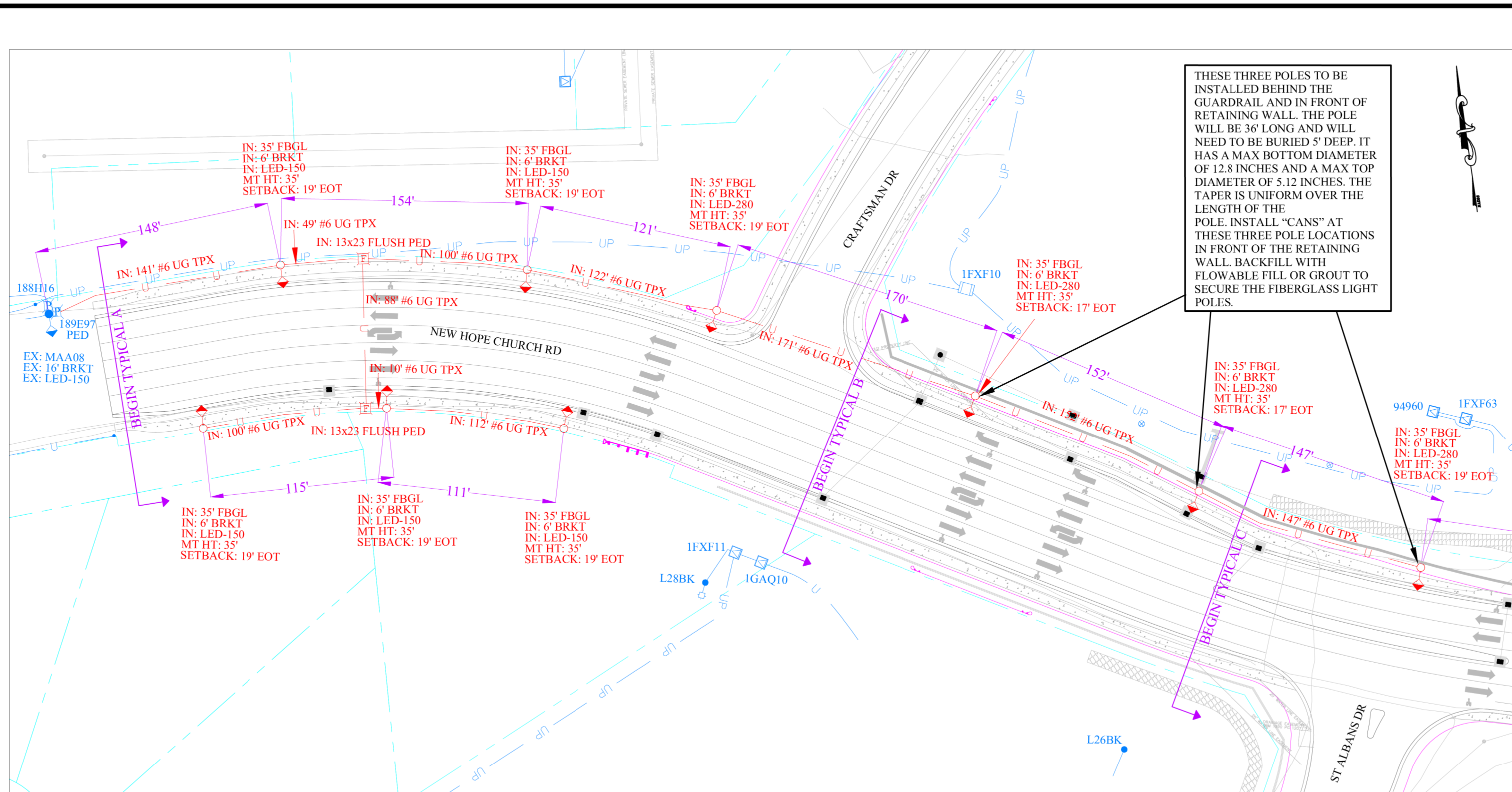
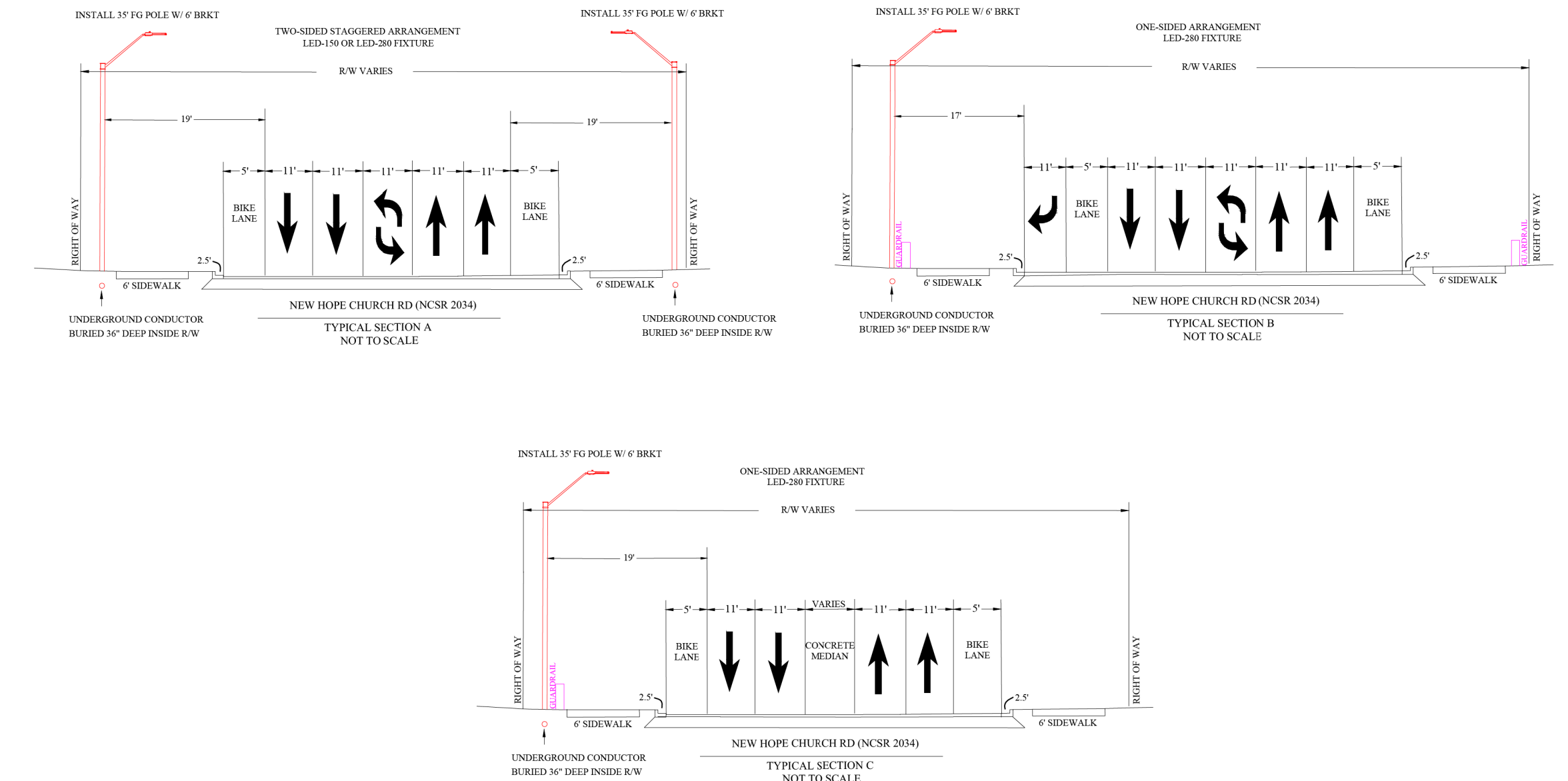


