GIVEN CONDITIONS

ROADWAY DATA:	Pavement Width	36 FT
	Number of Lanes	3
	Median Width	0 FT
	IES Surface Classification	R3
	Q-Zero Value	.07
LIGHT POLE DATA:	Mounting Height	45 FT
	Mast Arm Length	15 FT
	Pole Set-Back from Edge of Pavement	20 FT
LUMINAIRE DATA:	Lamp Type	HPS
	Lamp Lumens	28000
	IES Vertical Distribution	M
	IES Control of Distribution	FC
	IES Lateral Distribution	3
	Total Light Loss Factor	0.684
LAYOUT DATA:	Spacing	145 FT
	Configuration	Single Side
———	Luminaire Overhang Over Edge of Pavement Lane	-5 FT

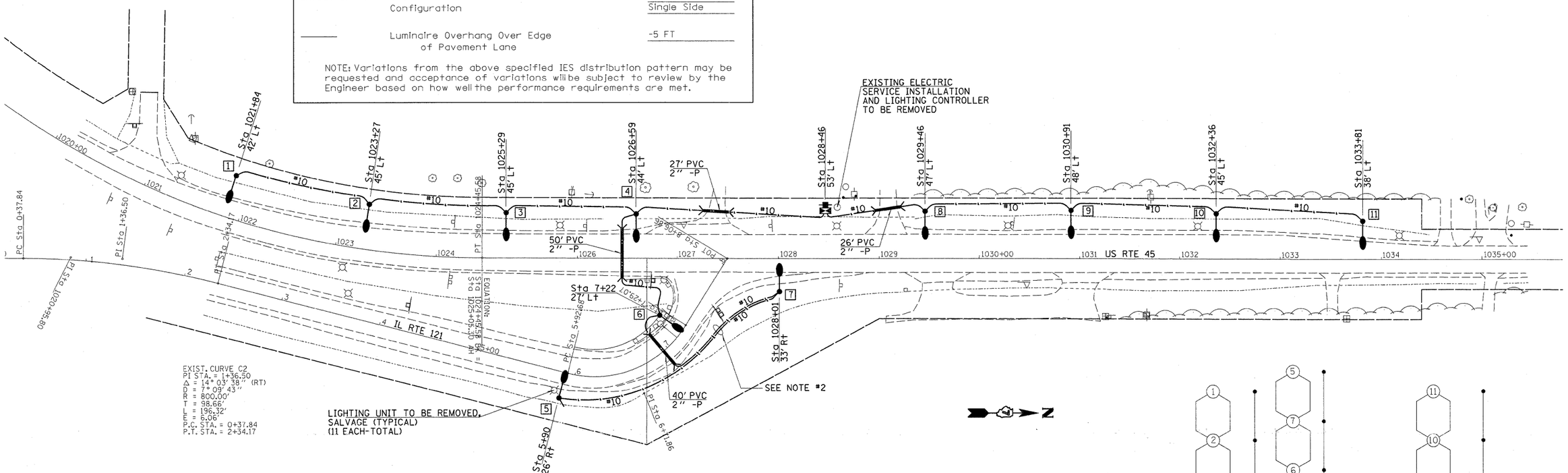
NOTE: Variations from the above specified IES distribution pattern may be requested and acceptance of variations will be subject to review by the Engineer based on how well the performance requirements are met.

PERFORMANCE REQUIREMENTS

NOTE: These performance requirements shall be the minimum acceptable standards of photometric performance for the luminaires.

