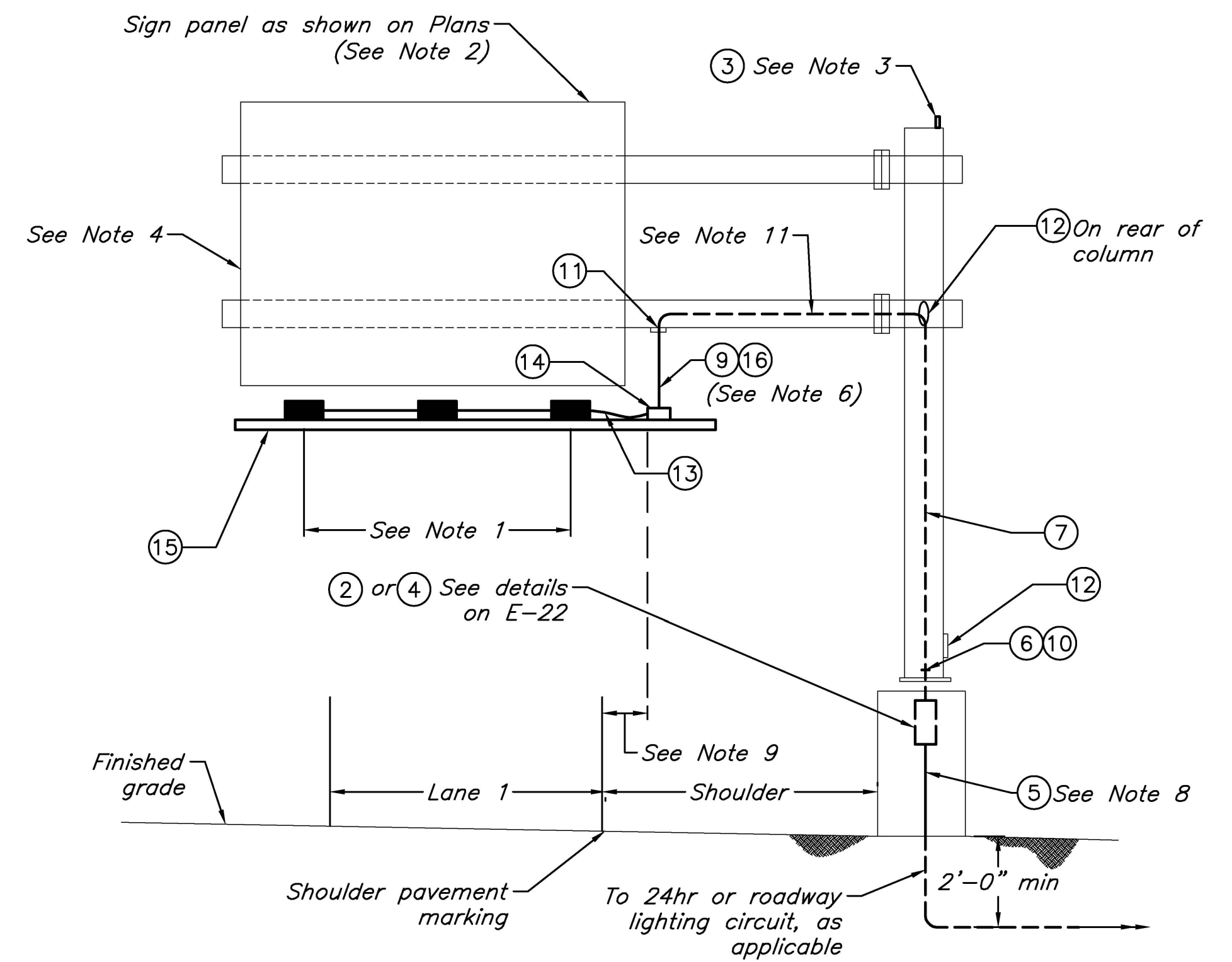


OVERHEAD SPAN TYPE
SIGN STRUCTURE



CANTILEVER TYPE
SIGN STRUCTURE

LEGEND(*)

(For sheets E-21 and E-22)

