FED. RD. REG. NO.	STATE	PROJECT NO.	COUNTY	SHEET NO.
9	NEVADA	M-6110(5)	CLARK	T-7

POLE SCHEDULE

POLE NO.	STATION	TYPE	SIGNAL ARM QUAD	SIGNAL ARM LGTH	LUM ARM QUAD	LUM ARM LGTH	SIGNALS-VEHICLE TYPE	SIGNALS-VEHICLE MOUNT	SIGNALS-VEHICLE QUAD	SIGNALS-PED MOUNT	SIGNALS-PED PHASE	PED BUTTON QUAD	PED BUTTON ARROW
(A)	EXIST. -REMOVE, SEE NOTE # 2												
(A)	"L1"118+13-52' LT.	35	3	45'	3	12'	1W5C 1W3C 1W3C 2W3C/5C	M-5 M-2 M-2 B-2a(S)	MAST ARM 1	WS-2	#2 #4	2 3	LT. RT.
(B)	EXISTING						1W3C	EXIST.	SEE NOTES #1 & #2				
(C)	EXISTING - REMOVE, SEE NOTE # 2												
(C)	5' WEST OF EXIST POLE C, 5' FROM FFC	35 SEE NOTE #6	1	50'	1	12'	1W3C 1W3C 1W3C 1W3C 2W3C/5C	M-2 M-2 M-2 M-2 B-2a(S)	MAST ARM 3				
(D)	EXIST. TO REMAIN IN PLACE												
(E)	EXIST. - REMOVE, SEE NOTE # 2												
(F)	RELOCATE SEE NOTE #3	EXIST. 1-B								EXIST.		EXIST.	
(G)	EXIST. - TO REMAIN IN PLACE												
(H)	EXIST. - TO REMAIN IN PLACE												

POLE SCHEDULE NOTES

1. THE CONTRACTOR SHALL REMOVE THE EXISTING PHASE 3 & 8 SHAFT MOUNTED SIGNAL HEAD AND REPLACE WITH A PHASE 3, 1W3C SIGNAL HEAD WITH RED, YELLOW AND GREEN ARROWS.

2. THE CONTRACTOR SHALL REMOVE THE EXISTING POLES A, C, E, AND MISCELLANEOUS EQUIPMENT, AND RETURN THEM TO THE CITY OF LAS VEGAS. THE CONTRACTOR SHALL COORDINATE WITH CITY OF LAS VEGAS TRAFFIC ENGINEERING AND CONSTRUCTION SERVICES WITH REGARD TO DELIVERY OF EXISTING POLES AND EQUIPMENT.

3. THE CONTRACTOR SHALL RELOCATE EXISTING POLE F TO THE BACK OF SIDEWALK TO ALIGN WITH THE PROPOSED CROSSWALK LOCATIONS AS SHOWN.

4. CONTRACTOR SHALL RELOCATE THE EXISTING INTERNALLY ILLUMINATED STREET NAME SIGN ON EXISTING POLES A AND C TO NEW POLES A AND C, RESPECTIVELY. THE HOT LEAD SHALL BE CONNECTED TO THE LOAD SIDE OF THE ILLUMINIRE PE CONTROL OF THE RELATED STREET LIGHT. THE NEUTRAL WIRE SHALL BE CONNECTED TO THE STREET LIGHT NEUTRAL AT THE THRESHOLD. USE #12 THWN.

5. ONE R3-8(S) 30"X42" SIGN SHALL BE PROVIDED ON POLE (C). ONE R10-5d(S) 36"X45" SIGN SHALL BE PROVIDED ON POLE (A).

6. ALL TYPE 35 POLES WITH SIGNAL ARMS GREATER THAN 45 FEET IN LENGTH SHALL HAVE A POLE BASE AND FOUNDATION SIMILAR TO A TYPE 50 POLE (2-INCH ANCHOR BOLTS, 19-INCH BOLT CIRCLE, 2-INCH BASE PLATE, 13 FEET DEPTH FOUNDATION, ETC.) AS PER STD. PLANS SHEET T-30.1.17. TYPE 35 POLES WITH SIGNAL ARM LENGTHS OF 45 FEET OR LESS SHALL BE DETAILED AS SHOWN ON STD. PLANS SHEET T-30.1.13.

