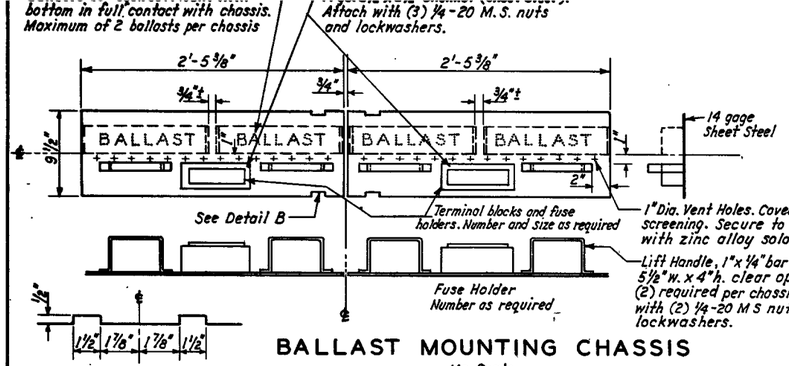


DETAIL "B"

BALLAST MOUNTING CHASSIS

No Scale

BALLAST NOTES

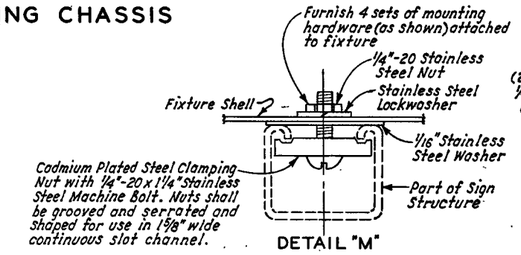
Each ballast shall be fused with a 1 1/4" x 1/4" slow-blow glass tube fuse - 2 1/2 amp. for 2-lamp ballast and 1 amp. for 1-lamp ballast.

Ballasts shall be rated at 300 ma.

Ballasts shall be secured by 8-32 machine screw studs soldered to chassis with nuts and lockwashers.

Fuseholders shall have insulating base and screw terminals.

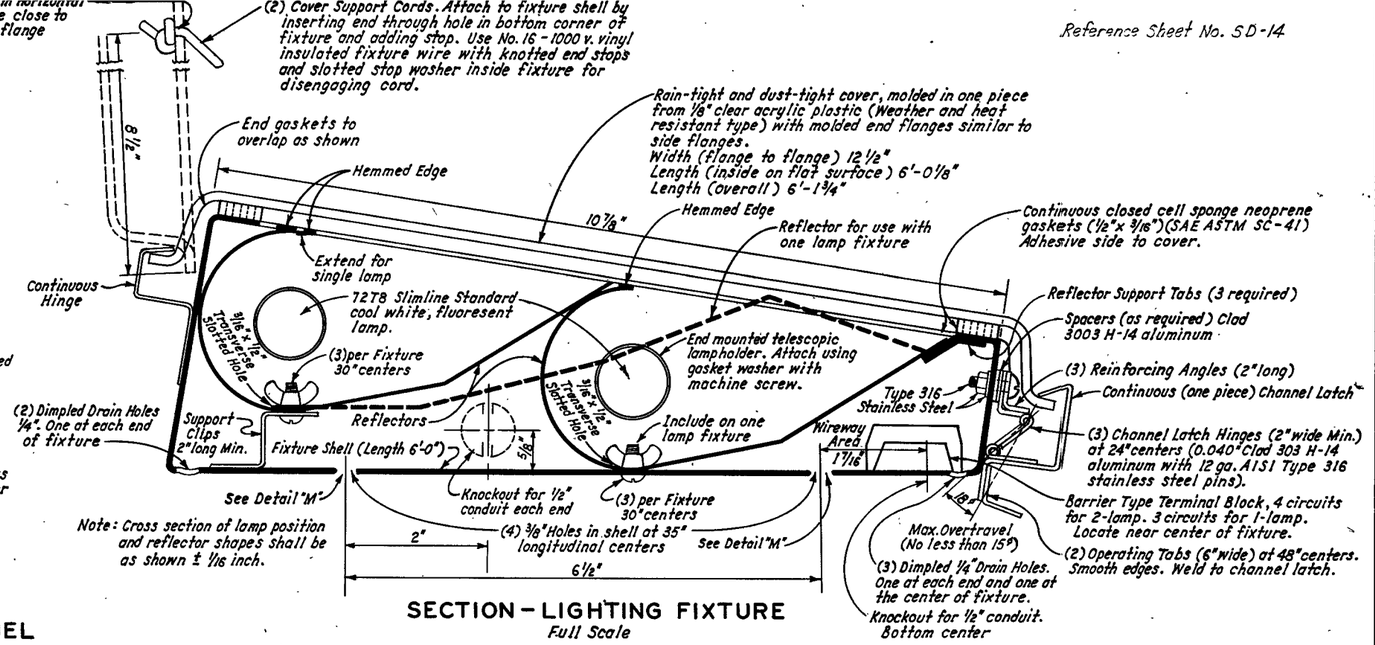
For number of ballast boxes see Sign Layout Sheets.



