

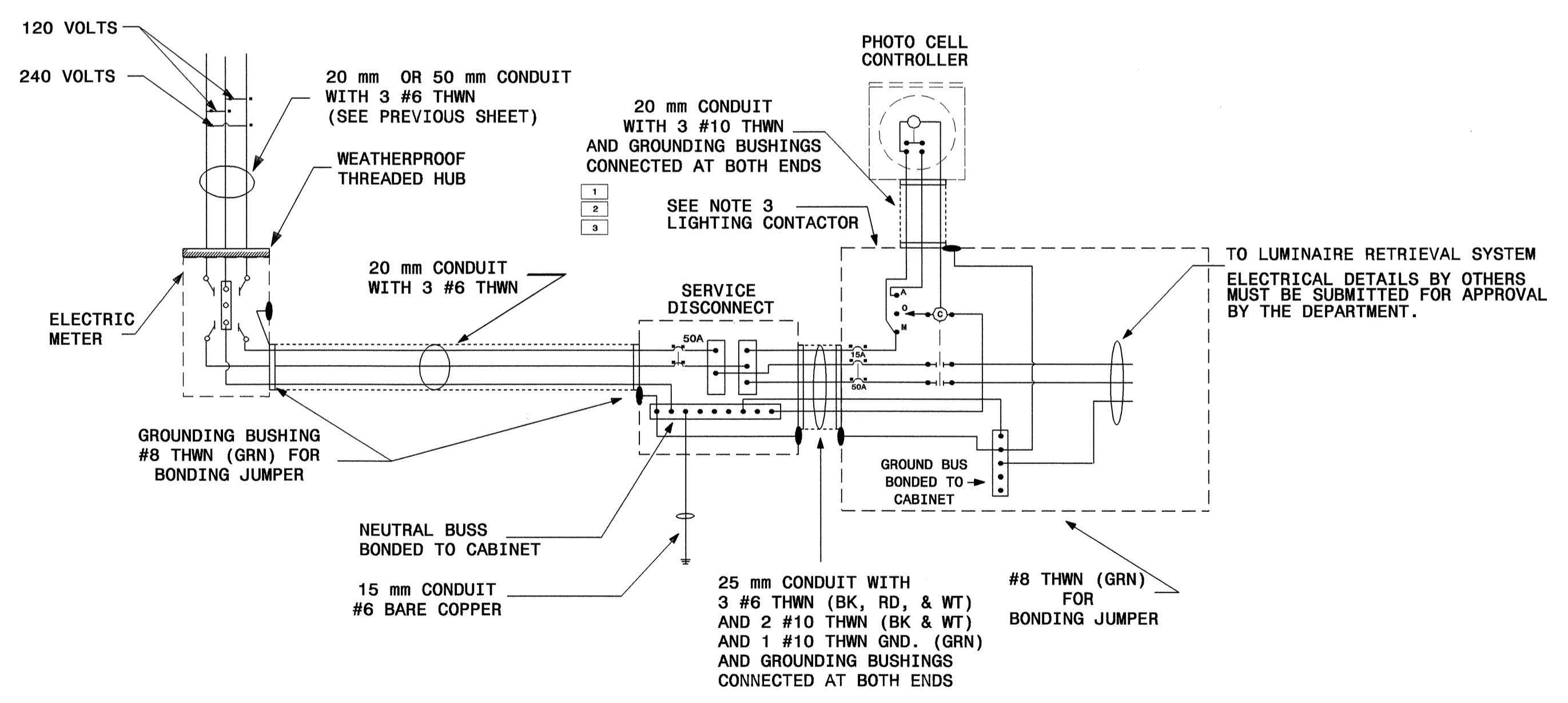


O.H. ASS'Y NO.	HIGH PRESSURE SODIUM LIGHTING SYSTEM																								MAXIMUM TOTAL WATTAGE	AMPERAGE								
	SIGN LOCATION "Z"								SIGN LOCATION "Y"								SIGN LOCATION "X"										SIGN LOCATION "W"							
	SIGN NO.	QTY. & WATT OF FIXTURES	TYPE	OFFSET (M)	B (M)	C (M)	D (M)	SIGN NO.	QTY. & WATT OF FIXTURES	TYPE	OFFSET (M)	E (M)	C (M)	D (M)	SIGN NO.	QTY. & WATT OF FIXTURES	TYPE	OFFSET (M)	F (M)	C (M)	D (M)	SIGN NO.	QTY. & WATT OF FIXTURES	TYPE			OFFSET (M)	G (M)	C (M)	D (M)				
A (-L. STA. 264+40)	2*	2/150	PV/GE	2.13	11.63	1.40	1.30	1	2/150	PV/GE	2.13	0.15	1.50	1.60															3840	7				
B (-L. STA. 270+50)	4*	2/150	PV/GE	2.08	5.91	1.70	1.80	3	2/150	PV/GE	2.08	0.15	1.50	1.50															3840	7				
C (-L. STA. 276+80)	7*	2/150	PV/GE	1.73	11.40	1.70	1.80	6*	1/150	PV/GE	1.73	0.79	1.65	n/a	5	2/150	PV/GE	1.73	1.10	1.70	1.90									5760	8			
D (-L. STA. 278+40)	10	2/150	PV/GE	1.93	10.44	1.90	1.90	9*	1/150	PV/GE	1.93	0.15	1.65	n/a	8*	2/150	PV/GE	1.93	0.15	1.80	1.80									5760	8			