CONTROLLER NOTES

1. THE EXISTING CONTROLLER CABINET AND EQUIPMENT SHALL BE RELOCATED AS SHOWN. THE CONTRACTOR SHALL SCHEDULE HIS OPERATIONS IN ORDER TO MINIMIZE THE DOWN TIME OF THE TRAFFIC SIGNAL SYSTEM DURING THE RELOCATION OF THE EXISTING CONTROLLER AND THE RESTORATION OF SERVICE.

2. EACH LOOP DETECTOR LEAD-IN REPRESENTS A SEPARATE DETECTOR SENSORY UNIT OR CHANNEL - 13 REQUIRED (14 EXISTING).

ELECTRICAL SERVICE NOTES

1. THE CONTRACTOR SHALL RELOCATE THE EXISTING SERVICE PEDESTALS (ONE FOR THE TRAFFIC SIGNAL SYSTEM, ONE FOR THE STREET LIGHTING SYSTEM) AT THE BACK OF THE NEW SIDEWALK AS SHOWN. THE CONTRACTOR SHALL COORDINATE THE CHANGEOVER WITH NEVADA POWER COMPANY WITH REGARD TO THE LOCATION OF THE POWER SOURCE. THE NEVADA POWER COMPANY WILL BE RELOCATING THE EXISTING POWER POLE AS PART OF THIS PROJECT.

CONDUIT & CABLE SCHEDULE

RUN NO.	FROM	TO	CONDUIT SIZE	SIGNAL CABLE 10 CON (14 AWG)	SIGNAL CABLE 20 CON (14 AWG)	DET. LEADS LOOPS 2 CON (12 AWG)	LIGHTING CIR LUM. (10 AWG)	LIGHTING CIR FLASH (12 AWG)	INTERCONNECT	SERVICE
1	POWER SOURCE	RELOCATED TRAFFIC SIGNAL SERVICE PEDESTAL	1 - 2"							3-#3 2-#6 2-#10
2	RELOCATED SERVICE PEDESTAL	RELOCATED CONTROLLER	1 - 2"							
3	CONTROLLER	NEW P.B.	3 - 2"	1	2	6	4			
4	CONTROLLER	NEW POLE A	1 - 2"		1		2			
5	CONTROLLER	NEW P.B.	2 - 2"	1	1	5	2			
6	CONTROLLER	EXIST. P.B.	2 - 2"	1	1	1	2			
7	EXIST. P.B.	EXIST. POLE B	EX. 1-2"		1		2			
8	CONTROLLER	NEW . P.B.	3 - 2"	1	2	5	4		EX. SEE NOTE #8	
9	EXIST. P.B.	EXIST. P.B.	EX. 1-2"			3				
10	EXIST. P.B.	EXIST. P.B.	EX. 1-1½"			1				
11	EXIST. P.B.	EXIST. P.B.	EX. 1-2"	1	1	2	2		EX.	
12	EXIST. P.B.	NEW POLE C	1 - 2"	1	1		2			
13	NEW POLE C	EXIST. POLE G	EX. & NEW 1-1½"	1						
14	NEW P.B.	NEW P.B.	1 - 1½"			1				
15	EXIST. P.B.	NEW P.B.	1 - 1½"			2				
16	CONTROLLER	RELOCATED POLE F	1 - 2"	1						
17	EXIST. P.B.	EXIST. POLE D	EX. 1-2"	1	1		2			
18	EXIST. POLE D	EXIST. POLE H	EX. 1-1½"	1						
19	EXIST. P.B.	EXIST. P.B.	EX. 1-2"			1				
20	EXIST. P.B.	EXIST. P.B.	EX. 1-2"			1			EX.	
21	RELOCATED SERVICE PEDESTAL	EXIST. SERVICE PEDESTAL	1-1½"							3-#4
22	NEW P.B.	NEW P.B.	1 - 1½"			1				
23	CONTROLLER	SEE NOTE #3	1 - 2"						X	
24	POWER SOURCE	RELOCATED LIGHTING SERVICE PEDESTAL	1 - 2"							3-#0
25	SACRAMENTO SPLICE CABINET	NEW SPLICE CABINET	EX.						EX. see Note 8	
26	NEW SPLICE CABINET	RELOCATE CONTROLLER	1 - 2"						EX. see Note 8	
27	RELOCATED CONTROLLER	MARLOW CONTROLLER	EX.						EX. see Note 9	

