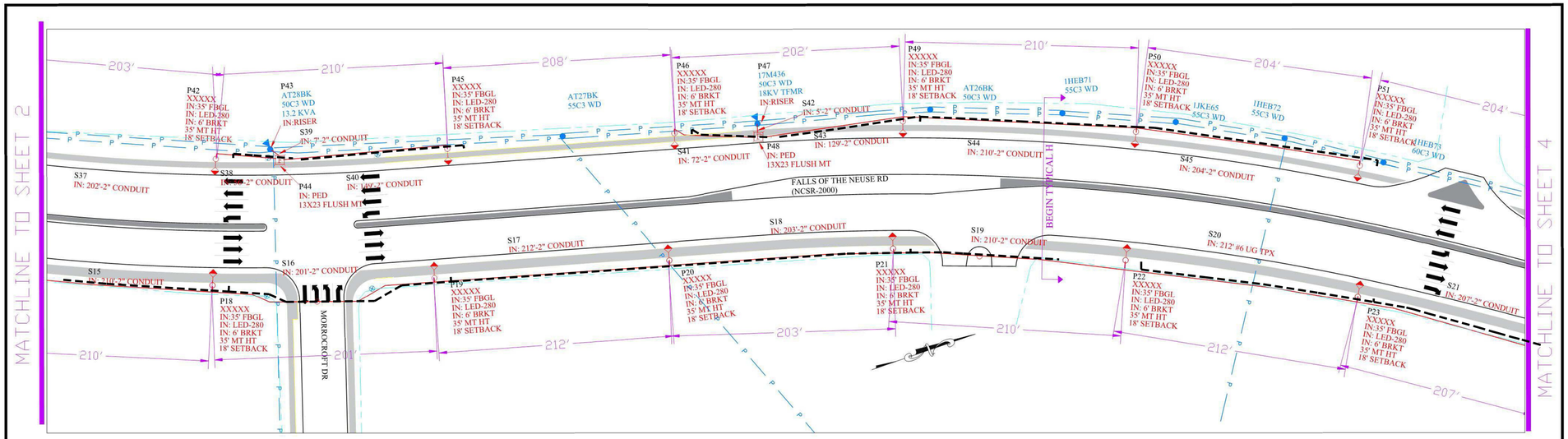
PROJECT REFERENCE NO.	SHEET NO.
U-5826	ECS-3

USE FOR LIGHTING CONSTRUCTION ONLY



NOTES

1. LIGHTING LEVELS ARE BASED ON TWO-SIDED STAGGERED ARRANGEMENT LIGHTING FOR THE ROADWAY.
2. LUMINARIES WILL BE 280 LED ROADWAY TYPE III, 4000K, RECTANGLE PATTERN WITH PHOTOCELLS AND BALLAST, RATED: 25,050 LUMENS 240V.
3. ALL LIGHTING WITH UNDERGROUND SERVICE WILL BE INSTALLED ON NEW FIBERGLASS POLES LOCATED INSIDE OF ROAD R/W.
4. MOUNTING HEIGHT FOR LIGHTING FIXTURES: 35' WITH 6' BRACKET ON NEW FIBERGLASS POLES.
5. MINIMUM SETBACK OF NEW LIGHTING POLES 12' FROM EDGE OF TRAVEL LANE. DESIGN SETBACK IS 18'. SEE DRAWING FOR DETAILS.
6. ALL POWER SOURCES WILL BE FROM DUKE ENERGY-PROGRESS FACILITIES.
7. ALL CONSTRUCTION WILL COMPLY WITH NESC REQUIREMENTS AND DUKE ENERGY-PROGRESS SPECIFICATIONS. REFER TO THE DUKE ENERGY-PROGRESS DRAWINGS LISTED.
8. THIS IS AN NCDOT ROADWAY. APPROVED NCDOT ENCROACHMENT MUST BE ON-SITE DURING CONSTRUCTION