# STREET LIGHTING LOCATION (FYI)



MATCHLINE TO SHEET 2



### NOTES

- LIGHTING LEVELS ARE BASED ON TWO SIDED STAGGERED LIGHTING FOR THE ROADWAY IN ACCORDANCE WITH NCDOT STANDARDS.
- ALL LUMINARIES WILL BE 150 LED ROADWAY TYPE III, 4000K, RECTANGLE PATTERN WITH PHOTOCELLS AND BALLAST, RATED: 12,920 LUMENS 240V OR 280 LED ROADWAY TYPE III, 4000K, RECTANGLE PATTERN WITH PHOTOCELLS AND BALLAST, RATED: 25,050 LUMENS 240V.
- ALL LIGHTING WITH UNDERGROUND SERVICE WILL BE INSTALLED ON FIBERGLASS POLES LOCATED INSIDE OF ROAD RIGHT OF WAY.
- MOUNTING HEIGHT FOR NEW LIGHTING FIXTURES: 35' WITH 6' BRACKET. EXISTING LIGHTING FIXTURES MOUNTED AT 30' WITH 16' BRACKET.
- MINIMUM SETBACK OF NEW LIGHTING POLES IS 10' FROM EDGE OF TRAVEL. BIKE LANE IS NOT CONSIDERED A TRAVEL LANE. WHERE POLES ARE BEING INSTALLED BEHIND GUARDRAIL, MINIMUM SETBACK IS 3.5' BEHIND ROADSIDE FACE OF GUARDRAIL. SEE DRAWING FOR DETAILS.
- ALL POWER SOURCES WILL BE FROM DUKE ENERGY-PROGRESS FACILITIES.
- ALL CONSTRUCTION WILL COMPLY WITH NESC REQUIREMENTS AND DUKE ENERGY-PROGRESS SPECIFICATIONS. REFER TO THE DUKE ENERGY-PROGRESS DRAWINGS LISTED.

(NCSR 2034) NEW HOPE CHURCH RD

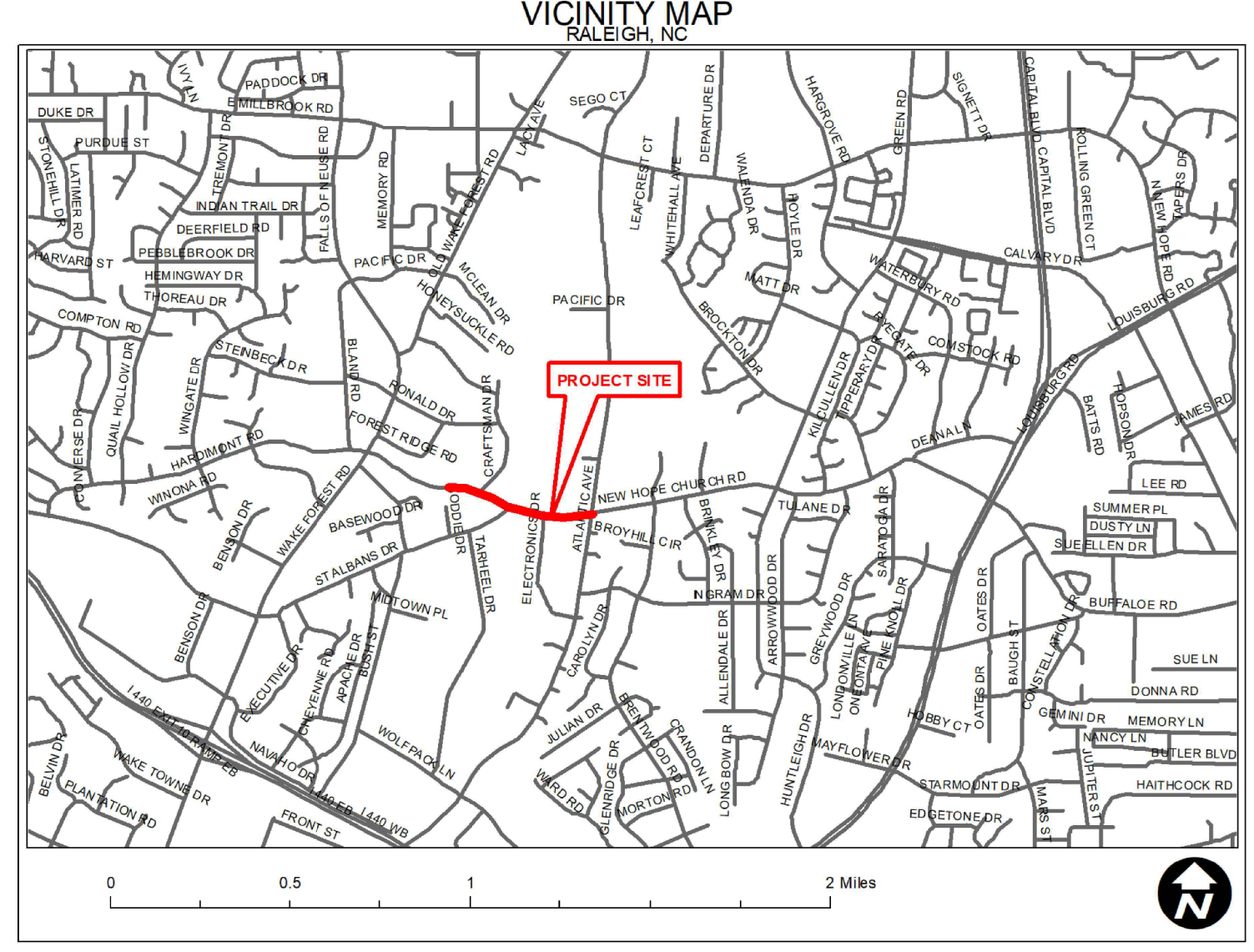
IES REQUIREMENTS	ACTUAL	
MINOR ARTERIAL/ COMMERCIAL		
AVE. MAINT. FC :	1.4 MIN.	1.40
AVE. / MIN. RATIO :	4:1 MAX.	3.93:1
VEILING LUM. RATIO :	0.3:1 MAX.	0.18:1

