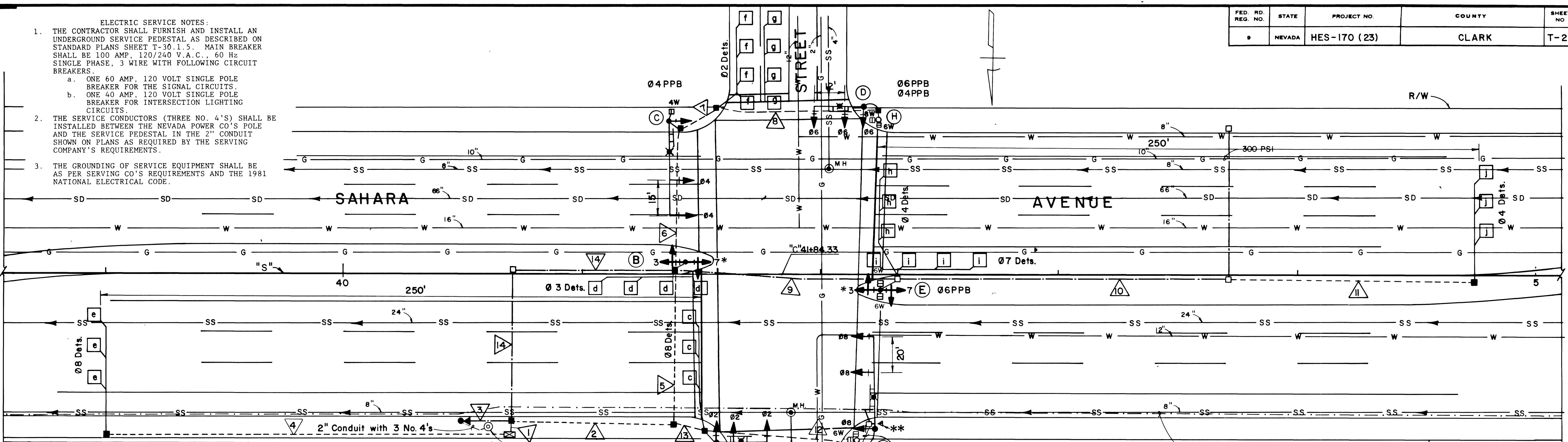


FED. RD. REG. NO.	STATE	PROJECT NO.	COUNTY	SHEET NO.
9	NEVADA	HES-170 (23)	CLARK	T-2

- ELECTRIC SERVICE NOTES:
- THE CONTRACTOR SHALL FURNISH AND INSTALL AN UNDERGROUND SERVICE PEDESTAL AS DESCRIBED ON STANDARD PLANS SHEET T-30.1.5. MAIN BREAKER SHALL BE 100 AMP, 120/240 V.A.C., 60 Hz SINGLE PHASE, 3 WIRE WITH FOLLOWING CIRCUIT BREAKERS:
 - ONE 60 AMP, 120 VOLT SINGLE POLE BREAKER FOR THE SIGNAL CIRCUITS.
 - ONE 40 AMP, 120 VOLT SINGLE POLE BREAKER FOR INTERSECTION LIGHTING CIRCUITS.
 - THE SERVICE CONDUCTORS (THREE NO. 4'S) SHALL BE INSTALLED BETWEEN THE NEVADA POWER CO'S POLE AND THE SERVICE PEDESTAL IN THE 2" CONDUIT SHOWN ON PLANS AS REQUIRED BY THE SERVING COMPANY'S REQUIREMENTS.
 - THE GROUNDING OF SERVICE EQUIPMENT SHALL BE AS PER SERVING CO'S REQUIREMENTS AND THE 1981 NATIONAL ELECTRICAL CODE.