DETAIL "M"

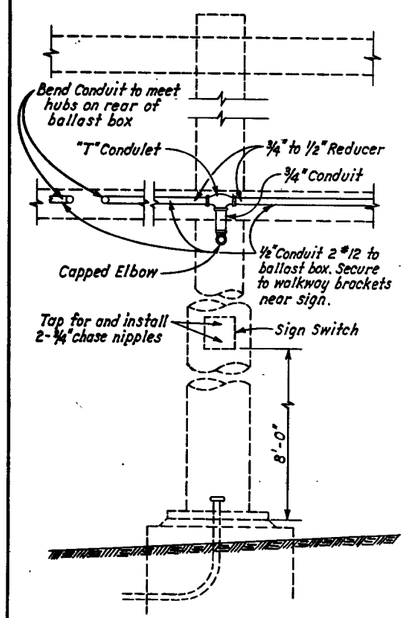
FIXTURE MOUNTING ON CONTINUOUS SLOT CHANNEL

Full Scale



SECTION - LIGHTING FIXTURE

Full Scale



TYPICAL WIRING AND SIGN SWITCH INSTALLATION DETAILS

59374

No Scale

LIGHTING FIXTURE DATA

LENGTH OF PANEL (FEET)	HEIGHT OF PANEL (INCHES)	NUMBER OF FIXTURES	NUMBER OF LAMPS	CONSECUTIVE SPACING FROM LEFT EDGE OF PANEL TO CENTER OF FIXTURES (INCHES)
10	40-70 80-120	1	1 2	60
12	40-70 80-120	2	2 4	36.5, 74
14	40-70 80-120	2	2 4	42, 84
16	40-70 80-120	2	2 4	47.5, 97
18	40-70 80-120	3	3 6	36.5, 74, 74
20	40-70 80-120	3	3 6	40, 80, 80
22	40-70 80-120	3	3 6	44, 88, 88
24	40-70 80-120	4	4 8	36.5, 74, 74, 74
26	40-70 80-120	4	4 8	39, 78, 78, 78
28	40-70 80-120	4	4 8	42, 84, 84, 84
30	40-70 80-120	4	4 8	45, 90, 90, 90
32	40-70 80-120	5	5 10	38, 77, 77, 77, 77
34	40-70 80-120	5	5 10	42, 81, 81, 81, 81
36	40-70 80-120	5	5 10	44, 86, 86, 86, 86
38	40-70 80-120	6	6 12	38, 76, 76, 76, 76, 76
40	40-70 80-120	6	6 12	40, 80, 80, 80, 80, 80
42	40-70 80-120	6	6 12	42, 84, 84, 84, 84, 84, 84
44	40-70 80-120	7	7 14	38, 76, 76, 76, 76, 76, 76
46	40-70 [illegible]	7	7	36.5, 80, 80, 80,

TRANSFORMER AND LOAD DATA

TOTAL NUMBER OF LAMPS	SM TRANSFORMER SIZE (VA) IF REQ'D.	SIGN * LOAD (WATTS)
1	75	70
2	150	131
3	225	201
4	300	262
5	375	332
6	450	393
7	525	463
8	600	524
9	750	594
10	750	655
11	900	725
12	900	785
13	1050	856
14	1050	917
15	1200	987
16	1200	1048
17	1350	1118
18	1350	1179
19	1500	1249
20	1500	1310

NOTES:

For sign structure with 21 or more lamps the load shall be split into two ballast box groups with separate switching supplied independently from two SM transformers in separate pull boxes.