LIGHTING LEVELS CALCULATED USING ALADAN/LITEPRO  
 AVG DAILY TRAFFIC: 21,000  
 DESIGN SPEED LIMIT: 35 MPH  
 ACTUAL SPEED LIMIT: 35 MPH  
 AVG SPAN DISTANCE: 136 FEET

FOR CONSTRUCTION DETAILS, REFER IN PARTICULAR TO THE FOLLOWING PE SPECIFICATION DRAWINGS

DRAWING NUMBER	DRAWING TITLE
30.09-01	GRAY FIBERGLASS POLE LIGHTING INSTALLATIONS
30.02-20	LIGHTING BRACKETS FOR STEEL & FIBERGLASS POLES
22.01-104	TRENCH, BACKFILL AND COMPACTION REQUIREMENTS

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
				DN PRIMARY CIRCUIT
				R/W/PROPERTY LINES
				SECONDARY PEDESTAL
				TRANSFORMER (PAD MOUNTED)



**Safety Reminders / Adverse Conditions**

**SAFETYFirst**

- PERSONAL ACCOUNTABILITY
- ACTIVE CAREERS
- HAZARD RECOGNITION

**WZS: REMEMBER "YOUR CIRCLE OF SAFETY"**

WZS: SET PROPER WORK ZONE NEEDED

WZS: SET PROPER SIGNS, CONES, AND BARRICADES

WZS: REMEMBER WALK AROUNDS AND PRETRIP

WZS:

REMEMBER: Work zone area conditions may have changed for this job! Everyone is responsible for verifying the above safety information is correct prior to any work being performed each day.

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 (follage or otherwise) in the lighted area, or lighting from sources other than listed in this design may produce different results from the predicted values. Normal tolerances of voltage, lamp output, and ballast and luminaire manufacture will also affect results.