ILLUMINANCE:	Average Horizontal Illuminance, (Eave)	9.0 Lux
	Uniformity Ratio, (Eave/Emin)	3.0
LUMINANCE:	Average Luminance, (Lave)	0.6 Cd/sq m
	Uniformity Ratios, (Lave/Lmin)	3.5
	(Lmax/Lmin)	6.0
	Maximum Veiling Luminance Ratio: (Lv/Lave)	0.3

EXIST. CURVE C1
PI STA. = 1020+95.80
Δ = 53° 08' 41" (LT)
D = 7° 00' 04"
R = 818.39'
T = 409.33'
L = 759.10'
E = 96.66'
P.C. STA. = 1016+86.48
P.T. STA. = 1024+45.58



EXIST. CURVE C2
PI STA. = 1+36.50
Δ = 14° 03' 38" (RT)
D = 7° 09' 43"
R = 800.00'
T = 98.66'
L = 196.32'
E = 6.06'
P.C. STA. = 0+37.84
P.T. STA. = 2+34.17

EXIST. CURVE C3
PI STA. = 5+71.86
Δ = 72° 54' 57" (LT)
D = 53° 27' 28"
R = 107.18'
T = 79.19'
L = 136.40'
E = 26.08'
P.C. STA. = 5+92.68
P.T. STA. = 7+29.07

LEGEND

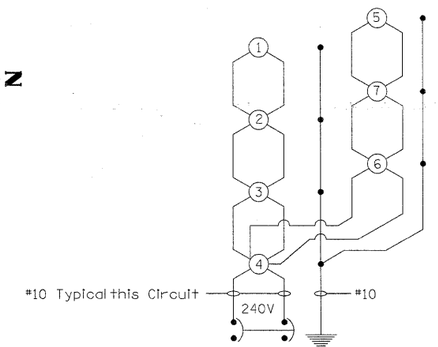
- Electric Service Installation, 120/240v, One Phase, Four Wire
- Lighting Controller, Pole Mounted, 30 Amp., 240 volt
- Light Pole, Aluminum, 45 ft M.H., 15 ft Davit Arm with 250W HPS Luminaire
- *10 — L — Unit Duct, 600 v, 2-1C No. 10, 1/C No. 10 Ground, (XLP-Type Use), 3/4" Polyethylene
- Conduit Pushed — LENGTH — XX' PVC — TYPE OF MATERIAL; DIAMETER — X"-P — PUSHED
- Existing Lighting Unit to be Removed, Salvage
- Existing Electric Service Installation and Lighting Controller to be Removed

NOTE:

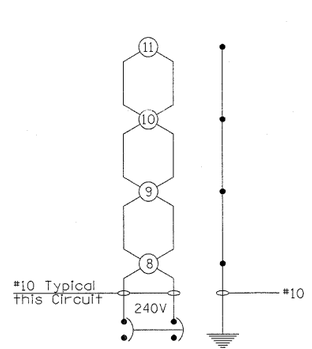
1.) POLES TO BE OFFSET, AS SHOWN, FROM EDGE OF PAVEMENT, FURTHER IF IN FLOWLINE OF DITCH. IN THAT CASE, MOVE FURTHER BACK AND OUT OF THE FLOWLINE OR AS DIRECTED BY THE ENGINEER. IF OBSTACLES ARE ENCOUNTERED, THE POLE WILL BE RELOCATED TO AN APPROPRIATE LOCATION AS DIRECTED BY THE ENGINEER.

2.) UNIT DUCT TO BE INSTALLED IN COMMON TRENCH.

3.) PUSHED CONDUIT SHALL BE PVC SCHEDULE 80.



20 AMP. 2 POLE CIRCUIT BREAKER
CIRCUIT NO. 1



20 AMP. 2 POLE CIRCUIT BREAKER
CIRCUIT NO. 2

(X) 250W ROADWAY LUMINAIRE

NOTE: ALL NECESSARY REVISIONS TO THE WIRING SHOWN ON THIS SHEET SHALL BE MADE AT NO ADDITIONAL COST TO THE DEPARTMENT AND TO THE SATISFACTION OF THE ENGINEER.

FILE NAME = c:\pw_work\pwidot\teasleyck\d0123848\D7744252-hwy lighting-sht.dgn	USER NAME = teasleyck	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED -
	PLOT DATE = 5/3/2011	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HIGHWAY LIGHTING
INTERSECTION US RTE 45 & IL RTE 121

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	(108,109,110)RS-3	Cumberland	56	27
		CONTRACT NO. 74252		
	ILLINOIS FED. AID PROJECT			