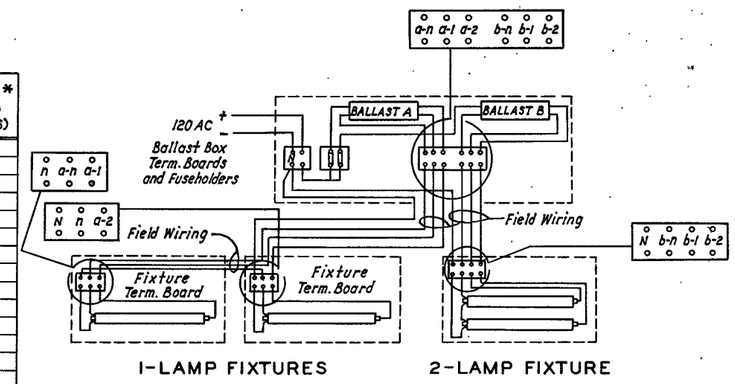
See Sign Layout Sheets for size of panels.

Use one SM transformer for each sign structure unless otherwise indicated or required.

Use two 2-lamp ballasts wherever possible.

Input to ballasts (90% pf) average 75 VA per lamp.

* Does not include SM transformer losses which are approximately 10% of load.



TYPICAL FIXTURE WIRING DIAGRAM

WIRING NOTES

Wiring between ballast box and nearest fixture and between fixtures shall be run in 1/2" liquid tight flexible conduit. Flexible conduit shall be secured to nearest walkway structural member bracket using galvanized bonding strap and brass machine screws.

Ballasts and terminal boards shall be marked with legible symbols, conductors shall be tagged and their indentification marked on the corresponding terminal on the terminal board as shown on the Typical Fixture Wiring Diagram.

See Special Provisions for additional specifications.

GENERAL NOTE - METALS

Where steel is indicated part shall be hot dip galvanized after fabrication. Where sheet steel is indicated, part shall be fabricated from hot dipped galvanized sheet steel. After fabrication, edges and flaws in galvanizing shall be cleaned and painted with two coats of Mil. Spec. Mil-P-21035. Other metal parts shall be made of bronze, phosphor bronze, brass, copper beryllium or AISI Type 316 stainless steel unless otherwise noted.

FIXTURE NOTES

Two lamp fixtures shall be used for signs over 70" in vertical dimension. One lamp fixtures for 70" signs and smaller.

Lighting fixtures shall be fabricated of 0.064" Clad 3003 H-14 aluminum, unless otherwise indicated. Machine screw parts and lockwashers for fixture shall be aluminum, unless otherwise indicated.

Reflectors shall be made of 0.020" (Min) thickness aluminum with specular finish, and shall be 69" long. The finish shall be as described in the Special Provisions.

Alternate fixture fabrication methods and design details may be acceptable provided the light distribution, lamp size, and the mounting details are equivalent to the fixture shown. All variations must be approved by the Engineer.

Machine screws shall be 8-32 with nuts and lockwashers, except as noted.

Manufacturer shall submit five copies of shop drawings to the Engineer for approval prior to fabrication if fixtures have not previously been approved.

For method of mounting fluorescent fixtures see walkways plan titled "Walkway Details No. 2".

After fabrication metal parts shall be thoroughly cleaned and degreased and shall have a well finished appearance. Painting will not be required.

107V3834

STATE OF NEVADA
DEPARTMENT OF HIGHWAYS

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LIGHTING FIXTURES
OVERHEAD FLUORESCENT
STANDARD SHEET