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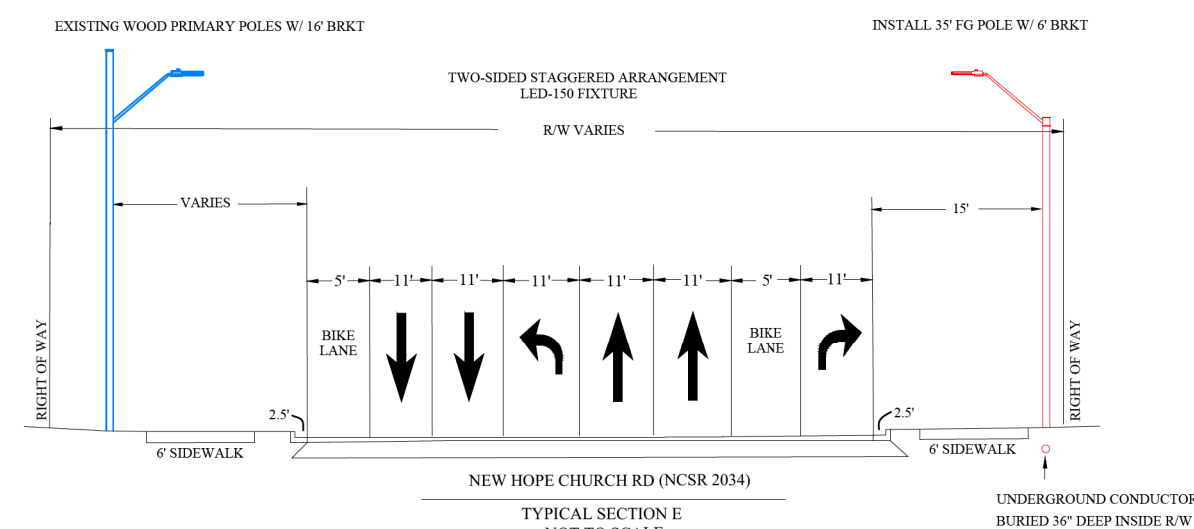
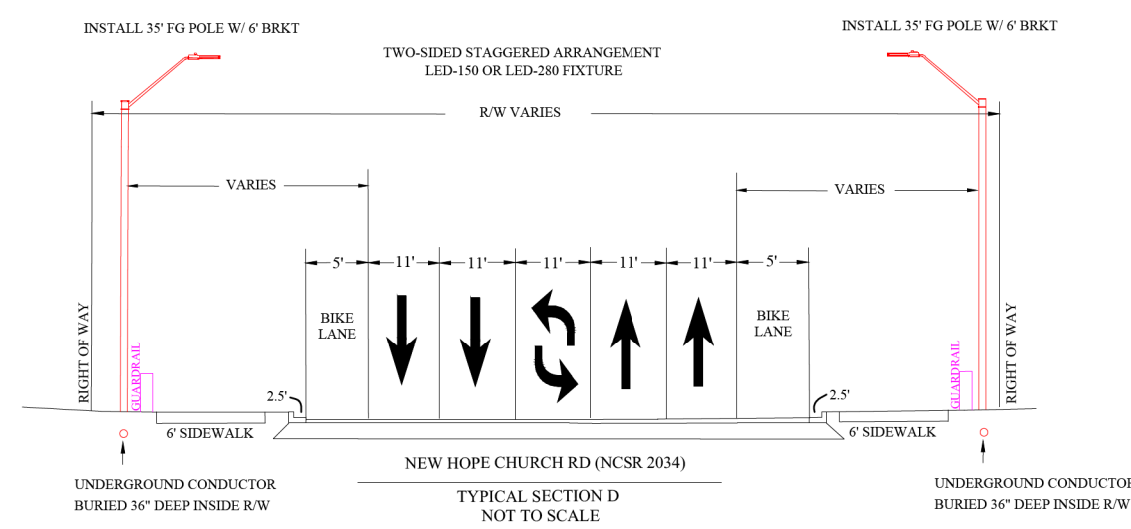
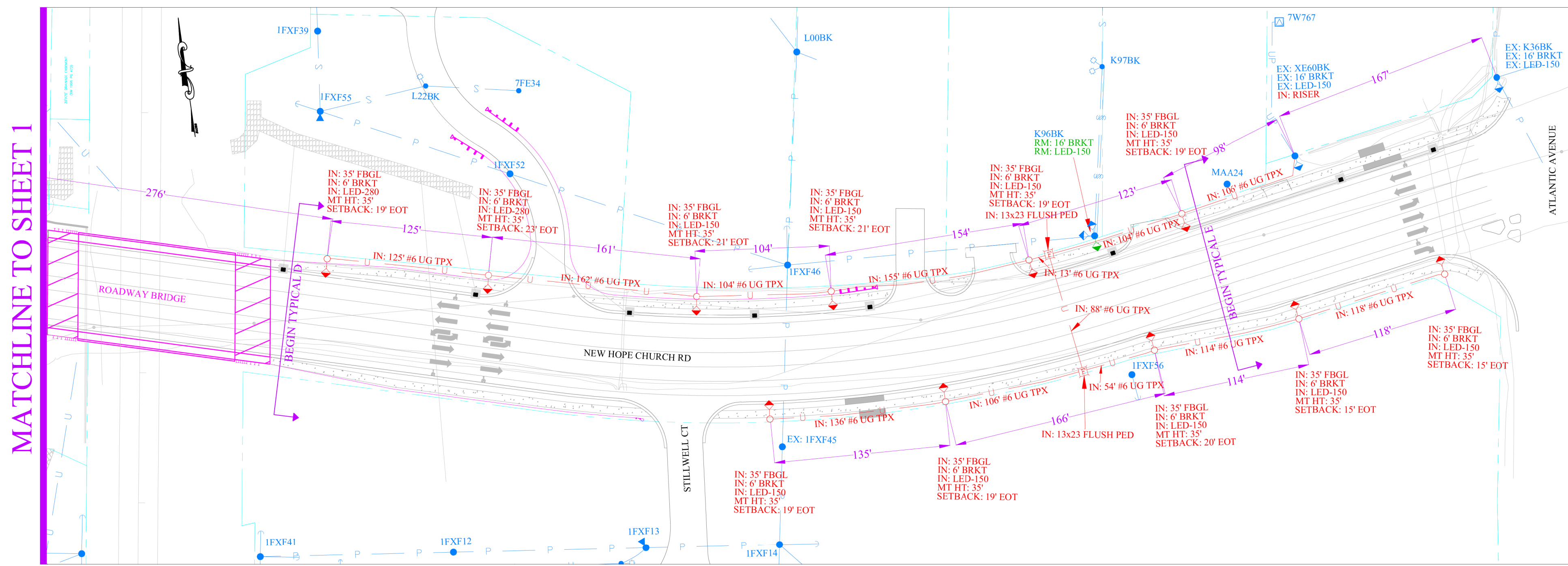
STREET LIGHTING ARRANGEMENT FOR	
NEW HOPE CHURCH RD	
RALEIGH, NC	
Designed by	DUKE ENERGY PROGRESS LIGHTING SOLUTIONS
Reviewed by	JESSICA WEISS Scale 1" = 50'
Date	2/16/2024 Size Drawing size "D"
Description	WO 43348592
Drawing No.	4304 Sht. 1 OF 2

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 5/12/2024  
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# STREET LIGHTING LOCATION (FYI)

PROJECT REFERENCE NO.	SHEET NO.
P-5715	SLO2
STREET LIGHTING	



**Safety Reminders / Adverse Conditions**

**WZS: REMEMBER "YOUR CIRCLE OF SAFETY"**  
**WZS: SET PROPER WORK ZONE NEEDED**  
**WZS: SET PROPER SIGNS, CONES, AND BARRICADES**  
**WZS: REMEMBER WALK AROUNDS AND PRETRIP**  
**WZS:**

**REMEMBER: Work zone area conditions may have changed for this job! Everyone is responsible for verifying the above safety information is correct prior to any work being performed each day.**

**LIGHTING DESIGN TOLERANCE**

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PROPOSED	EXISTING	REMOVE	ABANDON	LEGEND
				LED LUMINAIRE
				DECORATIVE LUMINAIRE
				FIBERGLASS/STEEL LIGHTING POLE
				VOID POLE
				FOREIGN POLE
				TRANSFORMER (POLE MOUNTED)
				STREET LIGHT CIRCUIT UNDERGROUND
				STREET LIGHT CIRCUIT OVERHEAD
				OH PRIMARY CIRCUIT
				R/W/PROPERTY LINES
				SECONDARY PEDESTAL
				TRANSFORMER (PAD MOUNTED)