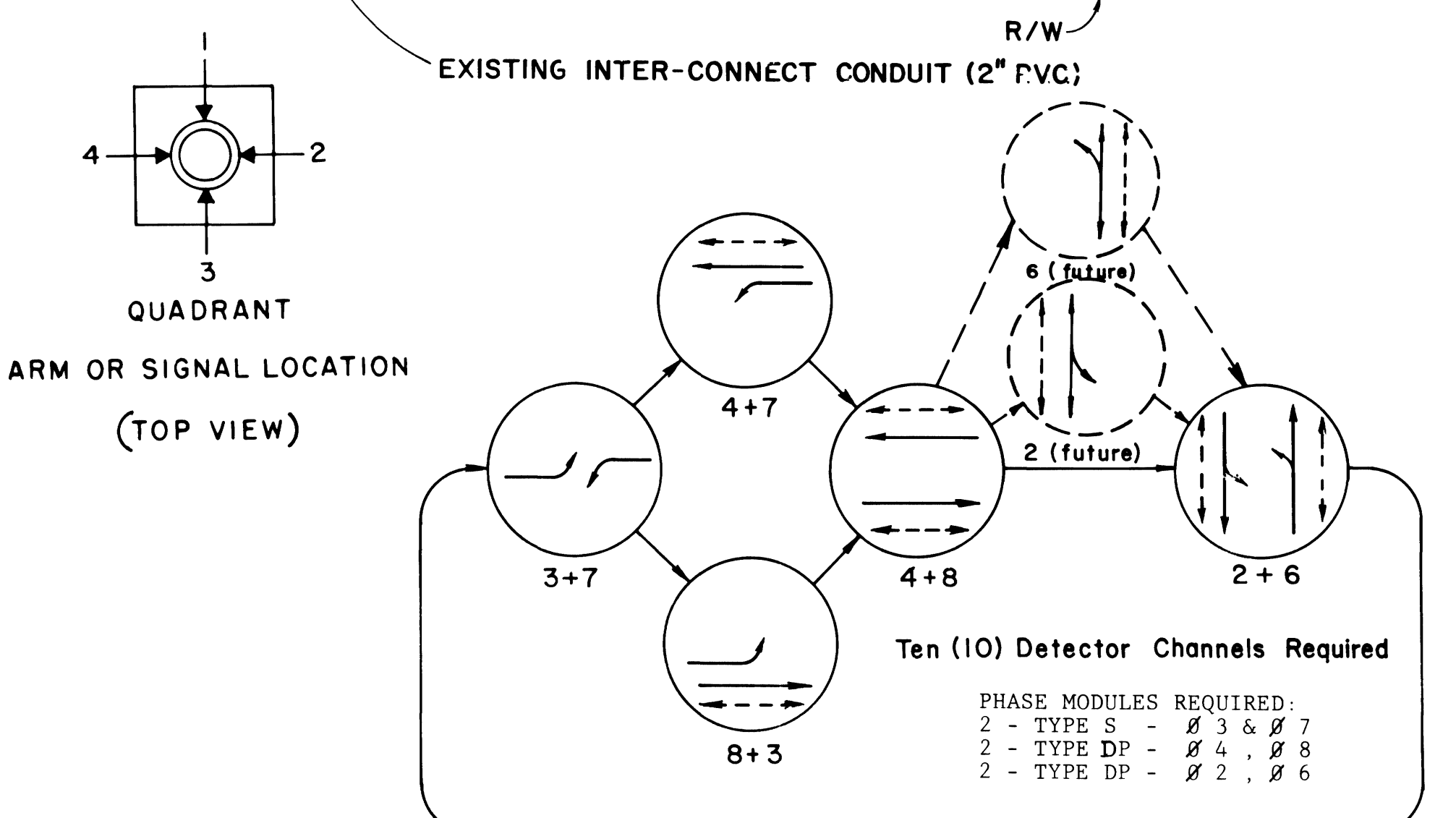


POLE SCHEDULE										
NO.	STATION	POLE			SIGNALS			VEH.		
		TYPE	SIGNAL ARM	LUM. ARM	TYPE	MOUNT	QUAD.	MOUNT	QUAD.	QUAD.
A	"S" 41+55 68' RT.	35	2	20	2	15	1W3C 1W3C 1W3C	M-2 M-2 M-2	MAST ARM MAST ARM MAST ARM	WCS-1 3 1
B	"S" 41+44 5' LT.	I-A	-	-	-	-	1W3C* 1W3C	A-6	POST TOP	-
C	"S" 41+35 67' LT.	35 MOD.	3	40	3	15	1W3C 1W3C 1W3C	M-2 M-2 M-2	MAST ARM MAST ARM MAST ARM	WCS-1 4 3
D	"S" 42+18 71' LT.	35	4	20	4	15	1W3C 1W3C 1W3C	M-2 M-2 M-2	MAST ARM MAST ARM MAST ARM	-
E	"S" 42+25 7' RT.	I-A	-	-	-	-	1W3C* 1W3C	A-6	POST TOP	WCS-2 2 4
F	"S" 42+22 65' RT.	35 MOD.	1	40	1	15	1W3C 1W3C 1W3C	M-2 M-2 M-2	MAST ARM MAST ARM MAST ARM	-
G	"S" 42+15 70' RT.	EXIST 1-B	-	-	-	-	-	-	-	WT-2 POST TOP 1 LT. RT.
H	"S" 42+25 65' LT.	EXIST 1-B	-	-	-	-	-	-	-	WT-2 POST TOP 3 LT. RT.

