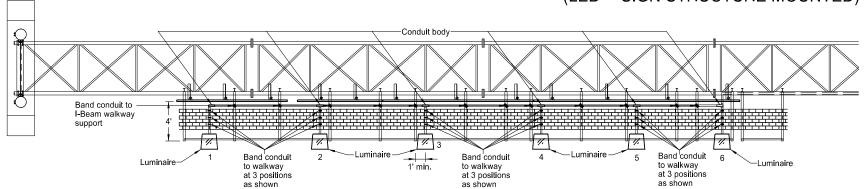
## OVERHEAD SIGN LIGHTING DETAILS (LED -- SIGN STRUCTURE MOUNTED)

Load Center

Ground Rod Detail



Ground Phase

Load Center Detail

-Breaker panel board. number of breakers

-Main circuit breaker with a rating not

greater than that of the panel board

-120x240 Volt

single phase, electric service

depends on the number of luminaires installed

to ground rod

Test switch to bypass photo cell-3 way switch, handy box,

3 No. 12 Type THW to photo cell-Photo cell not required if fed

from a feed point with a photo

cell or another system controlled

cover, and chase nipple

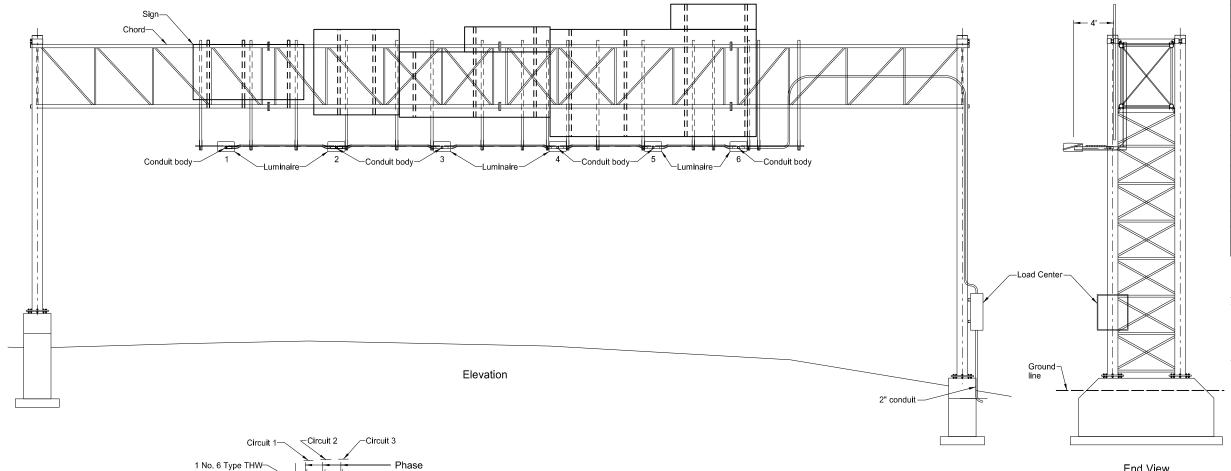
by a photo cell

Ground to cabinet

15 Amp-1 pole breaker—

50 Amp-2 pole breaker —

Plan



## NOTES:

Conduit: Attach conduit to sign structure using steel banding and/or conduit hangers. See sign lighting layout sheet(s) for feeder conduit layout.

Banding: Use ¾" width stainless steel with stainless steel buckles for banding.

Load Center: Provide load center of sufficient size to accommodate the required wiring, equipment, and feed conduit. See sign lighting layout sheet(s) for size of conduit.

Luminaires: Operate LED luminaires on 240 Volts unless shown otherwise on layout sheet(s). See sign lighting layout sheet(s) for number and location of luminaires.

Optics: Provide optical system with uniform distribution of 4000K to 5000K light.

Sign Structure Mounting: See layout sheet(s) for sign structure mounting details.

CONDUIT	SIZES	AND NUMBER OF	CONDUCTORS	
FROM LUMINAIRE TO LUMINAIRE	CONDUIT SIZE	NUMBER OF CONDUCTORS		
		FEEDER CONDUCTOR (No. 12 AWG)	GROUNDING CONDUCTOR (No. 12 THW)	
1 - 2	1¼"	2	1	
2 - 3	1¼"	4	1	
3 - 4	1¼"	6	1	
4 - 5	1¼"	8	1	
5 - 6	1¼"	10	1	
6 - 7	11/4"	12	1	
7 - 8	11/4"	14	1	
8 - 9	1½"	16	1	
9 - 10	1½"	18	1	
10 - 11	1½"	20	1	
11 - 12	2"	22	1	
12 - 13	2"	24	1	
13 - 14	2"	26	1	

Install the number of luminaires shown in the plans, unless the appropriate shop drawings require a different number. Then install that number of luminaires.

Use the conduit sizes shown in the conduit size table.

From the load center to the closest luminaire, use the size and number conduit and conductor shown as if running to the next sequential luminaire.

**End View** 

1/2" conduit —			
2" conduit	NORTH DAKOTA DEPARTMENT OF TRANSPORTATION		
6'		05-29-14	
		REVISIONS	
	DATE	CHANGE	
1/2" x 10' copperweld ground rod	10-17-17 8-28-19	Updated to active voice. New Design Engineer PE Stan	

This document was originally issued and sealed by Kirk J Hoff, Registration Number PE-4683, on 8/28/19 and the original document is stored at the North Dakota Department

of Transportation