STREET LIGHTING ARRANGEMENT FOR  
NEW HOPE CHURCH RD  
RALEIGH, NC

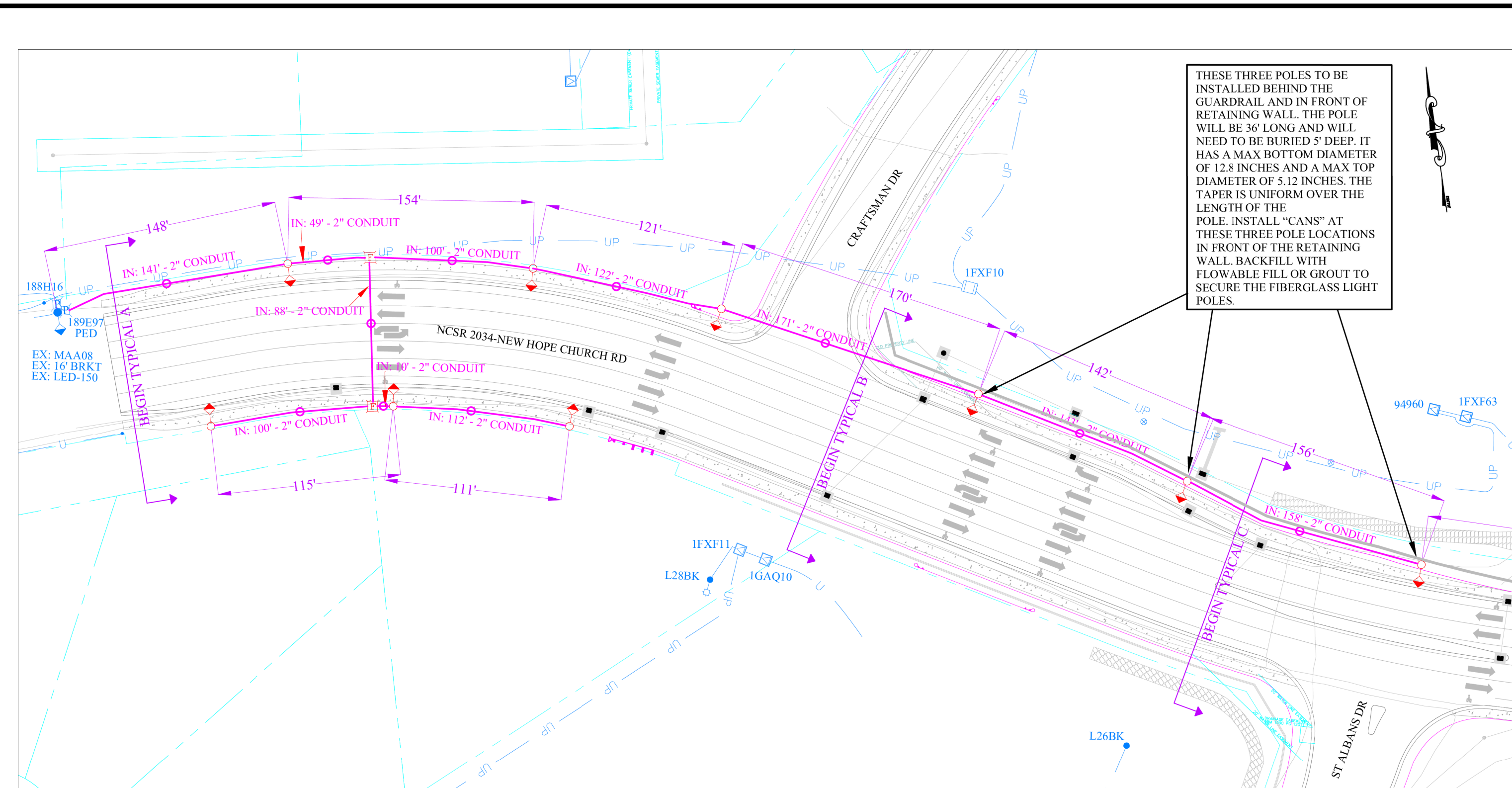
Designed by **DUKE ENERGY PROGRESS LIGHTING SOLUTIONS**  
 Reviewed by **JESSICA WEISS** Scale **1" = 50'**  
 Date **2/16/2024** Size **Drawing size "D"**  
 Description **WO 43348592**  
 Drawing No. **4304** Sht. **2 OF 2**