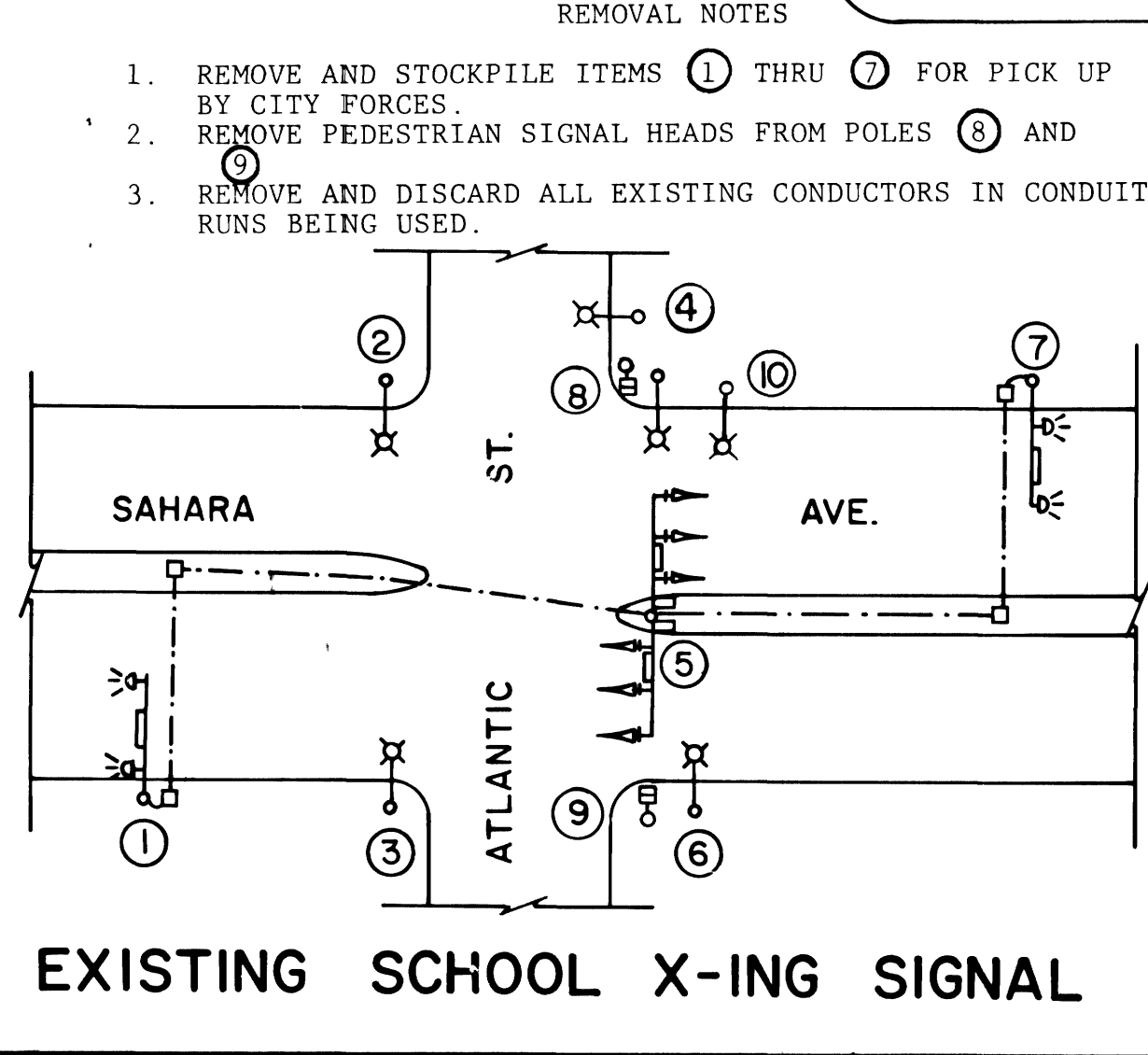
- POLE SCHEDULE NOTES
- POST TOP MOUNT 1W3C HEADS ON POLES (A) AND (E) SHALL BE ONE WAY PROGRAMMED VISIBILITY AS INDICATED BY ASTERISK (*). INTERNALLY ILLUMINATED STREET NAME SIGNS SHALL BE REQUIRED FOR POLES (A) AND (E). SIGNS FOR POLES (A) AND (E) SHALL READ "SAHARA AVE" AND SIGNS FOR POLES (B) AND (C) SHALL READ "ATLANTIC ST."
 - RIO-5 SIGNS WILL BE REQUIRED FOR POLES (C) AND (E). (24" X 30")
 - LUMINAIRES SHALL BE 400 WATT HIGH PRESSURE SODIUM 90 DEG. CUT OFF (G64N506 OR EQUAL) WITH MC-III DISTRIBUTION AND INTEGRAL BALLAST (120 VAC) AND INDIVIDUAL P.E. CONTROL.
 - SEE SHEET T-3 FOR APPLICABLE NOTES ON PRIME PAINTING OF SIGNAL POLES.
 - MOUNT PEDESTRIAN SIGNAL HEADS AND PUSH BUTTONS ON EXISTING TYPE 1-B POLES (G) AND (H).

