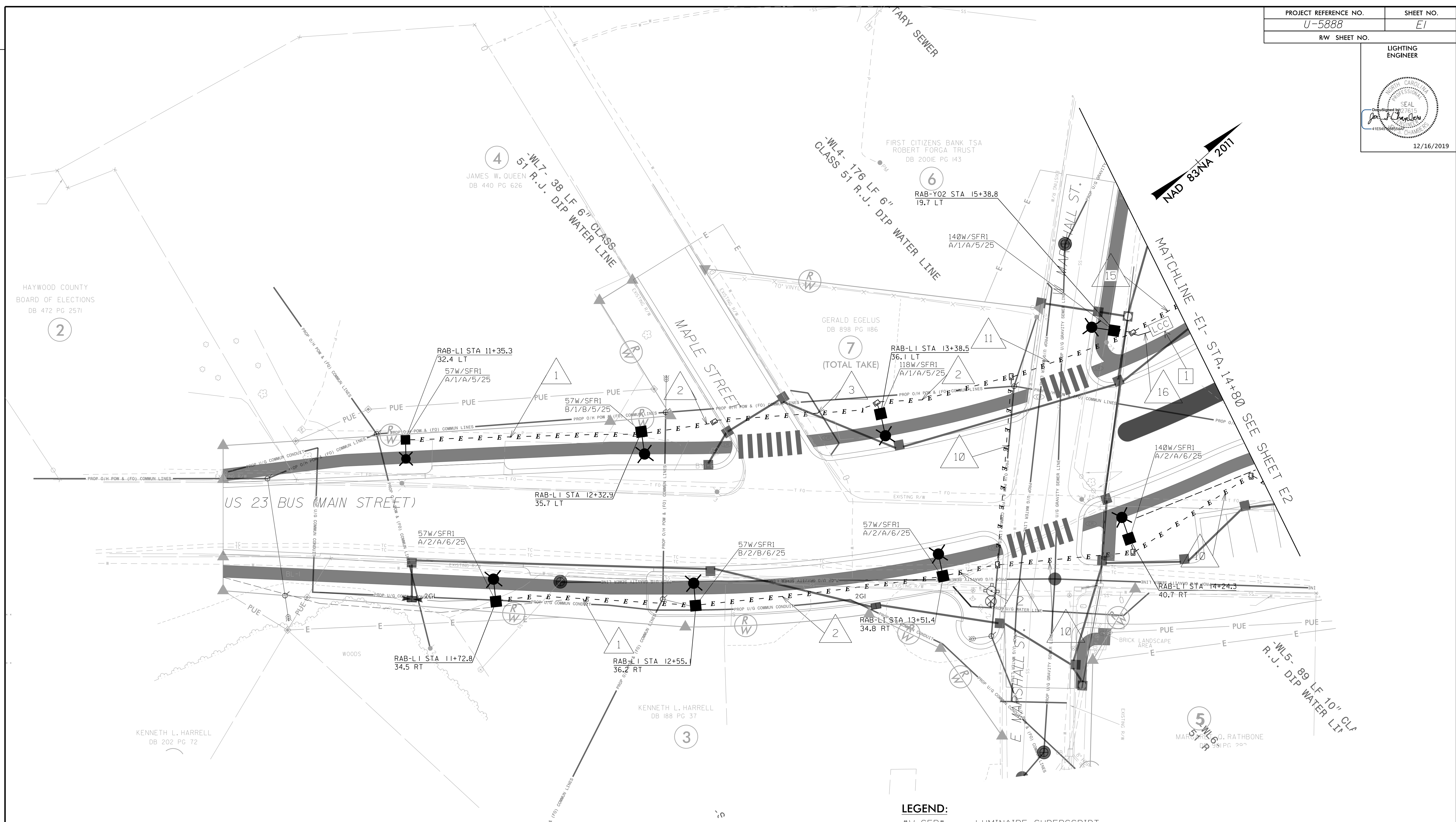


REVISIONS

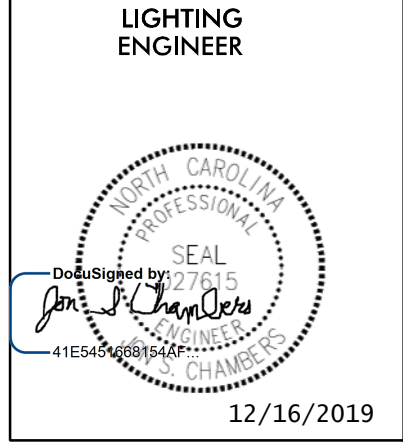


- GENERAL NOTES:**
- CONTRACTOR SHALL COORDINATE ELECTRICAL SERVICE CONNECTION WITH THE CITY OF WAYNESVILLE. CONTRACTOR SHALL OBTAIN 120/240V SERVICE.
 - CONTRACTOR SHALL INSTALL ALL EQUIPMENT IN ACCORDANCE WITH JURISDICTIONAL CODES AND STANDARDS AS WELL AS THE JURISDICTION'S LATEST ADOPTED VERSION OF THE NATIONAL ELECTRICAL CODE.
 - SEE SHEET E5 FOR LUMINAIRE CONDUIT AND CONDUCTOR SCHEDULE
 - CONTRACTOR SHALL LABEL LIGHT POLE RECEPTACLES FOR "MAX. OF 1.5A/180W LOAD"

- SHEET NOTES:**
- SEE SHEET E5 FOR LIGHTING CONTROL CENTER DETAILS.

LEGEND:

#W-SFR#	LUMINAIRE SUPERSCRIT	- E - E -	ELECTRICAL CONDUIT (SEE CONDUIT AND CONDUCTOR SCHEDULE ON SHEET E5 FOR DETAILS)
#W	INDICATED LUMINAIRE WATTAGE	LCC	LIGHTING CONTROL CENTER
SFR#	INDICATES FOUNDATION TYPE	■	LUMINAIRE (SEE PHOTOMETRIC PLANS FOR DETAILS)
X/#/Y/\$/&	LUMINAIRE SUBSCRIPT	△	CONDUIT AND CONDUCTOR CALLOUT (SEE SHEET E5 FOR DETAILS)
X	INDICATES PHASE CONNECTION TO LUMINAIRE	□	13" W X 24" L X 18" D ELECTRICAL JUNCTION BOX
#	INDICATES CIRCUIT NUMBER FOR LUMINAIRE		
Y	INDICATES PHASE CONNECTION TO RECEPTACLE		
\$	INDICATES CIRCUIT NUMBER FOR RECEPTACLE		
&	INDICATES MOUNTING HEIGHT FOR LUMINAIRE		

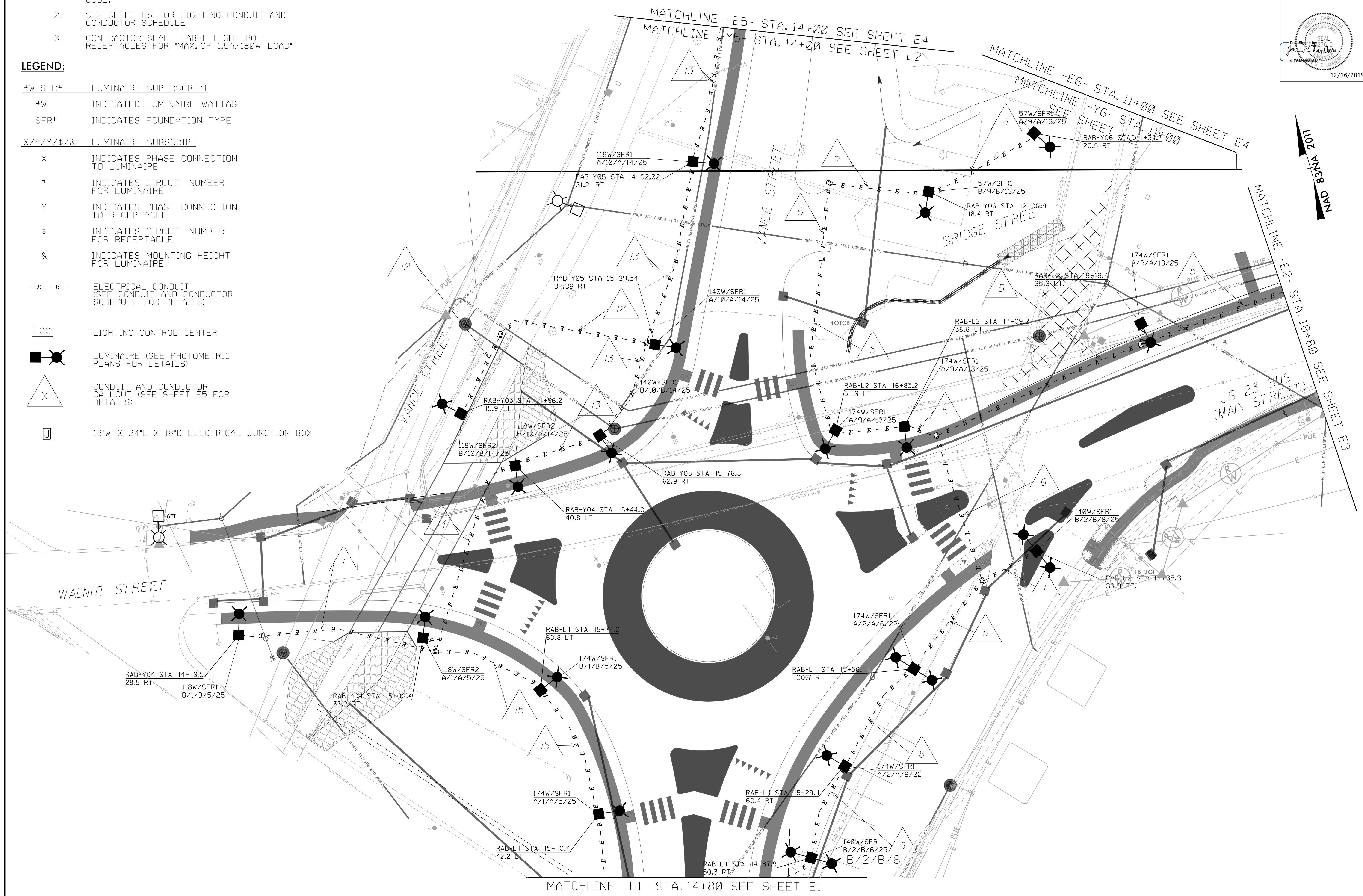


GENERAL NOTES:

1. CONTRACTOR SHALL INSTALL ALL EQUIPMENT IN ACCORDANCE WITH JURISDICTIONAL CODES AND STANDARDS AS WELL AS THE JURISDICTION'S LATEST ADOPTED VERSION OF THE NATIONAL ELECTRICAL CODE.
2. SEE SHEET E5 FOR LIGHTING CONDUIT AND CONDUCTOR SCHEDULE
3. CONTRACTOR SHALL LABEL LIGHT POLE RECEPTACLES FOR "MAX. OF 1.5A/180W LOAD"

LEGEND:

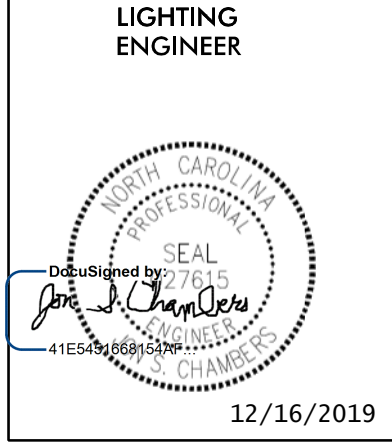
- #W-SFR# LUMINAIRE SUPERSCRIPIT
- #W INDICATED LUMINAIRE WATTAGE
- SFR# INDICATES FOUNDATION TYPE
- X/#/Y/\$/& LUMINAIRE SUBSCRIPT
- X INDICATES PHASE CONNECTION TO LUMINAIRE
- # INDICATES CIRCUIT NUMBER FOR LUMINAIRE
- Y INDICATES PHASE CONNECTION TO RECEPTACLE
- \$ INDICATES CIRCUIT NUMBER FOR RECEPTACLE
- & INDICATES MOUNTING HEIGHT FOR LUMINAIRE
- E - E - ELECTRICAL CONDUIT (SEE CONDUIT AND CONDUCTOR SCHEDULE FOR DETAILS)
- LCC LIGHTING CONTROL CENTER
- [Symbol] LUMINAIRE (SEE PHOTOMETRIC PLANS FOR DETAILS)
- [Symbol] CONDUIT AND CONDUCTOR CALLOUT (SEE SHEET E5 FOR DETAILS)
- [Symbol] 13"W X 24"L X 18"D ELECTRICAL JUNCTION BOX