NO.	DATE	REVISION	BY

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15/02/2024

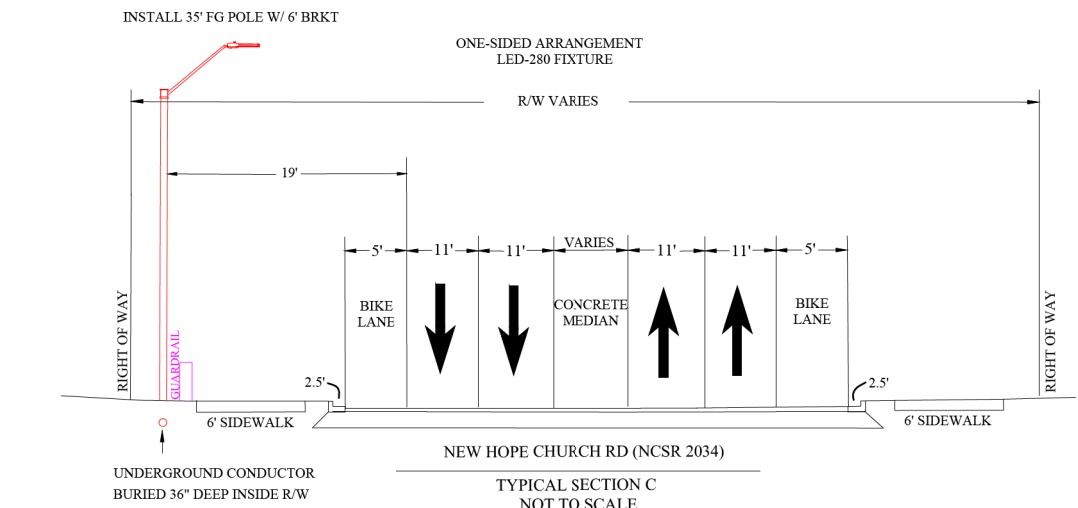
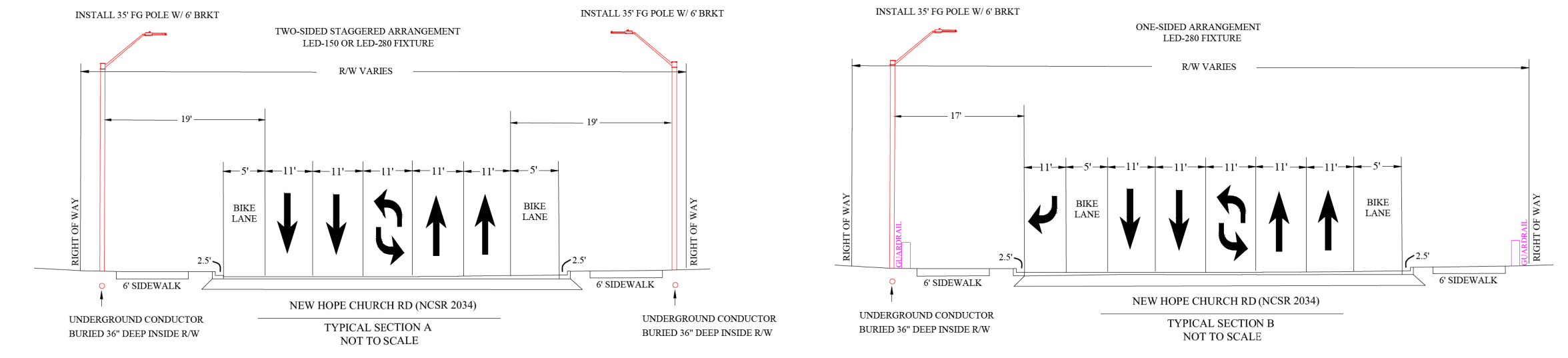


# STREET LIGHTING CONDUIT LOCATION



THESE THREE POLES TO BE INSTALLED BEHIND THE GUARDRAIL AND IN FRONT OF RETAINING WALL. THE POLE WILL BE 36' LONG AND WILL NEED TO BE BURIED 5' DEEP. IT HAS A MAX BOTTOM DIAMETER OF 12.8 INCHES AND A MAX TOP DIAMETER OF 5.12 INCHES. THE TAPER IS UNIFORM OVER THE LENGTH OF THE POLE. INSTALL "CANS" AT THESE THREE POLE LOCATIONS IN FRONT OF THE RETAINING WALL. BACKFILL WITH FLOWABLE FILL OR GROUT TO SECURE THE FIBERGLASS LIGHT POLES.