CONDUIT/CONDUCTOR NOTES

1. ALL RUNS CONTAINING 120 VAC OR 240 VAC SHALL ALSO CONTAIN A BARE GREEN NO. 8 GROUNDED WIRE.

2. EXISTING RUN 13 CONTAINS EXISTING 1-1/2" CONDUIT AND WILL REQUIRE NEW 1-1/2" CONDUIT TO COMPLETE THE RUN AS SHOWN.

3. SEE SHEETS T-8 THROUGH T-11 FOR INTERCONNECT LOCATION AND RUNS FROM CHARLESTON BOULEVARD TO OWENS AVENUE

4. CONTRACTOR SHALL PROTECT EXISTING STREET LIGHT AND INTERCONNECT CONDUIT, WIRE AND CABLE FROM DAMAGE. ANY DAMAGE CAUSED BY THE CONTRACTOR'S OPERATION SHALL BE REPAIRED AT HIS EXPENSE.

5. CONTRACTOR SHALL REMOVE THE EXISTING PULL BOX AND CONSTRUCT AN ELECTRICAL MANHOLE FRAME AND COVER TO GRADE PER NDOT STANDARD PLAN T30.1.18.

6. THE CONTRACTOR SHALL PULL THE EXISTING INTERCONNECT BACK TO THE EXISTING PULL BOX AT THE JUNCTION OF RUNS 7, 8, 9 AND 11. THE EXISTING INTERCONNECT SHALL BE INSTALLED IN NEW RUN NO. 8 TO THE RELOCATED CONTROLLER LOCATION.

7. SPLICE LEADS FOR EXISTING LOOP DETECTORS "a", "i", AND "j" TO NEW DETECTOR CABLE IN EXISTING PULL BOXES.

8. THE CONTRACTOR SHALL INTERCEPT THE EXISTING CONDUIT RUN FROM THE SACRAMENTO SPLICE CABINET, (22), AND PLACE A SPECIAL JUNCTION CABINET IN THE NEW ISLAND AS SHOWN. NEW CONDUIT MAY BE REQUIRED TO RUN (23) TO THE SPECIAL JUNCTION CABINET. LOCATION OF RUN (23) IS UNKNOWN, CONTRACTOR SHALL VERIFY EXISTING ALIGNMENT. THE CONTRACTOR SHALL PULL THE EXISTING INTERCONNECT BACK TO THE SPECIAL JUNCTION CABINET. NEW 2" CONDUIT, (25), AND INTERCONNECT CABLE SHALL BE RUN FROM THE SPECIAL JUNCTION CABINET TO THE RELOCATED CONTROLLER.

9. THE CONTRACTOR SHALL RUN NEW 2" CONDUIT, (22), FROM THE RELOCATED CONTROLLER TO INTERCEPT THE EXISTING CONDUIT, (22), IN THE EXISTING MEDIAN. EXACT LOCATION OF THE EXISTING CONDUIT IS UNKNOWN, CONTRACTOR TO VERIFY. THE CONTRACTOR SHALL PULL THE EXISTING INTERCONNECT CABLE BACK TO AND INSTALL INTO THE NEW CONDUIT TO THE RELOCATED CONTROLLER.

GENERAL NOTES:

1. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING SUBSTRUCTURES, WHETHER SHOWN OR NOT, AND TO NOTIFY ALL UTILITY COMPANIES TO VERIFY IN THE FIELD THE LOCATION OF THEIR INSTALLATIONS 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL PROTECT ALL SUBSTRUCTURES FROM DAMAGE. THE EXPENSE OF REPAIR OR REPLACEMENT SHALL BE BORNE BY THE CONTRACTOR.