100' VAN 38' DAN

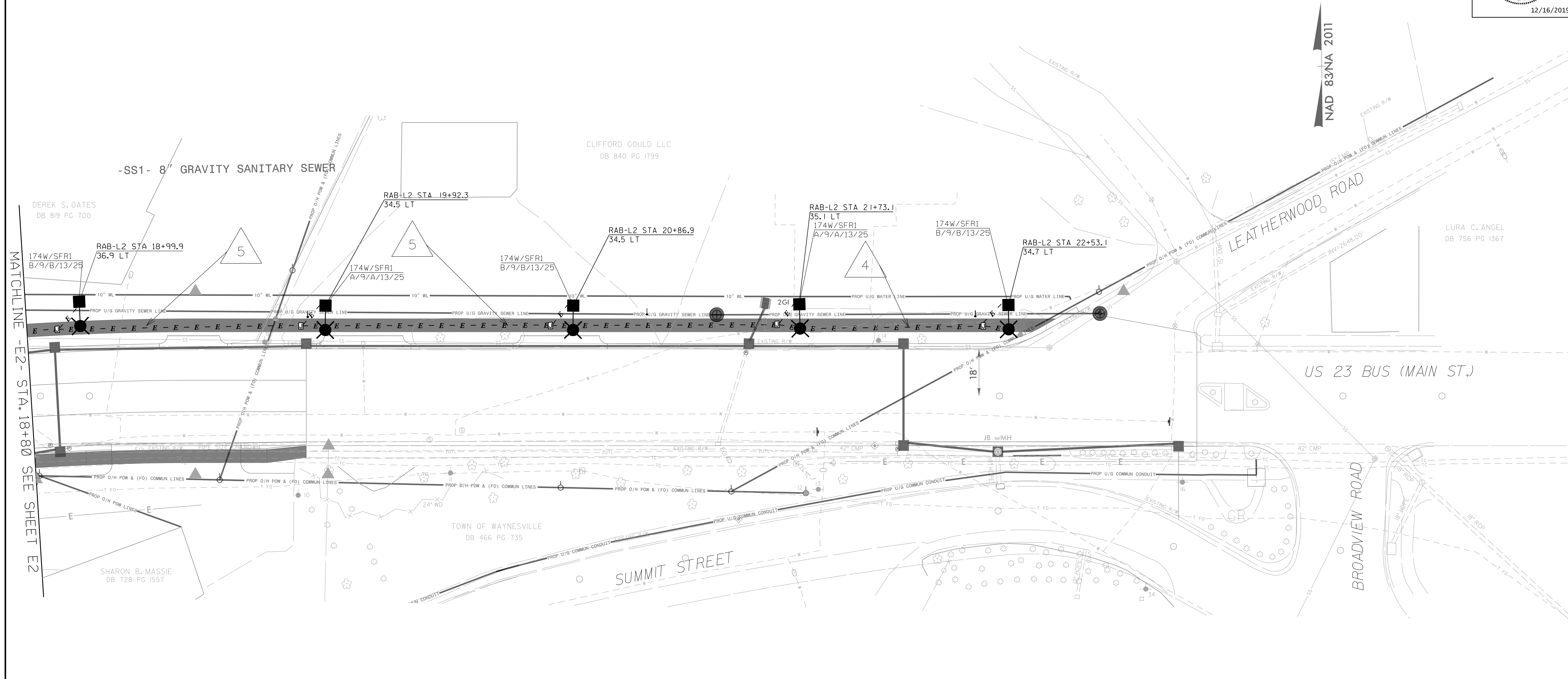
US 23 BUS (MAIN STREET) SEE SHEET E3

MATCHLINE -E1- STA. 14+80 SEE SHEET E1



GENERAL NOTES:

1. CONTRACTOR SHALL INSTALL ALL EQUIPMENT IN ACCORDANCE WITH JURISDICTIONAL CODES AND STANDARDS AS WELL AS THE JURISDICTION'S LATEST ADOPTED VERSION OF THE NATIONAL ELECTRICAL CODE.
2. SEE SHEET E5 FOR LIGHTING CONDUIT AND CONDUCTOR SCHEDULE.
3. CONTRACTOR SHALL LABEL LIGHT POLE RECEPTACLES FOR "MAX. OF 1.5A/180W LOAD"



LEGEND:

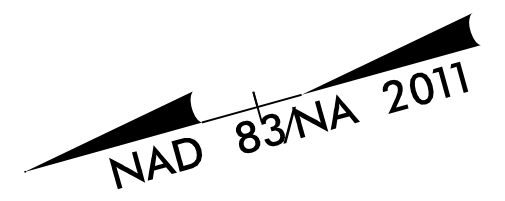
- | | | | | | |
|------------|--|-----------|---|---|---|
| #W-SFR# | LUMINAIRE SUPERSCRIPIT | - E - E - | ELECTRICAL CONDUIT (SEE CONDUIT AND CONDUCTOR SCHEDULE FOR DETAILS) | □ | 13' X 24' ELECTRICAL JUNCTION BOX |
| #W | INDICATED LUMINAIRE WATTAGE | LCC | LIGHTING CONTROL CENTER | ■ | LUMINAIRE (SEE PHOTOMETRIC PLANS FOR DETAILS) |
| SFR# | INDICATES FOUNDATION TYPE | △ | CONDUIT AND CONDUCTOR CALLOUT (SEE SHEET E5 FOR DETAILS) | | |
| X/#/Y/\$/& | LUMINAIRE SUBSCRIPT | | | | |
| X | INDICATES PHASE CONNECTION TO LUMINAIRE | | | | |
| # | INDICATES CIRCUIT NUMBER FOR LUMINAIRE | | | | |
| Y | INDICATES PHASE CONNECTION TO RECEPTACLE | | | | |
| \$ | INDICATES CIRCUIT NUMBER FOR RECEPTACLE | | | | |
| & | INDICATES MOUNTING HEIGHT FOR LUMINAIRE | | | | |

REVISIONS

MATCHLINE -E2- STA. 18+80 SEE SHEET E2

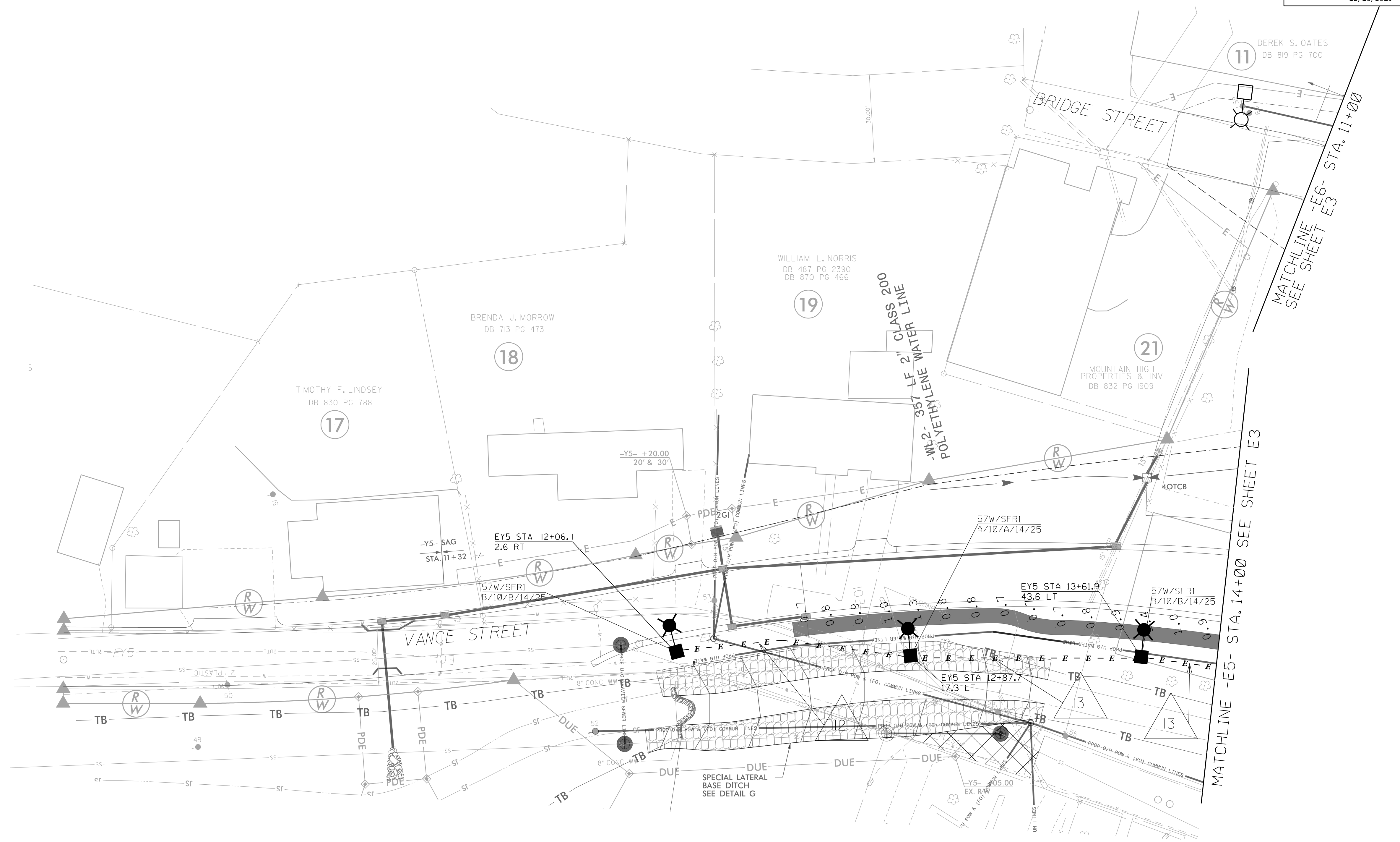
GENERAL NOTES:

1. CONTRACTOR SHALL INSTALL ALL EQUIPMENT IN ACCORDANCE WITH JURISDICTIONAL CODES AND STANDARDS AS WELL AS THE LATEST ADOPTED VERSION OF THE NATIONAL ELECTRICAL CODE.
2. SEE SHEET E5 FOR LIGHTING CONDUIT AND CONDUCTOR SCHEDULE
3. CONTRACTOR SHALL LABEL LIGHT POLE RECEPTACLES FOR *MAX. OF 1.5A/180W LOAD*



LIGHTING ENGINEER

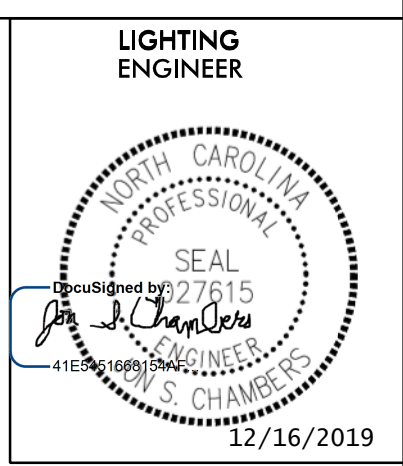
12/16/2019



LEGEND:

- #W-SFR# LUMINAIRE SUPERSCRIPT
- #W INDICATED LUMINAIRE WATTAGE
- SFR# INDICATES FOUNDATION TYPE
- X/#/Y/\$/& LUMINAIRE SUBSCRIPT
- X INDICATES PHASE CONNECTION TO LUMINAIRE
- # INDICATES CIRCUIT NUMBER FOR LUMINAIRE
- Y INDICATES PHASE CONNECTION TO RECEPTACLE
- \$ INDICATES CIRCUIT NUMBER FOR RECEPTACLE
- & INDICATES MOUNTING HEIGHT FOR LUMINAIRE

- E - E - ELECTRICAL CONDUIT (SEE CONDUIT AND CONDUCTOR SCHEDULE FOR DETAILS)
- J 13' X 24' ELECTRICAL JUNCTION BOX
- [LCC] LIGHTING CONTROL CENTER
- LUMINAIRE (SEE PHOTOMETRIC PLANS FOR DETAILS)
- △ X CONDUIT AND CONDUCTOR CALLOUT (SEE SHEET E5 FOR DETAILS)



LCC Panel Schedule													
Location: Equipment Rack Volts: 120/240 Phase 1 Wire: 3 Hertz: 60													
MCB: 100A Main AIC: (See Note 3) Branch AIC: (See Note 3) ENCL. (NEMA): 3R MTG: Surface													
100 Amp, 24 Space, Ground Bar, Locking Cover, Panel Card.													
Description of Load Served	Wire Size	Breaker		A/Phase		CKT No.	CKT No.	A/Phase		Breaker		Wire Size	Description of Load Served
		Pole	Amp	A	B			A	B	Amp	Pole		
Lighting - SB South Main Street and Walnut Street	#8	2	20	3.6	2.9	1	2	5.0	5.1	20	2	#8	Lighting - NB South Main Street and EB Main Street
Receptacle - SB South Main Street and Walnut Street	#8	2	20	6.0	4.5	5	6	6.0	4.5	20	2	#8	Receptacles - NB South Main Street and EB Main Street
Lighting - East Main Street and NB Vance Street	#4	2	20	6.3	4.8	9	10	3.6	2.6	20	2	#8	Lighting - SB Vance Street
Receptacles - East Main Street and NB Vance Street	#4	2	20	7.5	6.0	13	14	6.0	6.0	20	2	#4	Receptacle - SB Vance Street
Spare		2	20	-	-	17	18	-	-	20	2		Spare
Space				-	-	19	20	-	-				Space
Space				-	-	21	22	-	-				Space
Space				-	-	23	24	-	-				Space
Total A/Phase				23.4	18.2			20.6	18.2	Total A/Phase			

Notes:
 1. Connected KVA: 9.6
 2. Demand KVA: 12.1
 3. Contractor shall perform a short circuit analysis to determine the required minimum AIC rating of the panel and breakers.

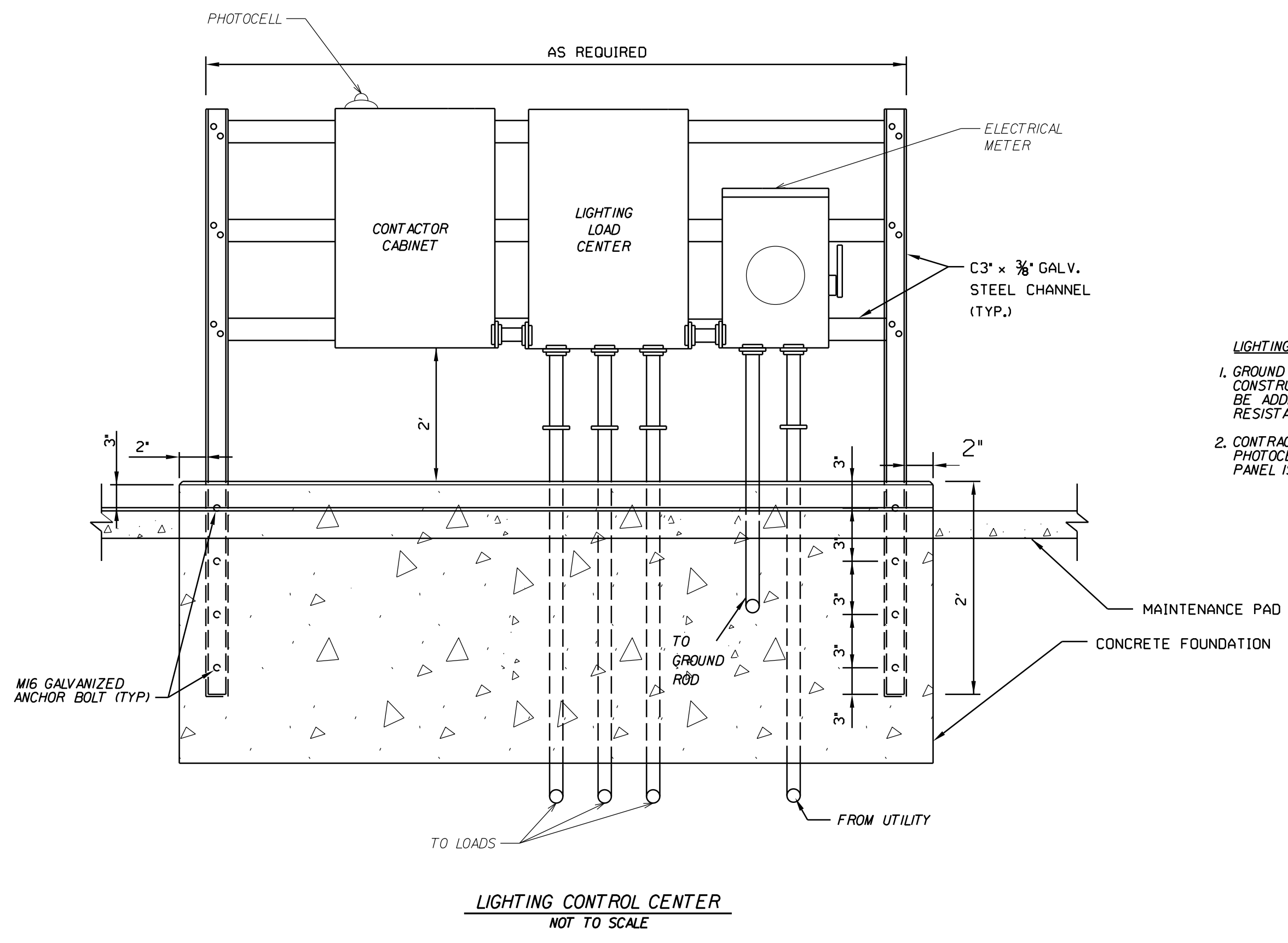
CONDUIT & CONDUCTOR SCHEDULE

CALLOUT	CONDUIT SIZE	CONDUIT TYPE*	AWG**	
			#4	#8
1	2"	P	-	5
2	2"	P	-	7
3	2"	H	-	7
4	2"	P	5	-
5	2"	P	7	-
6	2"	H	7	-
7	2"	H	7	4
8	2"	P	7	4
9	2"	P	7	6
10	2"	H	7	6
11	2"	H	-	7
	2"	H	7	6
12	2"	P	3	2
13	2"	P	4	3
14	2"	H	4	3
15	2"	P	4	9
16	2"	P	4	9
	2"	P	-	7
	2"	P	7	6

* P = PVC (Trenched)
 H = HDPE (Bored)
 E = Existing

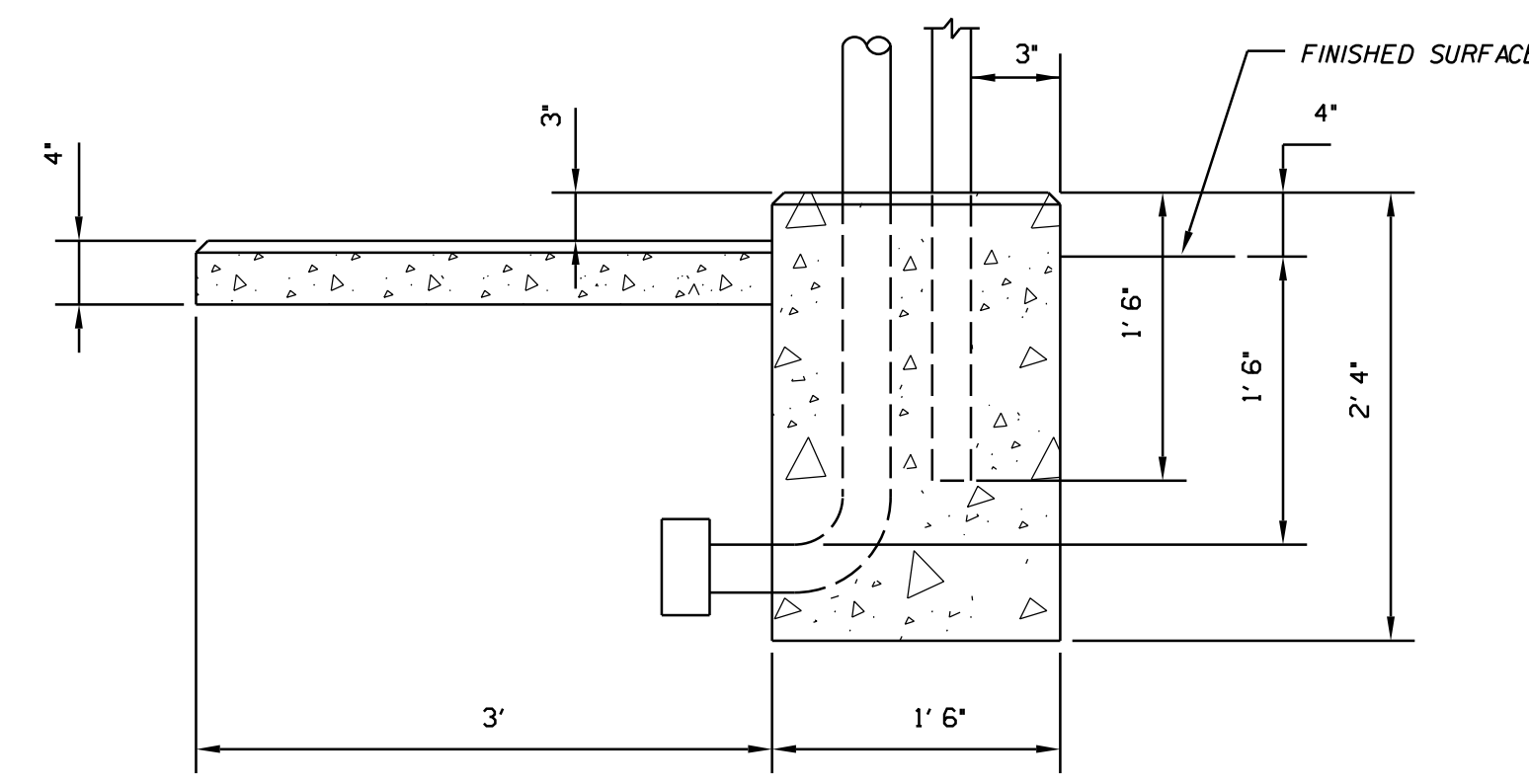
** EACH CONDUIT SHALL CONTAIN ONE SHARED EQUIPMENT GROUNDING CONDUCTOR (EGC). EGC IS INCLUDED IN THE CONDUCTOR QUANTITIES ABOVE AND IS SIZED TO MATCH THE LARGEST CIRCUIT WIRE SIZE PER NEC.