MATCHLINE TO SHEET 2

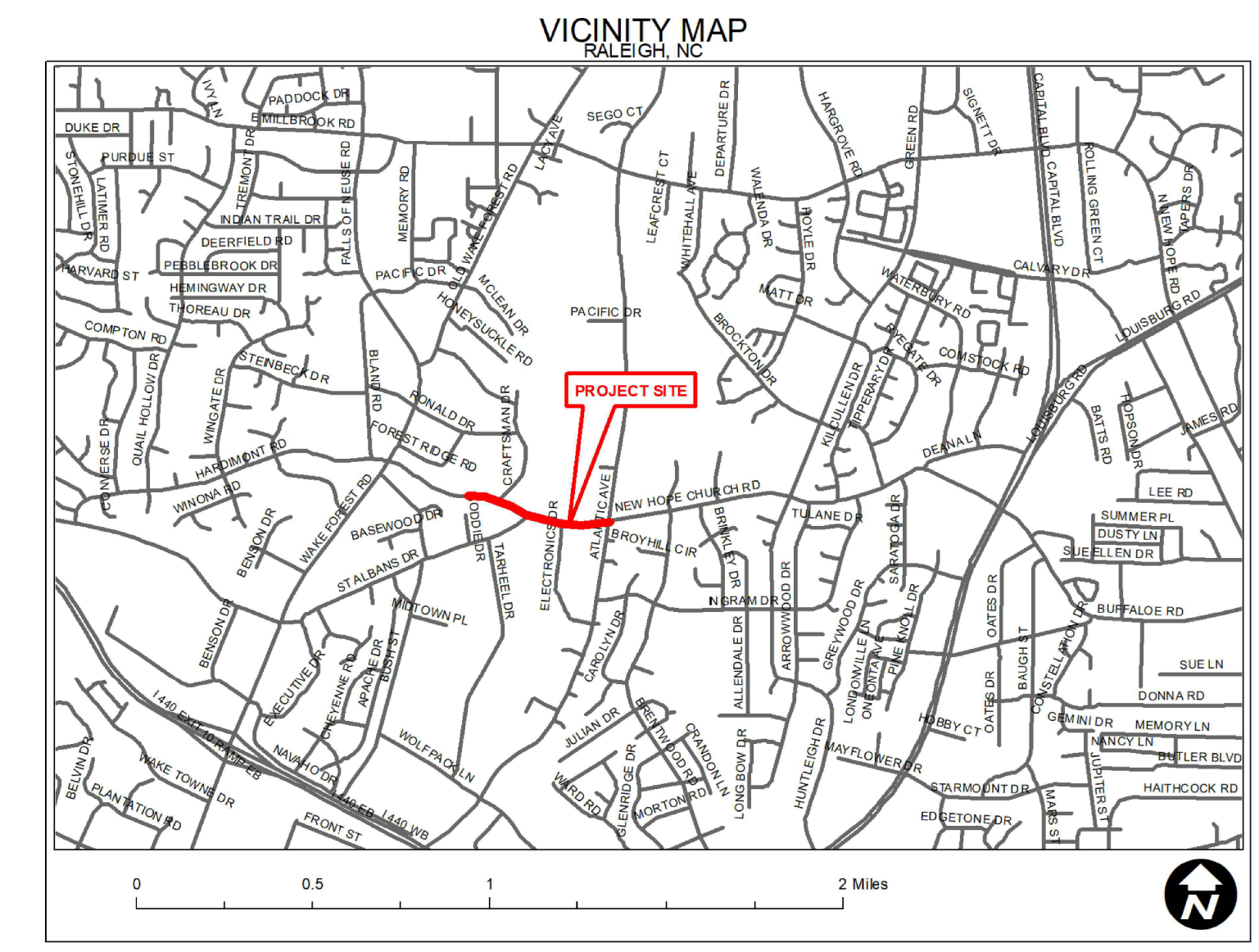


## NOTES

- INSTALL 2" PVC SCHEDULE 40 CONDUIT WHERE INDICATED ON DRAWING. PAID AS "5155000000-E 1409 Street Lighting Conduit Installation (2" PVC)"
- BURY CONDUIT AT LEAST 36" DEEP WITHIN THE RIGHT OF WAY.
- INSTALL CONTINUOUS RUN OF CONDUIT AND MARK LIGHT AND PEDESTAL LOCATIONS WITH AN EXTRA PIECE OF VERTICAL CONDUIT. INSTALL PULL STRING IN CONDUIT.
- PROVIDE AND INSTALL A 20" X 60" CONCRETE TUBE FORM AT THE LOCATIONS INDICATED ABOVE. TURN CONDUIT UP AND TERMINATE AT THE TOP OF THE TUBE. TUBES ARE INTENDED TO BLOCK OUT AN AREA FOR FUTURE LIGHT POLE INSTALLATION BY OTHERS. PLACEMENT OF "CANS" IS INCIDENTAL TO STREET LIGHTING CONDUIT INSTALLATION.

	? PERSONAL ACCOUNTABILITY ? ACTIVE CAREERS ? HAZARD RECOGNITION	<b>SAFETY Reminders / Adverse Conditions</b> WZS: REMEMBER "YOUR CIRCLE OF SAFETY" WZS: SET PROPER WORK ZONE NEEDED WZS: SET PROPER SIGNS, CONES, AND BARRICADES WZS: REMEMBER WALK AROUNDS AND PRETRIP WZS:	
	REMEMBER: Work zone area conditions may have changed for this job! Everyone is responsible for verifying the above safety information is correct prior to any work being performed each day.		

PROPOSED	EXISTING	REMOVE	INSTALL	LEGEND
				LED LUMINAIRE
				2" CONDUIT
				FIBERGLASS/STEEL LIGHTING POLE
				WOOD POLE
				FOREIGN POLE
				TRANSFORMER (POLE MOUNTED)
				STREET LIGHT CIRCUIT UNDERGROUND
				STREET LIGHT CIRCUIT OVERHEAD
				DN PRIMARY CIRCUIT
				REV/PROPERTY LINES
				SECONDARY PEDESTAL
				TRANSFORMER (PAD MOUNTED)