E (-COBC- STA. 32+40)	12	2/150	PV/GE	2.23	10.40	1.80	1.90	11	2/150	PV/GE	2.23	0.15	1.40	1.50															3840	7				
F (-L. STA. 285+30)	14	2/150	PV/GE	2.03	11.15	1.90	1.90	13*	2/150	PV/GE	2.03	0.15	1.30	1.50															3840	7				
G (-L. STA. 292+40)	16	2/150	PV/GE	2.18	12.93	1.50	1.60	15*	2/150	PV/GE	2.18	0.15	1.30	1.50															3840	7				
H (-L. STA. 293+37)	18*	2/150	PV/GE	1.83	4.61	2.10	2.30	17	2/150	PV/GE	1.83	0.15	1.70	1.90															3840	7				
I (-L. STA. 303+40)	20*	2/150	PV/GE	1.83	10.10	2.10	2.30	19	2/150	PV/GE	1.83	0.15	1.70	1.90															3840	7				
J (-COBC- STA. 24+00)	21*	2/150	PV/GE	2.03	10.05	1.90	2.00	22	2/150	PV/GE	2.03	0.15	1.40	1.60															3840	7				
K (-COAD- STA. 28+00)	24*	2/150	PV/GE	1.93	9.90	1.90	2.00	23	2/150	PV/GE	1.93	0.15	1.50	1.70															3840	7				
L (-COAD- STA. 36+40)	26*	2/150	PV/GE	2.03	10.20	1.80	1.90	25	2/150	PV/GE	2.03	0.15	1.50	1.70															3840	7				