REVISIONS



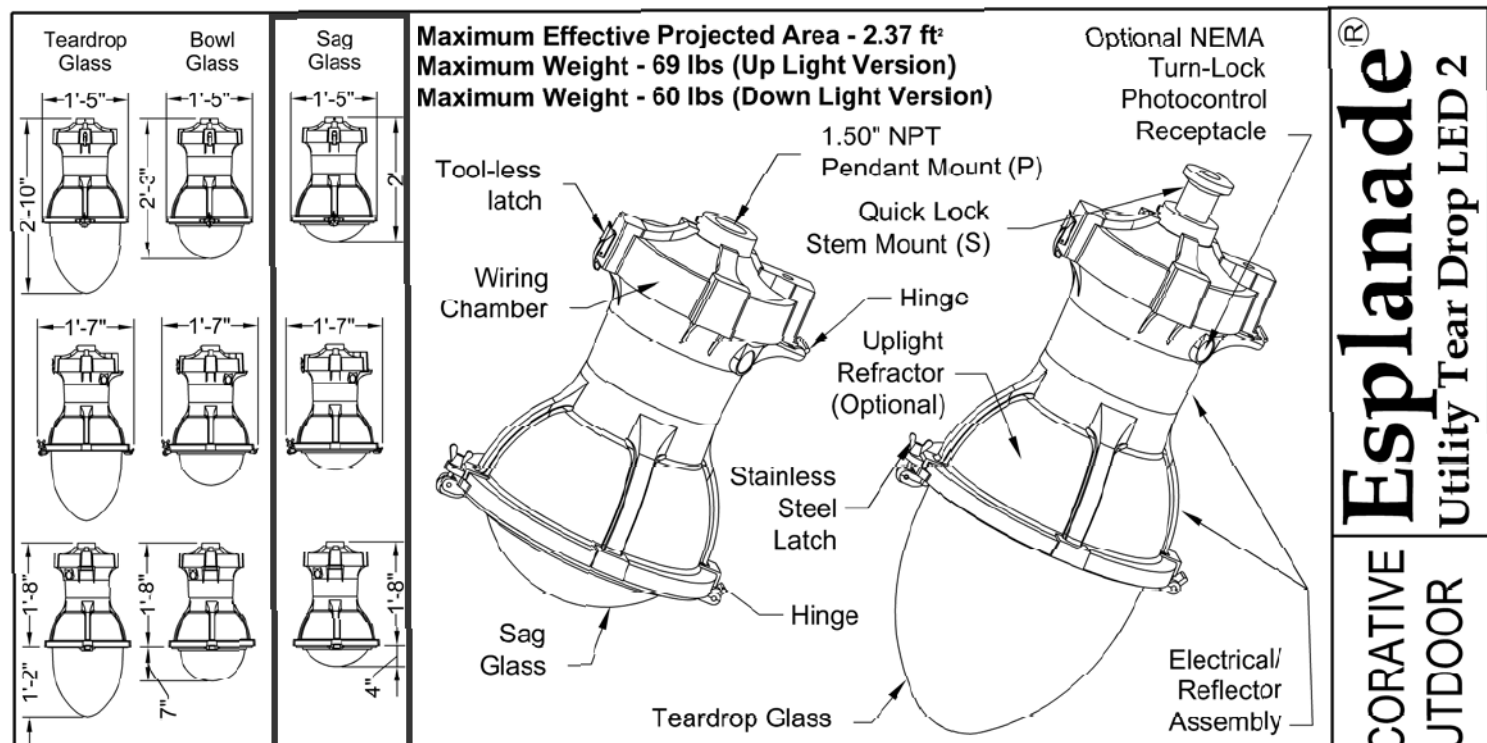
LIGHTING CONTROL CENTER NOTES:

- GROUND ROD SHALL BE 5/8" x 10' COPPER CLAD CONSTRUCTION. ADDITIONAL GROUND RODS SHALL BE ADDED AS REQUIRED TO MEET NEC GROUND RESISTANCE REQUIREMENTS.
- CONTRACTOR SHALL WIRE THE CONTACTOR AND PHOTOCELL SUCH THAT THE ENTIRE ELECTRICAL PANEL IS CONTACTED BY THE PHOTOCELL.



NOTES:

- ALL EXPOSED CONCRETE EDGES SHALL BE CHAMFERED 0.75".
- GROUNDING BUSHINGS SHALL BE INSTALLED ON EACH END OF METAL CONDUITS.
- BELL ENDS SHALL BE INSTALLED ON THE ENDS OF PVC CONDUITS.
- CITY OF WAYNESVILLE WILL INSTALL SERVICE CABLE FROM POWER SOURCE TO THE METER BASE.
- ELECTRICAL EQUIPMENT SHALL BE ATTACHED TO THE STRUCTURAL SUPPORTS WITH #9 GALVANIZED BOLTS, LOCK WASHERS, AND NUTS.
- EACH FOUNDATION SHALL BE PERMANENTLY MARKED TO INDICATE ALL SIDES FROM WHICH CONDUITS PASS. THIS MARK SHALL BE MADE WITH A TROWEL WHEN FINISHING THE CONCRETE AND SHALL BE 1/4" DEEP AND 4" TO 3" LONG.



EXAMPLE: ESL2 P10S 40K AS BK TG 3 S

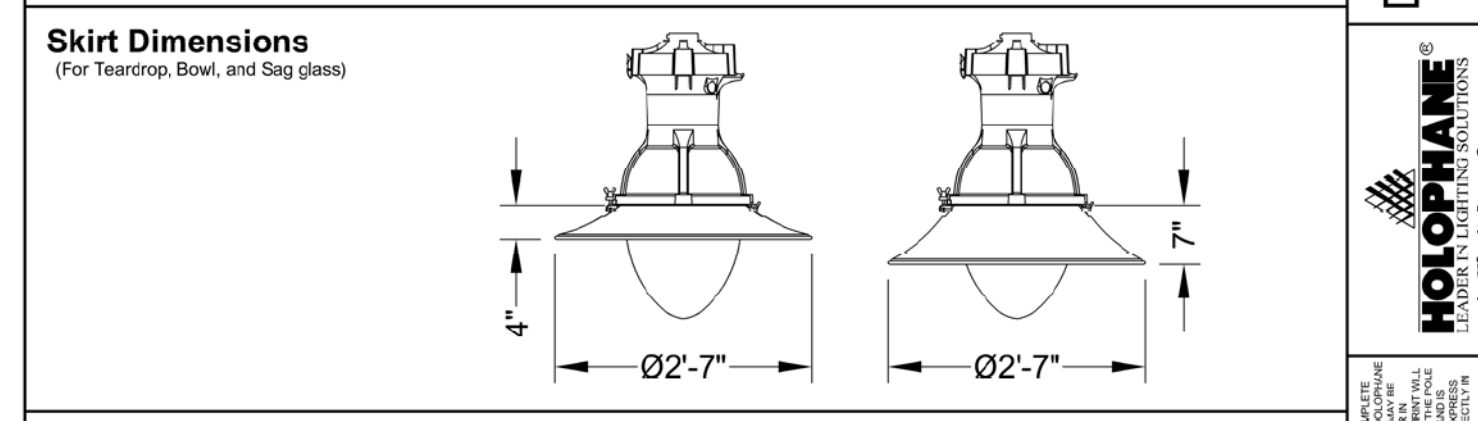
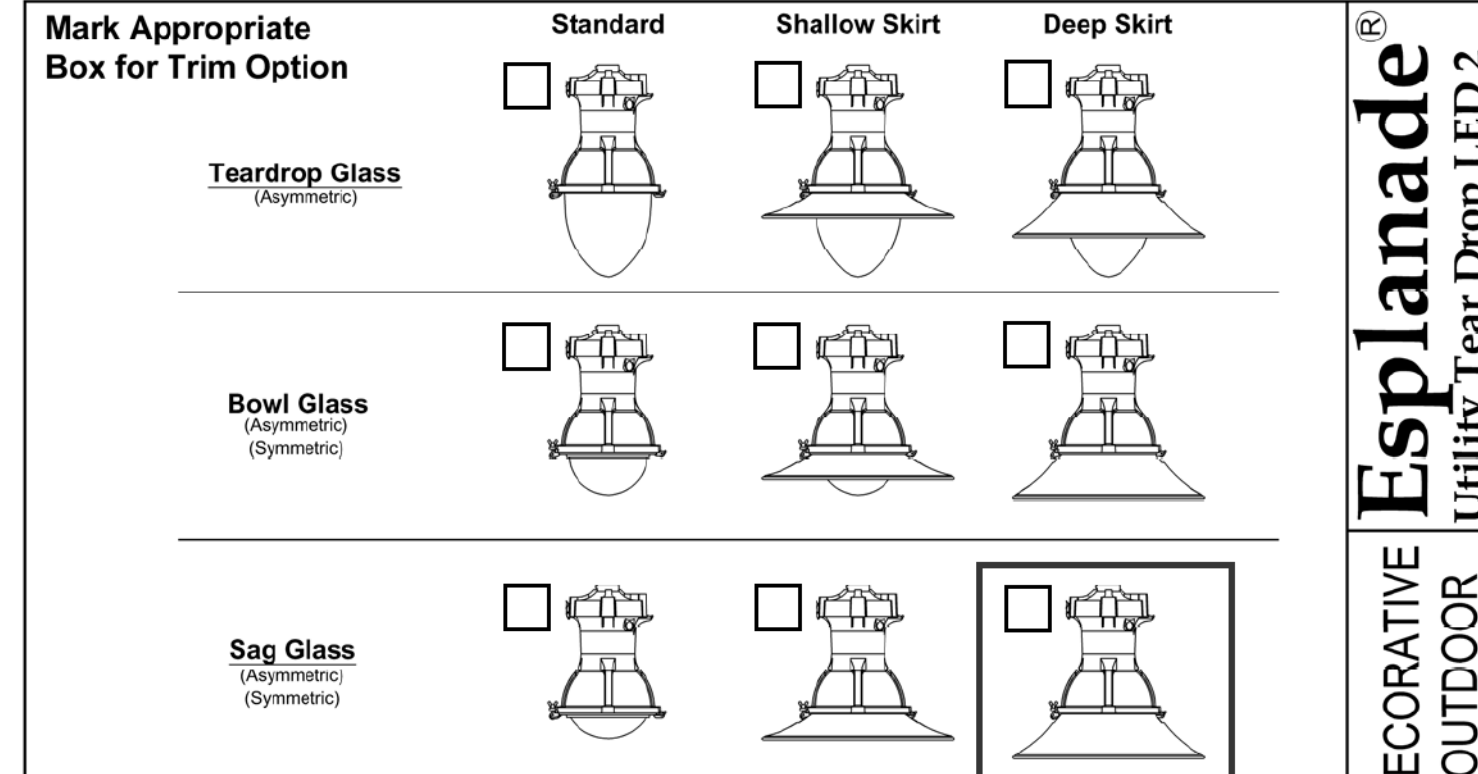
ESL2

LUMEN / WATTAGE PACKAGE (SEE PERFORMANCE TABLE FOR DETAILS, Page 2) P10S = DOWN LIGHT P10U = DOWN LIGHT AND UP LIGHT P200 = DOWN LIGHT P20U = DOWN LIGHT AND UP LIGHT P30S = DOWN LIGHT P30U = DOWN LIGHT AND UP LIGHT P40S = DOWN LIGHT P40U = DOWN LIGHT AND UP LIGHT P50S = DOWN LIGHT P50U = DOWN LIGHT AND UP LIGHT	VOLTAGE AS = AUTO-SENSING 120-277 V AH = AUTO-SENSING 347-480 V	COLOR BK = BLACK GR = GRAY GN = GRAFWHITE PP = PRIME PAINT WH = WHITE DZ = BRONZE TDC = TIGER DRYLAC CMC = CUSTOM MATCH COLOR XX = STD FINISH, TBD	DOOR AND GLASS TG = TEARDROP GLASS & DOOR BG = BOWL GLASS & DOOR SG = SAG GLASS & DOOR	OPTIC T = TYPE 3 A = ASYMMETRIC S = SYMMETRIC	TOP ENTRY P = 1.5\"/>
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ORDERING INFORMATION:

OPTIONS

AG = ADJUSTABLE OUTPUT DIMMING (NOT AVAILABLE WITH OPTIONS 'P5', 'P7', OR ANY OTHER DIMMING OPTION)
R = NEMA TWISTLOCK PHOTOCONTROL RECEPTACLE (S PIN)
P5 = NEMA TWISTLOCK PHOTOCONTROL RECEPTACLE (S PIN)
P7 = NEMA TWISTLOCK PHOTOCONTROL RECEPTACLE (T PIN)
P8 = PREPARED FOR EXTERNAL SPIN PHOTOCONTROL RECEPTACLE
P9 = PREPARED FOR EXTERNAL 7PIN PHOTOCONTROL RECEPTACLE
P0 = SHORTING CAP (MUST BE USED WITH OPTION 'R', 'P5', OR 'P7')
P1 = DTL TWISTLOCK PHOTOCONTROL FOR SOLID-STATE LIGHTING 120-277V (MUST BE USED WITH OPTION 'R', 'P5', OR 'P7')
P2 = DTL TWISTLOCK PHOTOCONTROL FOR SOLID-STATE LIGHTING 120-277V (MUST BE USED WITH OPTION 'R', 'P5', OR 'P7')
P3 = DTL TWISTLOCK PHOTOCONTROL 480V (MUST BE USED WITH OPTION 'R', 'P5', OR 'P7')
P4 = DTL TWISTLOCK PHOTOCONTROL 480V (MUST BE USED WITH OPTION 'R', 'P5', OR 'P7')
P5 = FACTORY PROGRAMMED DRIVER (XX = PERCENTAGE OF LUMENS OR WATTS, SEE PAGE 3)
P6 = ROOM CONCRETE DIMMING CONTROL (NOT AVAILABLE WITH VOLTAGE CODE AH)
P7 = OR ANY OTHER PHOTOCONTROL OR DIMMING OPTION
P8 = 30\"/>



Specifications

DESCRIPTION
The Esplanade luminaire is styled to replicate the "teardrop" luminaires that lighted boulevards in the first half of the 1900s. Designed for light control and ease of installation and maintenance, the Esplanade has a precision optical system for true street lighting performance.

WIRING CHAMBER
The wiring chamber has either a 1.50 inch NPT with a stainless steel set screw or a welded stem. The stem (Quick Lock Stem Mounting option) aids installation speed. A (3) station terminal block that accepts #14 through #2 wires and has a quick disconnect harness with removable electrical module is provided.

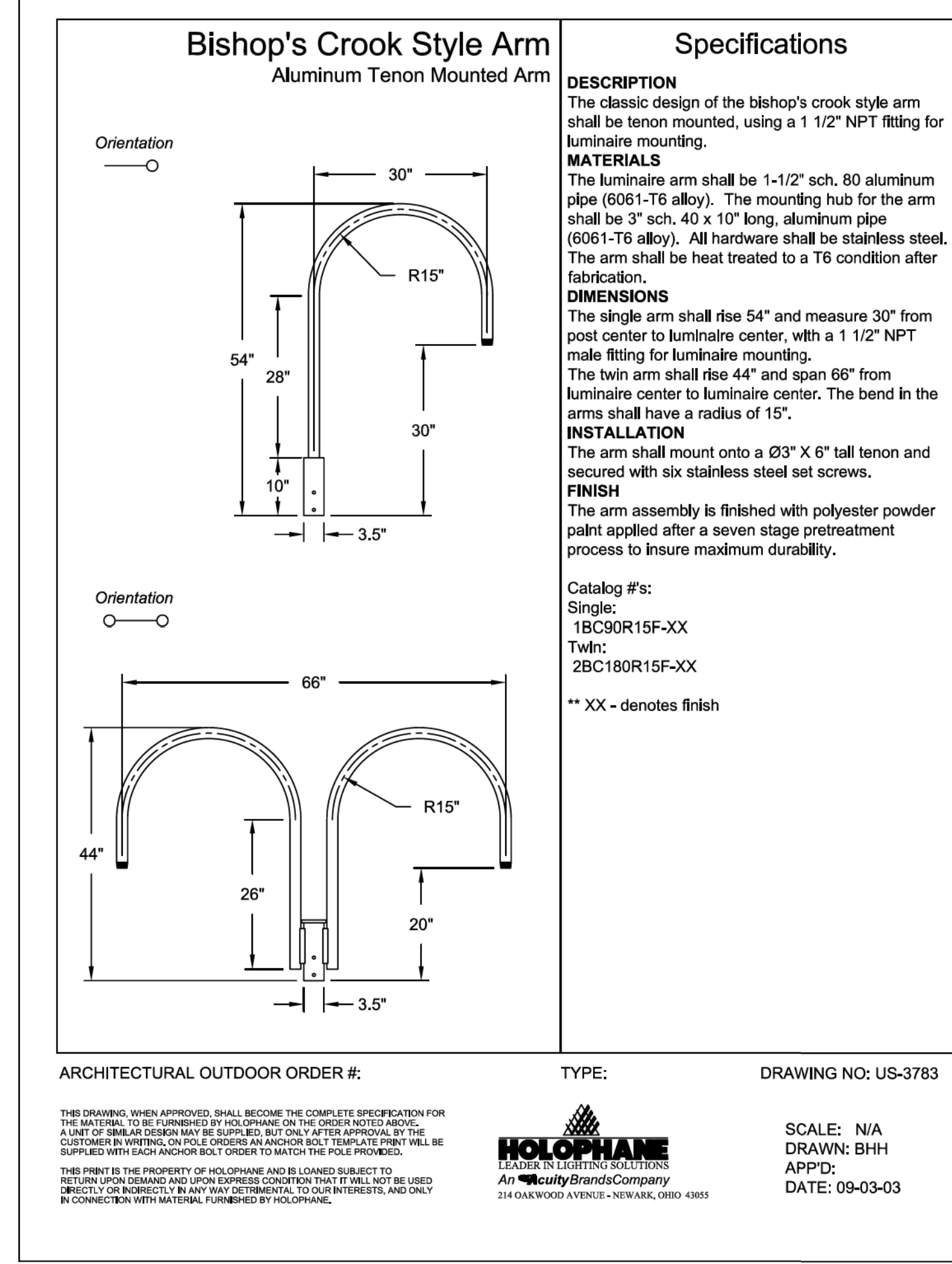
ELECTRICAL / REFLECTOR ASSEMBLY
The electrical / reflector assembly hinges down from the wiring chamber for ease in wiring and to facilitate the removal of the electrical module. The assembly is secured in place by a stainless steel latch. The unitized electrical module consists of the electronic driver and components mounted to an aluminum plate that is easily removed by loosening two screws in the base of the housing. The disconnect plug connects the ballast to the terminal block in the wiring chamber.

REFRACTOR / DOOR ASSEMBLY
The cast aluminum door supports a teardrop, bowl or sag shaped, thermal resistant borosilicate glass refractor that controls the light to provide an I.E.S. asymmetric (teardrop, bowl and sag glass) and symmetric (bowl and sag glass) distribution. I.E.S. asymmetric cut off distribution is available on the bowl glass with the decorative deep skirt option and the sag glass with either the decorative shallow or deep skirt option. The refractor assembly and decorative skirt (when applicable) assembly hinges from the electrical / reflector assembly and is latched by a tamper-resistant, color matched bracket and with nut assembly.

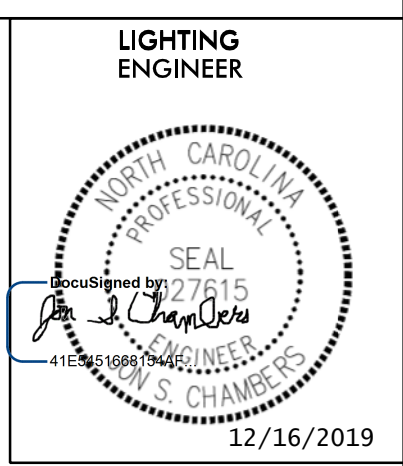
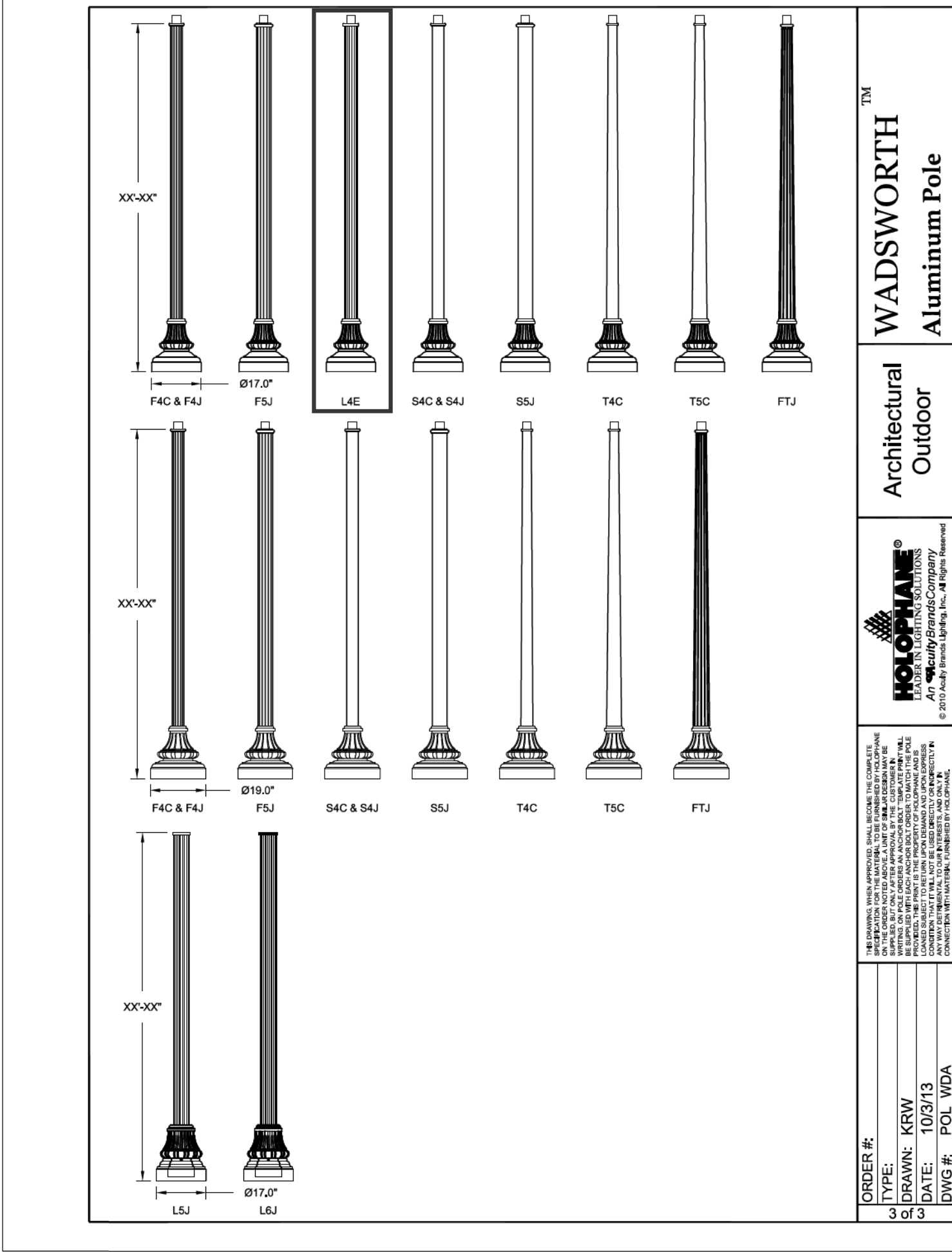
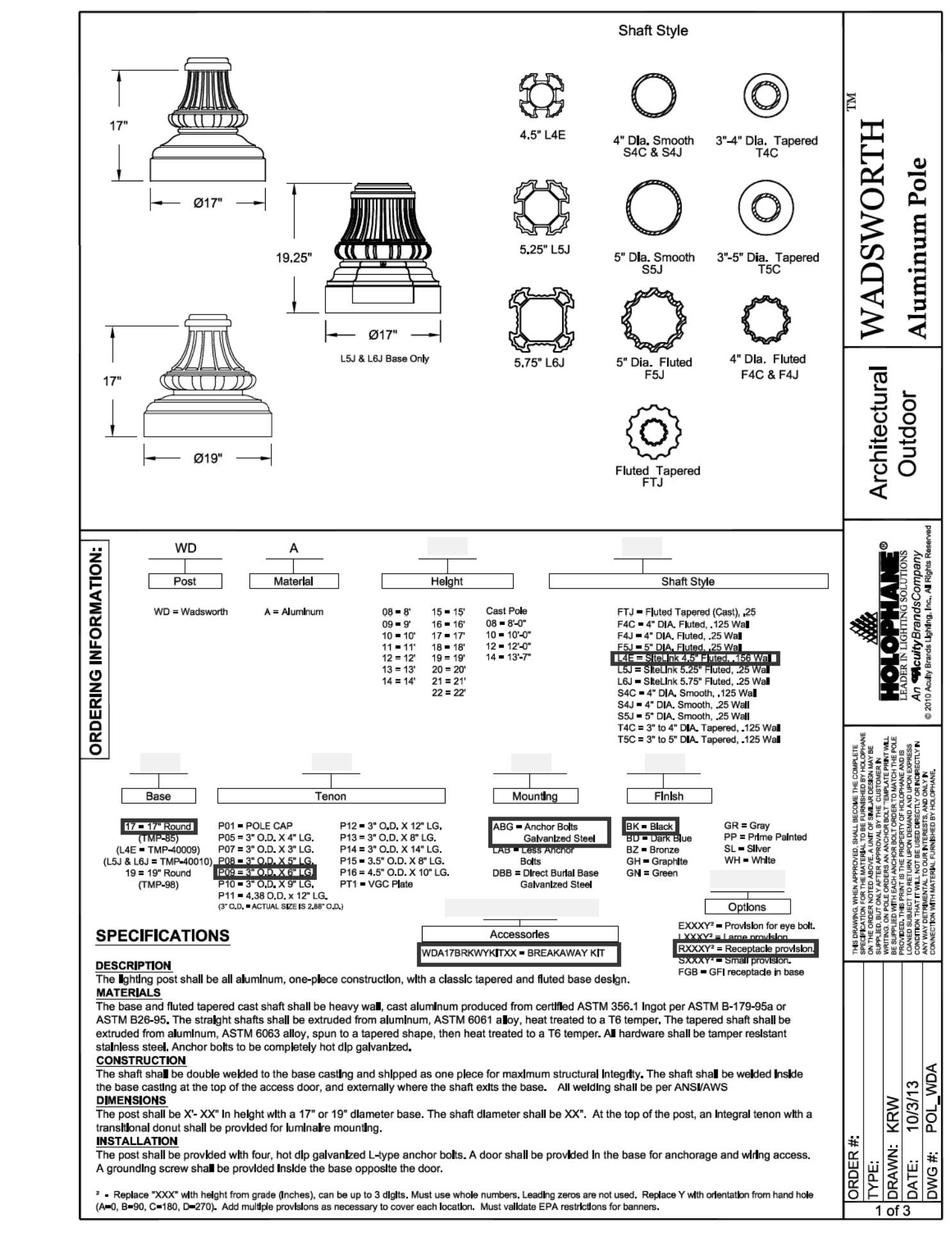
DRIVER
LED programmable dimmable driver located in the upper electrical housing.