**LIGHTING DESIGN TOLERANCE**  
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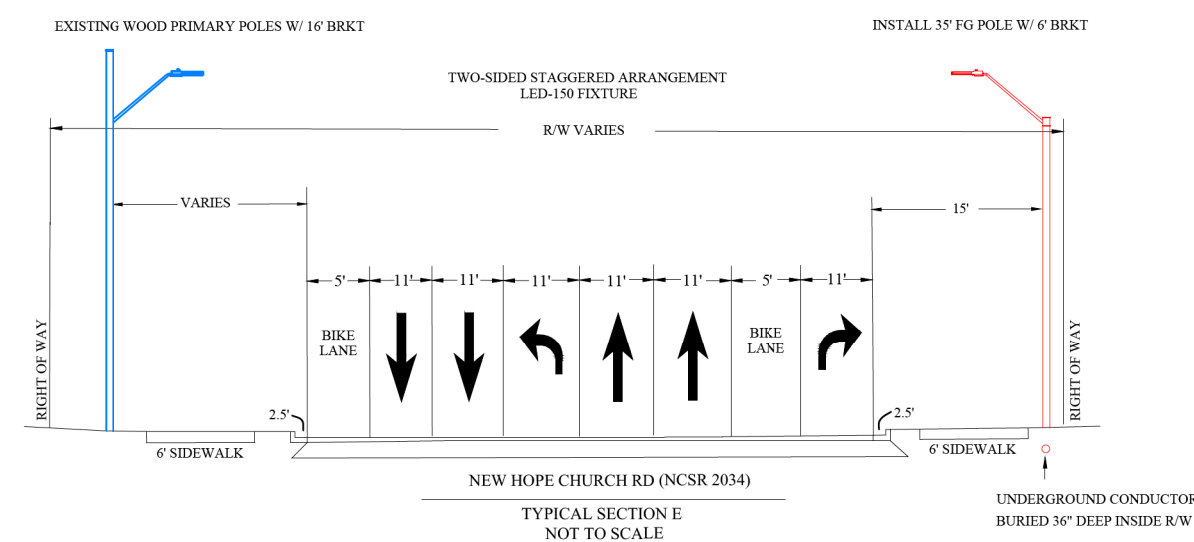
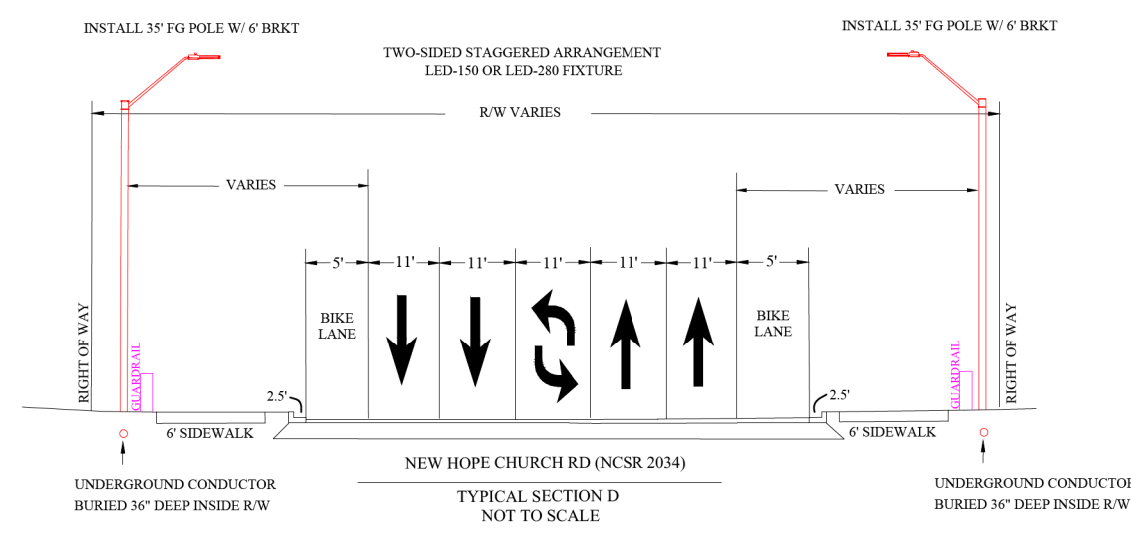
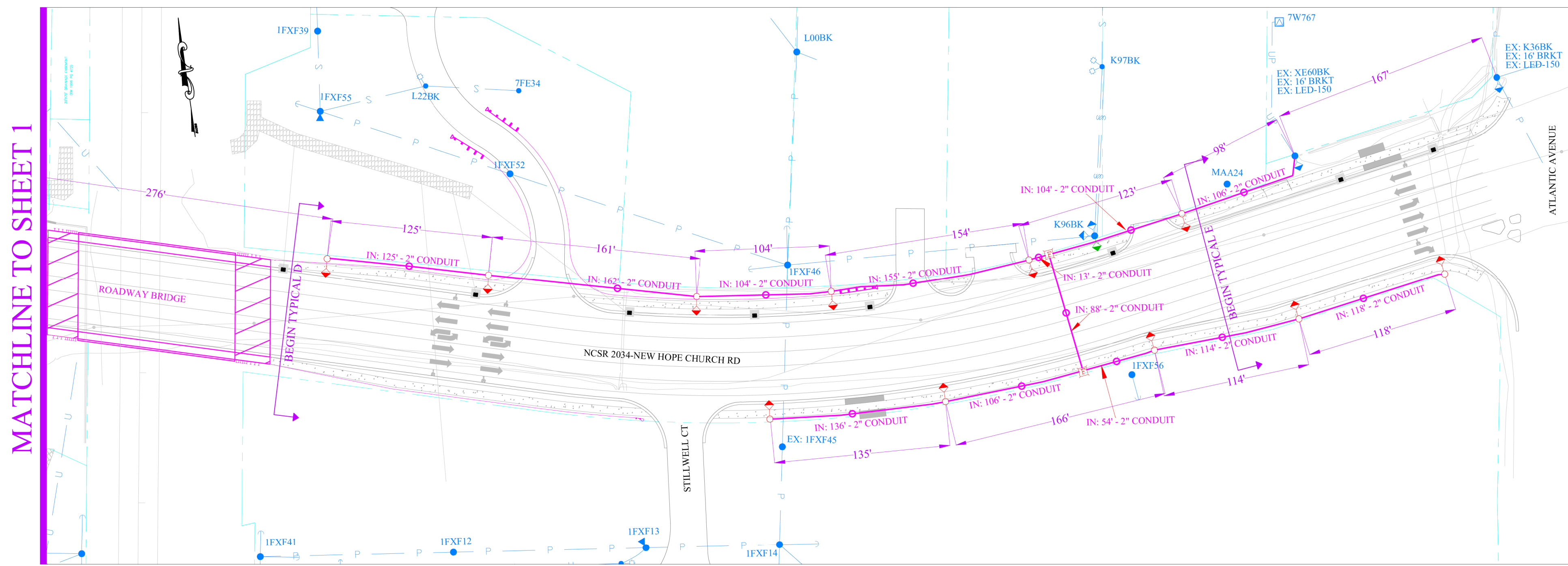
CONDUIT ARRANGEMENT FOR NEW HOPE CHURCH RD (NCSR 2034) RALEIGH, NC	
Designed by	DUKE ENERGY PROGRESS LIGHTING SOLUTIONS
Reviewed by	JESSICA WEISS Scale 1" = 50'
Date	2/16/2024 Size Drawing size "D"
Description	
Drawing No.	4304 Sit. 1 OF 2

NO.	DATE	REVISION	BY

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# STREET LIGHTING CONDUIT LOCATION



PROPOSED	EXISTING	REMOVE	INSTALL	LEGEND
				LED LUMINAIRE
				2" CONDUIT
				FIBERGLASS/STEEL LIGHTING POLE
				WOOD POLE
				FOREIGN POLE
				TRANSFORMER (POLE MOUNTED)
				STREET LIGHT CIRCUIT UNDERGROUND
				STREET LIGHT CIRCUIT OVERHEAD
				ON PRIMARY CIRCUIT
				R/W/PROPERTY LINES
				SECONDARY PERISTAL
				TRANSFORMER (PAD MOUNTED)

**SAFETYFirst**

7: PERSONAL ACCOUNTABILITY  
7: ACTIVE CAREER  
7: HAZARD RECOGNITION

**Safety Reminders / Adverse Conditions**

**WZS: REMEMBER "YOUR CIRCLE OF SAFETY"**  
**WZS: SET PROPER WORK ZONE NEEDED**  
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CONDUIT ARRANGEMENT FOR NEW HOPE CHURCH RD (NCSR 2034)	
RALEIGH, NC	
Designed by	DUKE ENERGY PROGRESS LIGHTING SOLUTIONS
Reviewed by	JESSICA WEISS Scale 1" = 50'
Date	2/16/2024 Size Drawing size "D"
Description	
Drawing No.	4304 Sht. 2 OF 2

NO.	DATE	REVISION	BY

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