- CONDUIT-CABLE SCHEDULE
- (A) INDICATES 10 CONDUCTOR NO 14 AWG CABLE
 - (B) INDICATES 20 CONDUCTOR NO 14 AWG CABLE
 - DETECTOR LEAD IN CABLE SHALL BE ONE TWISTED PAIR OF NO 12 AWG CABLE I.M.S.A. SPEC. 19-2. CONTRACTOR MAY SUBSTITUTE TWO CONDUCTOR NO. 16 AWG COPPER 19 X 29 STRANDED CABLE WITH INNER INSULATION 20 MIL HI DENSITY POLYETHYLENE CABLED WITH NON-ALUMINUM MYLAR SHIELD WITH 1/2 MIL POLYESTER FILM, WITH NO 20 AWG TINNED COPPER DRAIN WIRE AND THE OUTER JACKET OF 35 MIL HI DENSITY POLYETHYLENE, SIMILAR TO DETECTOR SYSTEMS LOOP LEAD IN CABLE DSI-1602 OR APPROVED EQUAL.
 - CONTRACTOR SHALL INSTALL 2" PVC CONDUIT FROM INTERCONNECT TERMINAL BOX ON N.W. CORNER TO EXISTING INTERCONNECT PULLBOX. (SEE NOTE #8.) INTERCONNECT CABLE SHALL BE SIX PAIR NO. 22 AWG CONDUCTOR (SEE SPECIAL PROVISIONS) INSTALLED FROM TERMINAL BLOCK CABINET TO CONTROLLER WITH NO SPLICING ALLOWED.
 - SIGNAL CONDUCTOR CABLE SHALL BE INSTALLED "HOME RUN" TERMINAL BLOCK TO CONTROLLER WITH NO SPLICING ALLOWED. CONDUCTORS IN POLES PAST TERMINAL BLOCKS SHALL BE INDIVIDUAL, COLOR CODED NO 14 AWG CONDUCTORS. IN-LINE FUSE HOLDERS SHALL BE INSTALLED IN THE CONTROLLER CABINET FOR INTERSECTION LIGHTING CONDUCTORS (TWO SEPARATE CIRCUITS)
 - SIGNAL CABLE SHALL CONFORM TO I.M.S.A. SPEC. 20-1
 - THE CONTRACTOR SHALL INSTALL A SPECIAL JUNCTION CABINET AND CONNECT THE LOCAL CONTROLLER INTERCONNECT CABLE TO MAIN INTERCONNECT CABLE. CABINET REQUIRED IS TESCO CATALOG NO. 2200 NR (43" X 20" X 11") WITH 3 TYPE 66 TELEPHONE STRIPS. (SEE SPECIAL PROVISIONS SEC. 623.02.09(C).)