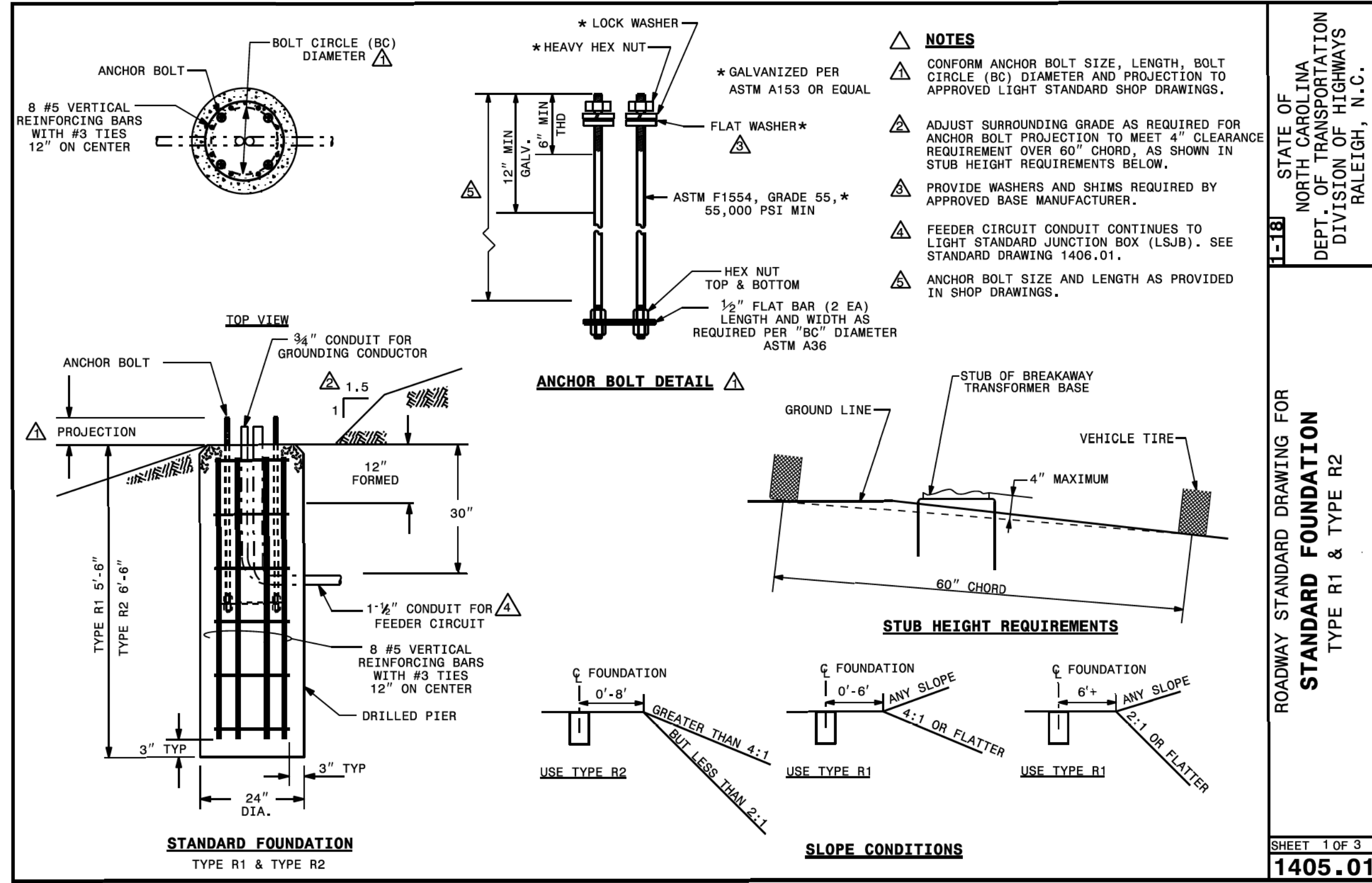
FINISH / MATERIAL
The luminaire is finished with polyester powder paint to insure maximum durability. All castings utilize low copper aluminum for maximum corrosion resistance and all exposed hardware is stainless steel.

CERTIFICATION
CSA listing suitable for wet location up to 40°C. Consult factory for details.