2. THE LOCATION OF CONTROLLER, PULL BOXES, AND CONDUIT RUNS SHALL BE WITHIN THE EXISTING RIGHT-OF-WAY.

3. SIGNAL STANDARDS, CONTROLLER, CONDUITS, AND PULL BOX LOCATIONS ARE APPROXIMATE ONLY. ACTUAL LOCATIONS TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

4. ALL CONSTRUCTION SHALL CONFORM TO THE STATE OF NEVADA, DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION) AND THE STATE OF NEVADA, DEPARTMENT OF TRANSPORTATION STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION, 1989.

5. CONTROLLERS AND CABINETS SHALL MEET THE REQUIREMENTS OF NEMA STANDARD PUBLICATION NO. TS1-1976, PARTS 2, 3, 4, 5, 6, AND 8, AND THE STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS AS DEFINED IN THE CONTRACT DOCUMENTS HEREIN.

6. ALL SIGNAL CABLE SHALL BE A 10, 15 AND/OR 20 CONDUCTOR (AS SHOWN IN THE CONDUIT AND CABLE SCHEDULE) #14 A.W.G. CABLE I.M.S.A. SPEC 20-1. ALL SIGNAL CABLE SHALL RUN FROM CONTROLLER CABINET TERMINALS TO VEHICLE SIGNAL TERMINAL COMPARTMENT WITHOUT SPLICES. SINGLE CONDUCTORS SHALL BE INSTALLED FROM VEHICLE SIGNAL TERMINAL COMPARTMENT TO PEDESTRIAN SIGNAL TERMINAL COMPARTMENT, PEDESTRIAN PUSH BUTTONS, AND MAST ARM SIGNALS AS REQUIRED.

7. PEDESTRIAN SIGNAL HEADS SHALL BE THE "MAN AND HAND" SYMBOL TYPES IN LIEU OF THE "WALK" AND "DON'T WALK".

8. PEDESTRIAN SIGNAL HEADS SHALL BE THE SOLID STATE NEON TYPES IN LIEU OF THE TRANSFORMER TYPES. (SEE SPECIAL PROVISIONS SECTION 623.02.39.)

9. LUMINARIES SHALL BE 120 VAC, 400 WATT HIGH-PRESSURE SODIUM LAMPS WITH BUILT-IN BALLAST. LUMINARIES SHALL BE SEALED AND FILTER TYPE AND SET FOR I.E.S. TYPE 3 DISTRIBUTION. LUMINAIRES SHALL HAVE INDIVIDUAL P.E. CONTROL.

10. UNLESS SHOWN OTHERWISE, #5 PULL BOXES SHALL BE USED AT LOCATIONS WHERE CONDUIT RUNS CONTAIN TRAFFIC SIGNAL CABLE. #3-1/2 PULL BOXES MAY BE USED AT OTHER LOCATIONS.

11. ALL EXPOSED CONDUIT SHALL BE OF A RIGID PVC (SCHEDULE 80) TYPE AND SHALL EXTEND TO A MINIMUM DEPTH OF 18-INCHES BEFORE CHANGING TO PVC.

12. ALL CONDUCTORS AND THEIR TERMINATION SHALL BE CLEARLY MARKED ON THE CABINET SCHEMATIC WIRING DIAGRAM.

13. ALL LENSES TO BE GLASS 12".

Deleted by C.O.#17
Interconnect terminated in Controller at request of City.

REVISIONS
1 C.O.#1 & LV Comments 5/17/90 FGAII

SCS CONSULTING ENGINEERS — RENO-SPARKS NEVADA, LAS VEGAS NEVADA, PHOENIX, ARIZONA

FRANKLIN G. ALVERSON II — REGISTERED PROFESSIONAL ENGINEER — STATE OF ALASKA — 04083 — CIVIL — 3-30-90

JOB NO.	990-02-2
DESIGNED	F.G.A.II
DRAWN	C.H.W.
CHECKED	A.T.
DATE	3-30-90

107V3989

STATE OF NEVADA
DEPARTMENT OF TRANSPORTATION

SIGNAL MODIFICATION
LAMB BLVD. - E. CHARLESTON BLVD.

66976