENT. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EQUIPMENT AND MATERIALS INCURRED IN THIS PROCESS.
- AS PART OF THE INTERNALLY ILLUMINATED ONE WAY SIGN INSTALLATION THE CONTRACTOR MAY BE REQUIRED TO RELOCATE OR ADJUST EXISTING MAST ARM MOUNTED SIGNING, SIGNAL HEAD TENONS OR OTHER EQUIPMENT. ALL ADJUSTMENTS SHALL BE APPROVED BY THE CITY OF LAS VEGAS TRAFFIC ENGINEER.
- PULL BOX AND VAULT LOCATIONS AND CONDUIT ROUTING ARE SCHEMATIC FOR THE PURPOSE OF CLARITY AND MAY DIFFER FROM ACTUAL INSTALLATION. FINAL LOCATION SHALL BE DETERMINED IN THE FIELD BY THE RESIDENT ENGINEER.



811 SAFETY ALERT
 Call Before You Dig
 Call before you UnderGround
 1-702-432-5300

DATE: 6/21/10
 SHEET REPLACEMENT
 SCALE: 1" = 20'
 DRAWN BY: AP
 DESIGNED BY: AP/RC
 CHECKED BY: RC/RF
 DATE: FEBRUARY 2010
 PROJECT: BONNEVILLE/CLARK ONEWAY COUPLETT PHASE 1 IMPROVEMENT PLANS
 SHEET: TS-03
 SHEET 62 OF 91
 107V5201

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 Engineering, Planning, and Environmental Consultants
 2080 E. Flamingo Road, Suite 210, Las Vegas, NV 89119
 PH: (702) 734-5666
 FAX: (702) 734-4949

DEPARTMENT OF PUBLIC WORKS
 TRAFFIC SIGNAL CLARK AVE AND 4TH ST

BID# 09-1730-37REV 3

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