- 1 Sign lighting luminaire (See Contract Plans and Specifications for details on spacing, type, make, and model of luminaire)
- 2 Enclosed circuit breaker: 3-pole, 480V, 100A frame with 30A trip, bolted type molded case enclosed circuit breaker with groundable neutral, within a NEMA 4 or 4X cast aluminum or stainless steel enclosure
- 3 Photoelectric control unit: shall be of the twistlock type and installed where 24hr service is used for sign lighting (I.E. when feed is not coming from an existing lighting circuit)
- 4 Load center: 2-pole, 240V, 100A, frame with 30A trip main circuit breaker; 2-pole, 240V, 30A, 120V coil magnetic contactor; fuse block with 15A fuse; and SPST-20A bypass switch, all in a NEMA 4 or 4X cast aluminum or stainless steel enclosure
- 5 3" PVC coated galvanized conduit with service and ground wire, size and quantity as shown on the Contract Plans
- 6 2" rigid metallic conduit with (3) #10 and (1) #10 ground
- 7 (3) #10 and (1) #10 ground in sign structure column/chord
- 8 3" rigid non-metallic conduit with service and ground wire, size and quantity as shown on the Contract Plans
- 9 1/2" flexible metallic conduit with (3) #10 and (1) #10 ground
- 10 Grounding bushing
- 11 1/2" half coupling
- 12 Handhole
- 13 (4) #10 SOOW cable
- 14 6"x6"x4" NEMA 4X Pull Box
- 15 1 5/8"x1 5/8" stainless steel support channel
- 16 1/2" aluminum conduit with (3)#10 and (1)#10 ground

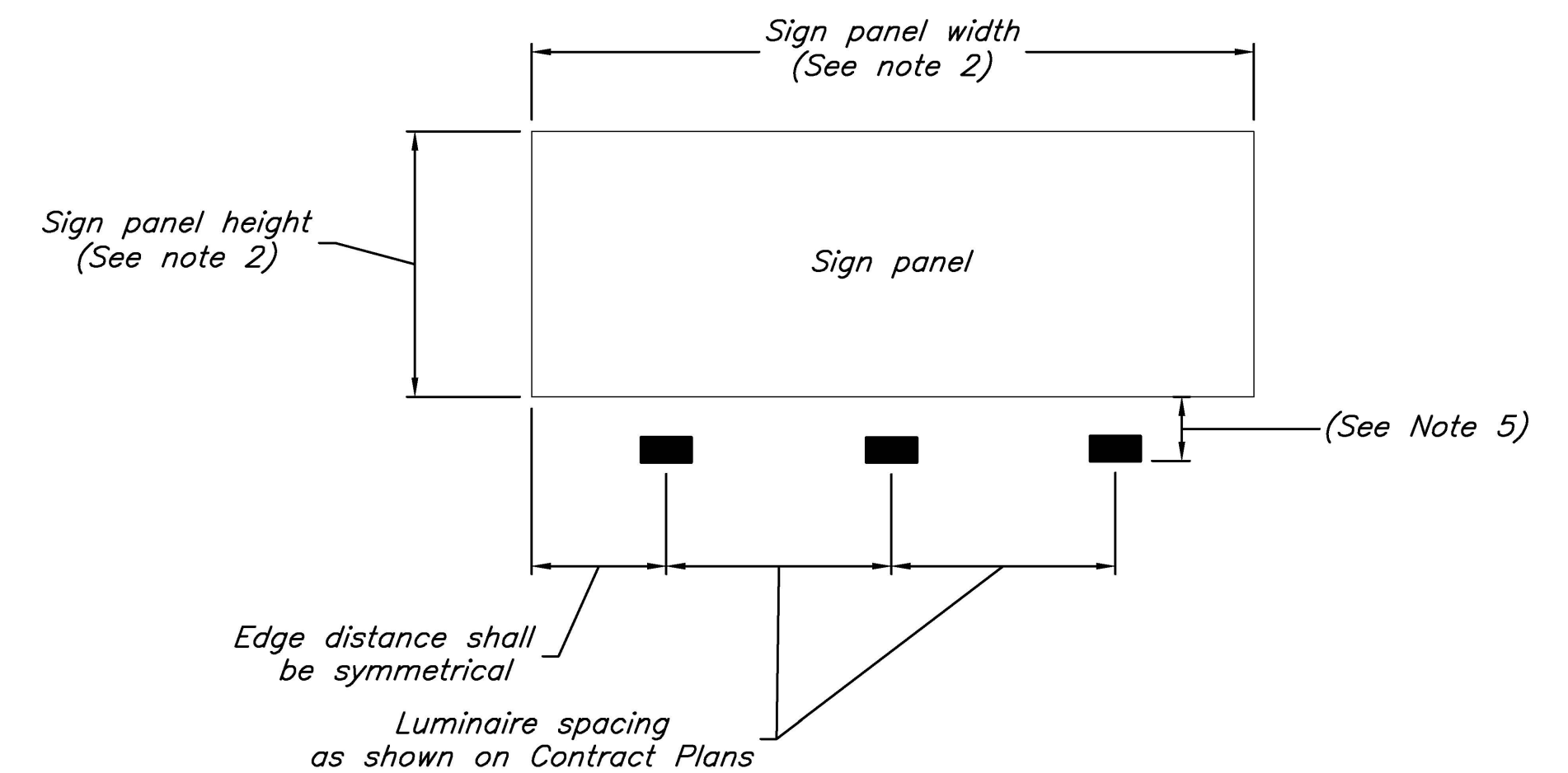
*Wiring shown in legend is for single-phase, 3-wire distribution systems. For 3-phase, 4-wire systems, one more service wire shall be required.