- CONTROLLER NOTES
- CONTROLLER SHALL BE A TYPE 90 HOUSED IN A TYPE "R" CABINET WITH EXHAUST FAN AND FLOURESCENT LIGHT FIXTURE. CABINET SHALL BE PAINTED WHITE INSIDE AND OUT.
 - EACH LOOP DETECTOR LEAD-IN CABLE (IDENTIFIED BY A LOWER CASE ALPHABETICAL LETTER) REPRESENTS A SEPARATE SENSOR UNIT AS DESCRIBED IN "VEHICLE DETECTORS" SECTION OF THE SPECIAL PROVISIONS. SENSOR UNITS SHALL BE DETECTOR SYSTEM, CANOGA CONTROLS OR APPROVED EQUAL.
 - ALL NECESSARY AMPLIFIER UNITS, MODULES, LIGHT CONTROL UNITS, SWITCHES, FLASHERS, ETC., SHALL BE WIRED IN CABINET TO ACTUATE PHASE OPERATION AS SHOWN.
 - EACH CONTROLLER, INTERFACE UNIT, MODIFICATION KIT, OPTICOM UNIT AND OTHER EQUIPMENT SHALL BE COMPATIBLE WITH THE AREA WIDE TRAFFIC CONTROL SYSTEM INTERSECTION OPERATION AND MONITORING. THE FOLLOWING ITEMS ARE REQUIRED TO BE WIRED IN THE CONTROLLER CABINET TO BRING IT "ON LINE" WITH THE SYSTEM.
 - A LOCAL CONTROLLER INTERFACE UNIT (LCIU) OF THE TYPE AND MANUFACTURER DESCRIBED IN SECTIONS 623.02.31, SUBSECTION (L) OF THE SPECIAL PROVISIONS.
 - AN INTERFACE UNIT (MODIFICATION KIT) IS ALSO REQUIRED FOR CONTROLLERS CABINET THAT ARE NOT WIRED TO ACCEPT THE LCIU DESCRIBED ABOVE. THIS INTERFACE UNIT WILL REQUIRE HARNESSES AND CONNECTORS FOR THE LCIU AND PHONE JACKS FOR VOICE COMMUNICATION. THIS IS FURTHER DESCRIBED IN ABOVE REFERENCED SPECIAL PROVISIONS.
 - CONTROLLER AND CABINET SHALL MEET CURRENT NEMA STANDARDS AND ALL REQUIREMENTS OF SPECIAL PROVISIONS.
 - THE LCIU IN THE EXISTING CABINET AT THE SPRING MT. AND DECATUR RD. INTERSECTION (SHEET T-1) SHALL BE TRANSFERRED TO THE NEW CABINET IN LIEU OF A NEW UNIT.
 - SEE SHEETS T-3 FOR OPTICOM EQUIPMENT REQUIREMENTS FOR CONTROLLER CABINETS AT INTERSECTIONS SHOWN ON T-1.



CONDUIT-CABLE SCHEDULE								
RUN NO.	FROM	TO	CONDUIT SIZE	SIGNAL CABLE	DET. LEADS	LIGHTING CIRCUIT	GRND. WIRE	SERVICE
1	CONTROLLER	PULL BOX JCT. A	THREE 3"	XXXXXX	XXXXXX	2-#10	1-#8	2-#6
2	PULL BOX JCT. A	PULL BOX JCT. B	TWO 3"	XXXXXX	XXXXXX	2-#10	1-#8	X
3	SERVICE	PULL BOX JCT. A	EXISTING 2"	XXXXXX	XXXXXX	2-#10	1-#8	2-#6
4	CONTROLLER	PULL BOX TERMINUS A	1 1/2"	XXXXXX	XXXXXX	2-#10	1-#8	X
5	PULL BOX JCT. A	PULL BOX POLE B	3"	XXXXXX	XXXXXX	2-#10	1-#8	X
6	PULL BOX POLE B	PULL BOX JCT. C	3"	XXXXXX	XXXXXX	2-#10	1-#8	X
7	PULL BOX JCT. C	PULL BOX POLE D	3"	XXXXXX	XXXXXX	2-#10	1-#8	X
8	PULL BOX POLE D	PULL BOX POLE E	2"	XXXXXX	XXXXXX	2-#10	1-#8	X
9	PULL BOX POLE E	PULL BOX JCT. F	EXISTING 2"	XXXXXX	XXXXXX	2-#10	1-#8	X
10	PULL BOX JCT. F	PULL BOX JCT. G	EXISTING 2"	XXXXXX	XXXXXX	2-#10	1-#8	X
11	PULL BOX JCT. G	PULL BOX TERMINUS B	1 1/2"	XXXXXX	XXXXXX	2-#10	1-#8	X
12	PULL BOX POLE A	PULL BOX POLE F	3"	XXXXXX	XXXXXX	2-#10	1-#8	X
13	PULL BOX JCT. A	PULL BOX POLE A	3"	XXXXXX	XXXXXX	2-#10	1-#8	X
14	PULL BOX JCT. A	PULL BOX POLE B	EXISTING 2"	XXXXXX	XXXXXX	2-#10	1-#8	X



PHASE DIAGRAM

Flashing Operation Shall Be:
Phases 2,3,6,8 7 Red
Phases 4 & 8 Amber

STATE OF NEVADA
DEPARTMENT OF TRANSPORTATION

**NEW TRAFFIC SIGNAL SYSTEM FOR
SAHARA AVE. AT ATLANTIC ST.**