PROPOSED	EXISTING	REMOVE	ABANDON	LEGEND
				LED LUMINAIRE
				DECORATIVE LUMINAIRE
				FIBERGLASS/STEEL LIGHTING POLE
				WOOD POLE
				FOREIGN POLE
				TRANSFORMER (POLE MOUNTED)
				STREET LIGHT CIRCUIT UNDERGROUND
				STREET LIGHT CIRCUIT OVERHEAD
				DH PRIMARY CIRCUIT
				ROW/PROPERTY LINES
				SECONDARY FLUSH MOUNT PEDESTAL
				TRANSFORMER (PAD MOUNTED)
				CONDUIT

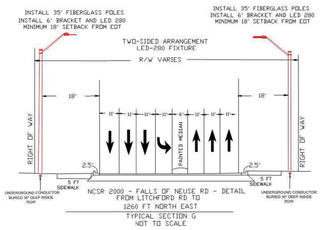
FOR CONSTRUCTION DETAILS, REFER TO THE FOLLOWING PE SPECIFICATION DRAWINGS

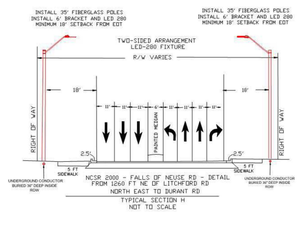
DRAWING NUMBER	DRAWING TITLE
30.02-104	LIGHTING BRACKETS FOR STEEL (AND FIBERGLASS) POLES
30.00-15	MOUNTING HEIGHT FOR LUMINAIRES
30.09-01	FIBERGLASS POLE LIGHTING DETAILS

FALLS OF NEUSE RD (NCSR-2000) ,

IES REQUIREMENTS MINOR ARTERIAL/COMMERCIAL			ACTUAL
AVE. MAINT. FC :	1.4	MIN.	1.37
AVE. / MIN. RATIO :	4:1	MAX.	3.64
VEIL. LUM. MAX RATIO	0.3:1	MAX.	0.3

LIGHTING LEVELS CALCULATED USING ALADAN/LITEPRO
AVG DAILY TRAFFIC: 48,000
DESIGN SPEEN LIMIT: 45 MPH
ACTUAL SPEED LIMIT: 45 MPH
AVG SPAN DISTANCE: 199 FEET





NTS

LEGEND

---- 2" PVC CONDUIT FURNISHED BY DUKE ENERGY AND TO BE INSTALLED BY CONTRACTOR FOR FUTURE DUKE ENERGY LIGHTING ALONG FALLS OF NEUSE ROAD

NO.	DATE	REVISION	BY

LIGHTING DESIGN TOLERANCE

The calculated footcandle light levels in this lighting design are predicted values and are based on specific information that has been supplied to Duke Energy. Any inaccuracies in the supplied information; differences in luminaire installation; lighted area geometry, including elevation differences; reflective properties of surrounding surfaces; obstructions (foliage or otherwise) in the lighted area; or lighting from sources other than those in this design may produce different results from the predicted values. Normal tolerances of voltage, lamp output, and ballast and luminaire manufacturer will also affect results.

DUKE ENERGY® PROGRESS

PROPRIETARY & CONFIDENTIAL

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STREET LIGHTING ARRANGEMENT FOR
FALLS OF THE NEUSE (NCSR-2000) I-540 TO DURANT
RALEIGH NC

Designed by DUKE ENERGY PROGRESS LIGHTING SOLUTIONS
Reviewed by CHARLES JONES Scale 1" = 40'
Date 2-18-2020 Size Drawing size "D"
Description WR 34443477
Drawing No. U-5826 Sht. 3 OF 4

Rev.	Date	Description	Approved
2			
1			

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN LIGHTING/ELECTRICAL SECTION

LIGHTING LAYOUT

ELECTRICAL CONDUIT SYSTEM

WAKE COUNTY

Drawn By:	Approved By:	Dwg No.:
AB		

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