TYPICAL SIGN STRUCTURE ELEVATIONS

Scale: 3/16" = 1'-0"

NOTES

1. See Contract Plans for quantity, type, and spacing of luminaires. Contractor shall submit lighting calculations and luminaire installation details for approval if alternate luminaire is suggested.
2. The size and location of the sign panels on sign structures shall be as shown on the Contract Plans.
3. A twistlock photoelectric control unit for sign lighting shall be installed on top of sign structures, where required.
4. Sign and sign lighting hangers not shown. See Standard Drawing SI-19 for more details.
5. See Standard Drawing E-22 for luminaire offset distance from sign panel.
6. Conduit(s) shall be supported along sign hangers (not shown) using an attachment method as shown on Standard Drawing E-22.
7. The minimum and maximum mounting height of sign lighting shall be as shown on Standard Drawing SI-19, and Contract Plan.
8. PVC coated galvanized conduit shall extend 12-18" below grade where connecting to rigid nonmetallic conduit runs underground.
9. Contractor shall install pull box a minimum of 2'-0" from the shoulder pavement marking as shown on this drawing and as shown on the Contract Plans.
10. The overall sign panel width used to determine the luminaire spacing and number of luminaires shall be the actual sign panel edge to edge dimension. For multiple (side by side) sign panel configurations, where the distance between panels is 18" or less, the overall width may be the combined total width of all panels including the distance between those panels.
11. Sign lighting cable/conduit on all Parkway sign structures shall be routed externally on the back of the sign structure chord or as shown on Contract Plans.

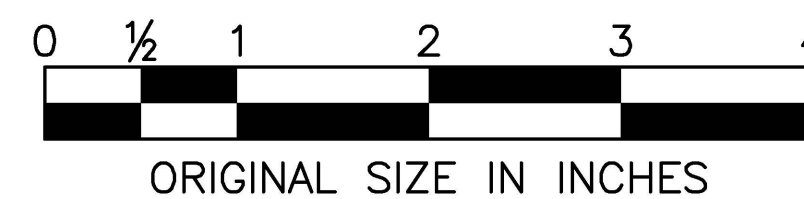


TYPICAL SIGN LIGHTING LUMINAIRE ARRANGEMENT

NOT TO SCALE

	BY	DATE
MADE	AG	12/2012
TRACED	MDC	12/2012
CHECKED	MS	12/2012
SUPERVISED	ALB	12/2012

If you use this DWG:	
You also need	E-22
You may need	E-29, SI-19



APP.	NO.	DATE	REVISION
	1	01/2013	REPLACEMENT SHEET
	0	04/2010	ORIGINAL DRAWING

NEW JERSEY TURNPIKE AUTHORITY	
NEW JERSEY TURNPIKE	
SIGN LIGHTING DETAILS - 1	
HNTB 9 ENTIN ROAD, SUITE 202 PARSIPPANY, NJ 07054 - COA# 24GA28000700	STANDARD DRAWING E-21
ANTHONY L. BARTELLO New Jersey Professional Engineer License No. GE 45842	