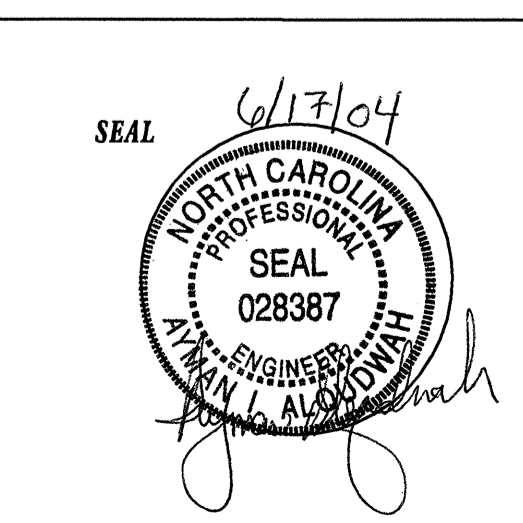
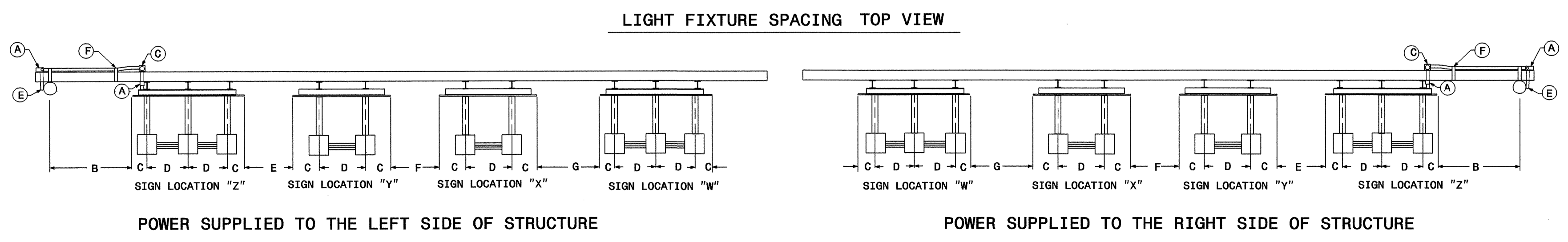
- NOTES:
- NAMEPLATE SHALL READ (1) "MAIN", (2) "LIGHTS", (3) "CONTROL".
 - CAULK ALL ENDS OF CONDUIT UNDERGROUND WITH A CAULKING COMPOUND APPROVED BY THE ENGINEER.
 - LABEL THREE POSITION SELECTOR SWITCH "MANUAL", "OFF", AND "AUTO".
 - STRAPS SHALL BE STAINLESS STEEL MATERIAL UNLESS OTHERWISE SPECIFIED.
 - THE CONTRACTOR SHALL USE G.E., HOLOPHANE PANEL-VUE (PV) OR SIGN-VUE II (SV), OR AN APPROVED EQUIVALENT FIXTURE. THE CONTRACTOR MAY REQUEST APPROVAL TO USE A FIXTURE THAT IS EQUAL TO OR EXCEEDS SPECIFICATIONS FOR THE G.E. OR HOLOPHANE FIXTURES. THE POINT-TO-POINT LIGHTING ANALYSIS WILL BE REQUIRED PRIOR TO THE APPROVAL OF A FIXTURE OTHER THAN THE ONE SPECIFIED. SEE N.C.D.O.T. STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES.
 - THE CONTRACTOR SHALL VERIFY THE LENGTH OF UNDERGROUND RUN ("H" DISTANCE) AND RE CALCULATE WIRE SIZE (UF WIRE) ACCORDING TO THE NEC (NOT MORE THAN 3% VOLTAGE DROP) FOR EACH OVERHEAD LIGHTING SYSTEM. THESE MEASUREMENTS AND WIRE SIZES SHALL BE SUBMITTED WITH THE CATALOG CUTS FOR APPROVAL.
 - THE CONTRACTOR SHALL PROVIDE AND INSTALL LIGHTING SYSTEM FOR ALL SIGNS, INCLUDING FUTURE SIGNS.
 - ALL UNDERGROUND DUCT SHALL BE INSTALLED BY THE CONTRACTOR USING MINIMUM 50MM DIAMETER RIDGED GALVANIZED STEEL OR RIDGED PVC HEAVY WALL CONDUIT.
 - TEST SYSTEM GROUNDING USING AN APPROVED METHOD. SYSTEM SHOULD MEASURE LESS THAN TWENTY (20) OHMS.
 - ALL ASSEMBLIES AND COMPONENTS SHALL BE UL APPROVED. INSTALLATION SHALL MEET NEC REQUIREMENTS AND ALL APPLICABLE LOCAL AND STATE CODES.
 - EACH SIGN SHALL HAVE ITS OWN CIRCUIT. MAX. 1920 WATTS PER CIRCUIT. LOAD MUST BE DISTRIBUTED EQUALLY BETWEEN THE TWO 120 VOLTS CIRCUITS. MAX. LOAD FOR BOTH 120 VOLTS CIRCUITS IS 7680 WATTS.
 - THE POSITION OF THE CIRCUIT NO. AND BREAKER NO. IS NOT THE SAME IN THE PANEL.
 - THE CONTRACTOR SHALL BE REQUIRED TO FURNISH ONLY THE APPROPRIATE NUMBER OF BREAKERS AND WIRE THAT IS REQUIRED IN ACCORDANCE WITH THE NUMBER OF CIRCUITS LISTED FOR A GIVEN LIGHTING SYSTEM.

* LUMINAIRES FOR THESE SIGNS SHALL BE TILTED 5 DEGREES BACK

- LEGEND
- (A) 20 mm STANDARD LB CONDULET.
 - (B) 20 mm LIQUID TIGHT FLEXIBLE METALLIC CONDUIT.
 - (C) 115 mm X 115 mm X 100 mm RSS-1 JUNCTION CONDULET.
 - (D) 20 mm WATERPROOF ADAPTER.
 - (E) 20 mm RIGID GALVANIZED CONDUIT.
 - (F) STAINLESS STEEL STRAPS.



WIRING SCHEMATIC



LIGHTING SYSTEM FOR OVERHEAD SIGN ASSEMBLIES WITH LUMITRAK (SHEET 2 OF 2)			
SCALE	NONE	N. C. DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS TRAFFIC ENGINEERING BRANCH	REVISIONS
DATE	03-17-04		
SIGNING TECHNICIAN			
SIGNING ELECTRICAL ENG	M. HOVIQUS		
SIGNING PROJECT ENG	A. ALQUDWAH		