REVISIONS

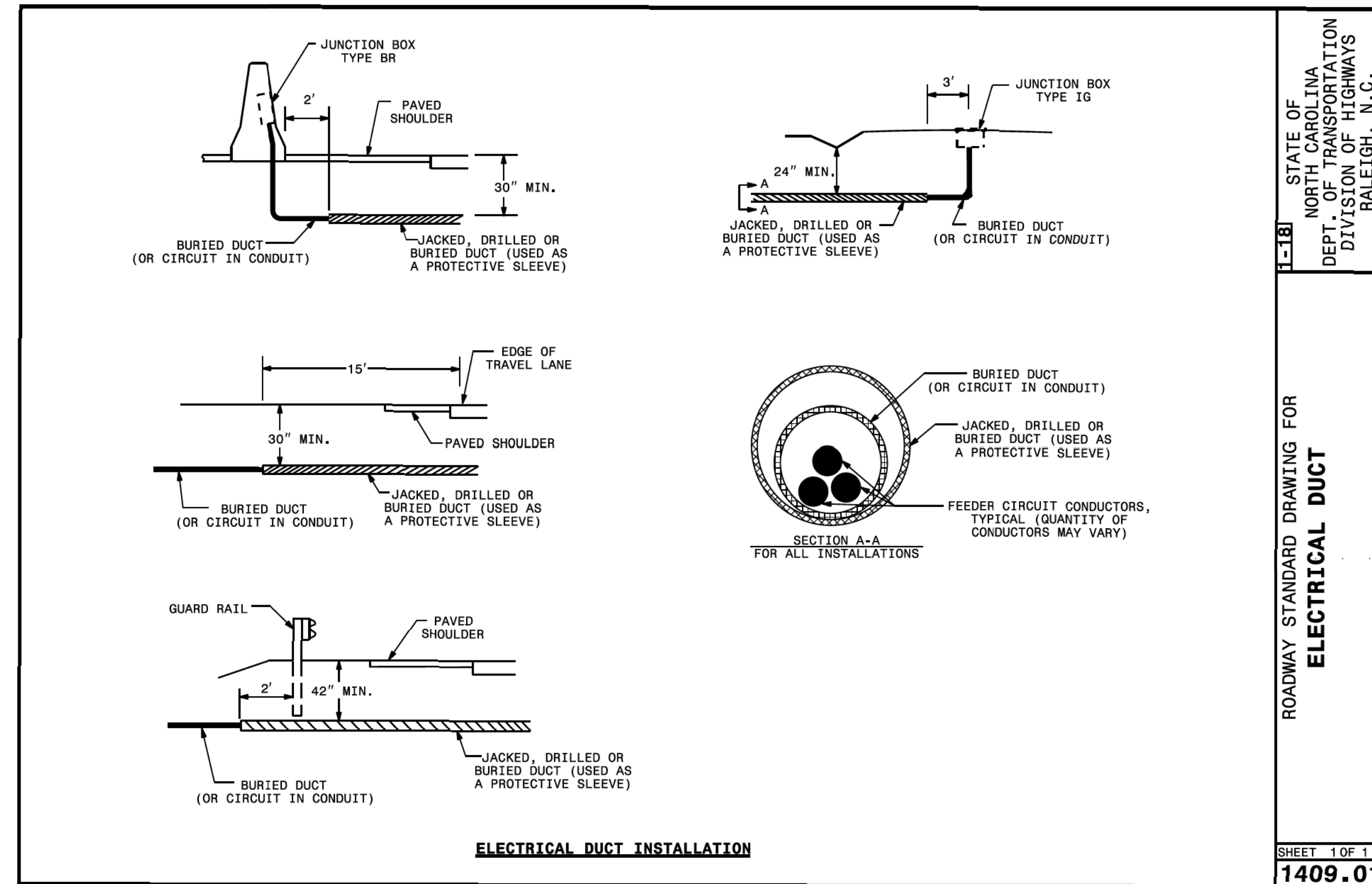




STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

ROADWAY STANDARD DRAWING FOR STANDARD FOUNDATION TYPE R1 & TYPE R2

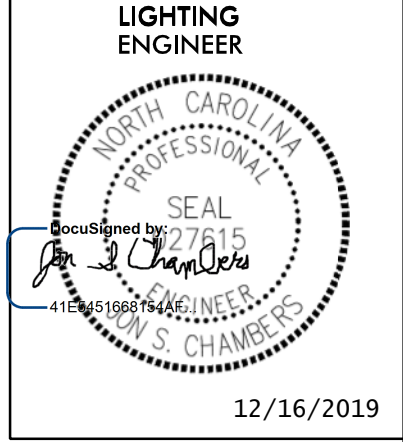
SHEET 1 OF 3 1405.01



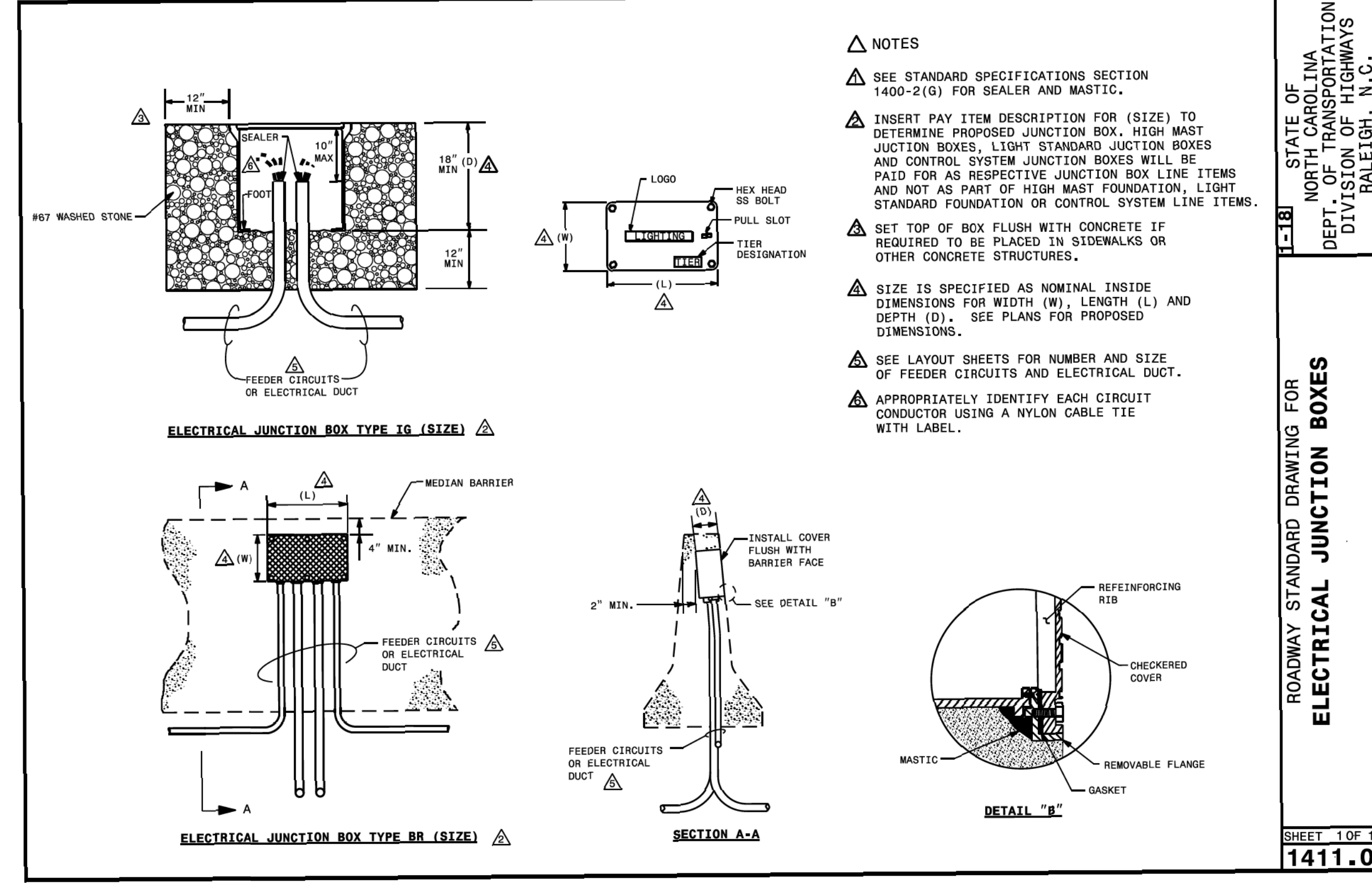
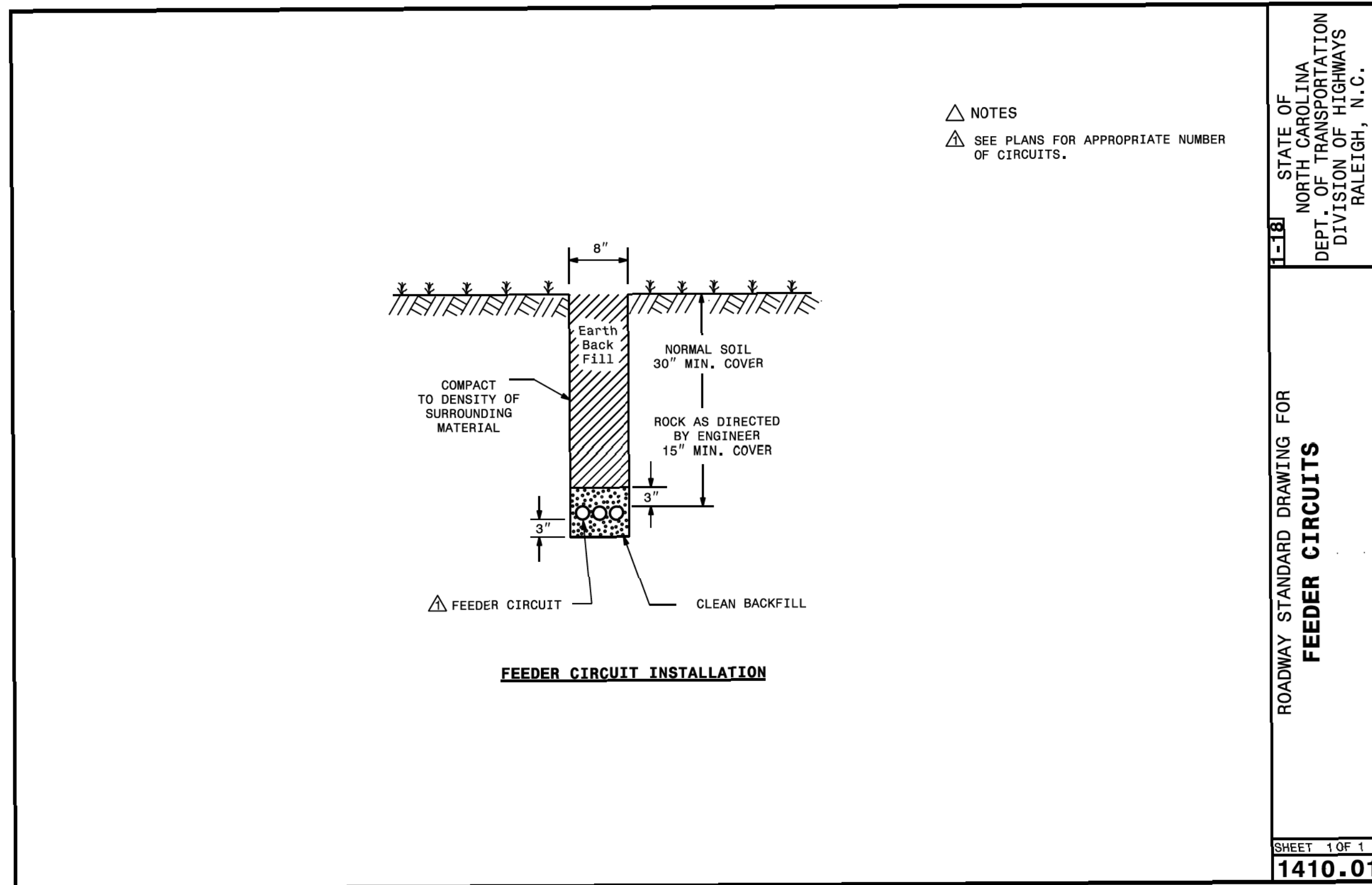
STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

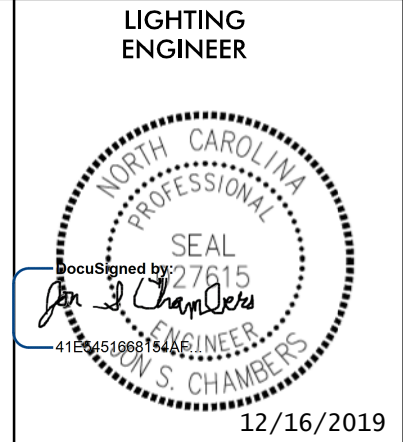
ROADWAY STANDARD DRAWING FOR ELECTRICAL DUCT

SHEET 1 OF 1 1409.01

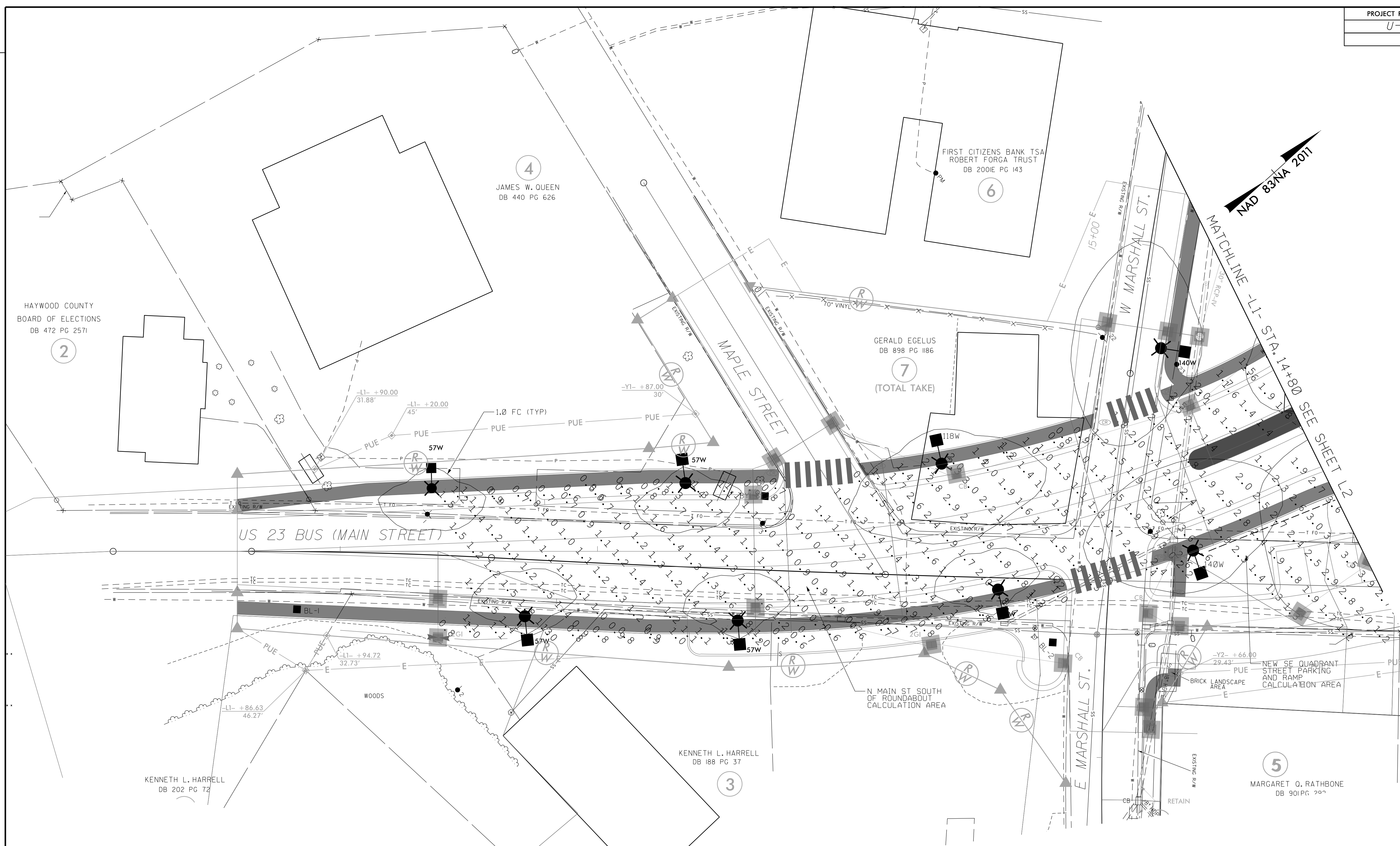


REVISIONS





REVISIONS



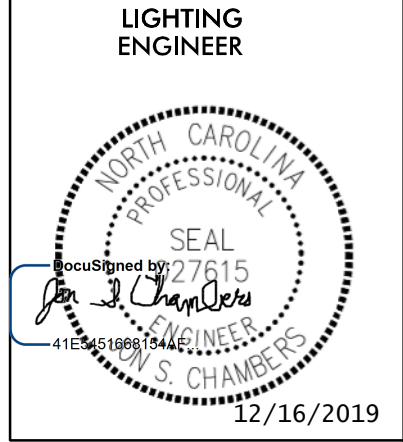
GENERAL NOTES:

1. PHOTOMETRIC PLANS ARE FOR INFORMATIONAL PURPOSES ONLY.

Label	Calculation Type	Units	Target Avg	Avg	Max	Min	Target Avg/Min	Avg/Min
N Main St South of Roundabout	Illuminance	Fc	0.9	1.3	3.0	0.5	3.0	2.5

Symbol	Quantity*	Description	Luminaire Lumens	Total Light Loss Factor	Luminaire Watts	Arrangement
57W	11	Proposed 57W City Standard Decorative Teardrop LED Fixture Mounted at 25ft on a City Standard Arm and Pole on a Concrete Foundation	4951	0.85	57	SINGLE
118W	5	Proposed 118W City Standard Decorative Teardrop LED Fixture Mounted at 25ft on a City Standard Arm and Pole on a Concrete Foundation	9046	0.85	118	SINGLE
140W	4	Proposed 140W City Standard Decorative Teardrop LED Fixture Mounted at 25ft on a City Standard Arm and Pole on a Concrete Foundation	10422	0.85	140	SINGLE

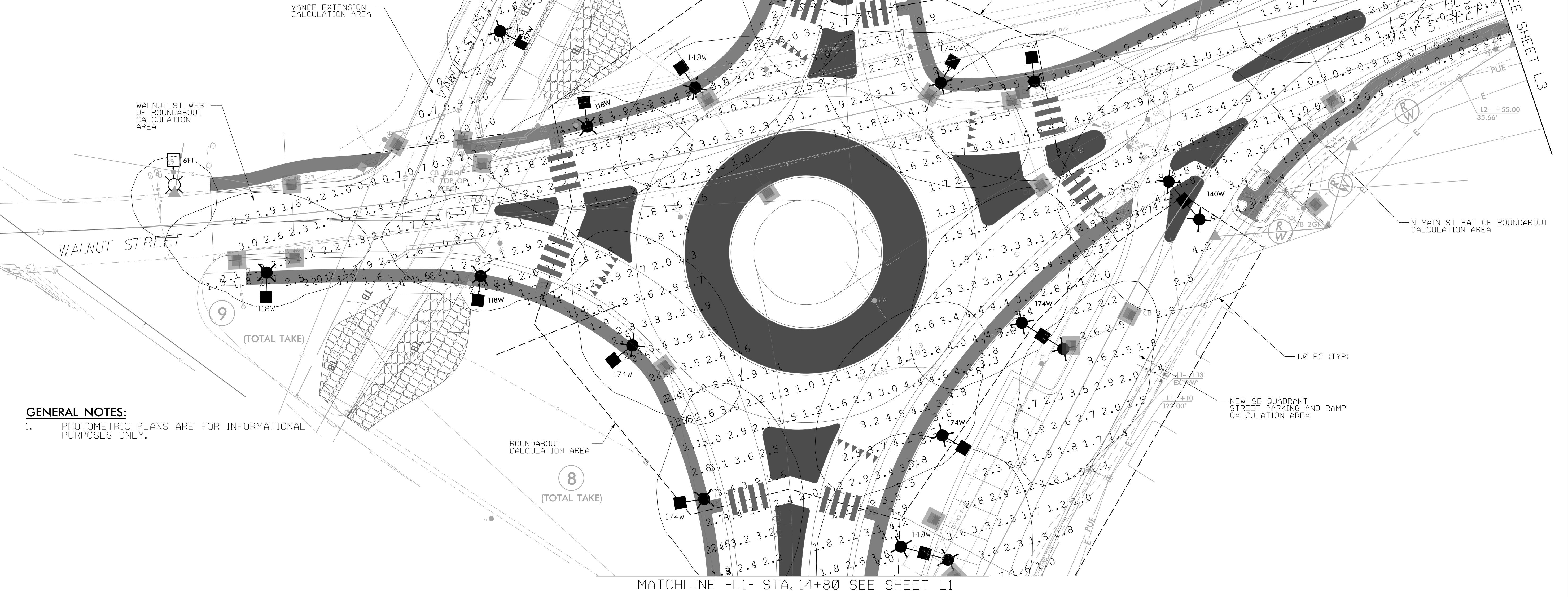
*QUANTITY REPRESENTS TOTAL PROJECT FIXTURE QUANTITIES



Label	Calculation Type	Units	Target Avg	Avg	Max	Min	Target Avg/Min	Avg/Min
Walnut St West of Roundabout	Illuminance	Fc	0.9	1.9	3.5	0.7	3.0	2.7
Vance St Extension	Illuminance	Fc	0.9	1.0	1.6	0.5	3.0	2.0
Vance St North of Roundabout	Illuminance	Fc	0.9	1.3	3.3	0.5	3.0	2.5
N Main St East of Roundabout	Illuminance	Fc	0.9	1.8	4.9	0.5	3.0	3.6
Roundabout	Illuminance	Fc	2.6	2.6	5.3	0.9	3.0	2.9
Bridge St Extension	Illuminance	Fc	0.4	1.4	2.7	0.7	6.0	2.0
New SE Quadrant Street Parking and Ramp	Illuminance	Fc	0.5	2.2	4.3	0.8	4.0	2.7

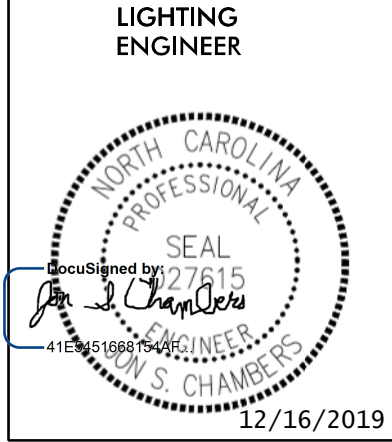
Symbol	Quantity*	Description	Luminaire Lumens	Total Light Loss Factor	Luminaire Watts	Arrangement
57W	11	Proposed 57W City Standard Decorative Teardrop LED Fixture Mounted at 25ft on a City Standard Arm and Pole on a Concrete Foundation	4951	0.85	57	SINGLE
118W	5	Proposed 118W City Standard Decorative Teardrop LED Fixture Mounted at 25ft on a City Standard Arm and Pole on a Concrete Foundation	9046	0.85	118	SINGLE
174W	10	Proposed 174W City Standard Decorative Teardrop LED Fixture Mounted at 25ft on a City Standard Arm and Pole on a Concrete Foundation	12464	0.85	174	SINGLE
12FT	2	Existing Duke Roadway Fixture with a 12ft Arm	10721	0.69	193	SINGLE
6FT	2	Existing Duke Roadway Fixture with a 6ft Arm	10721	0.69	193	SINGLE
140W	1	Proposed B2B 140W City Standard Decorative Teardrop LED Fixtures Mounted at 25ft on a City Standard Dual Arm and Pole on a Concrete Foundation	10422	0.85	140	BACK-BACK
174W	3	Proposed B2B 174W City Standard Decorative Teardrop LED Fixtures Mounted at 25ft on a City Standard Dual Arm and Pole on a Concrete Foundation	12464	0.85	174	BACK-BACK

*QUANTITY REPRESENTS TOTAL PROJECT FIXTURE QUANTITIES



GENERAL NOTES:
 1. PHOTOMETRIC PLANS ARE FOR INFORMATIONAL PURPOSES ONLY.

REVISIONS

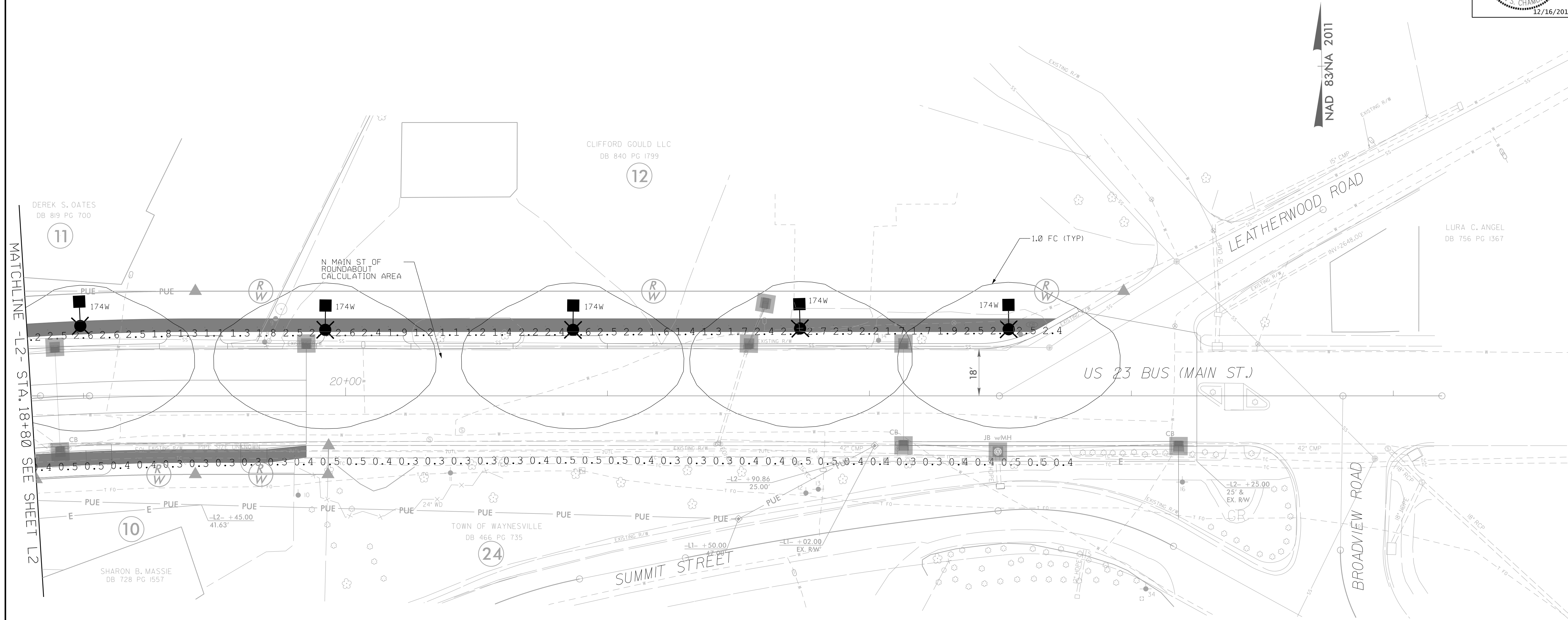


GENERAL NOTES:

- PHOTOMETRIC PLANS ARE FOR INFORMATIONAL PURPOSES ONLY.

REVISIONS

MATCHLINE - L2 - STA. 18+80 SEE SHEET L2



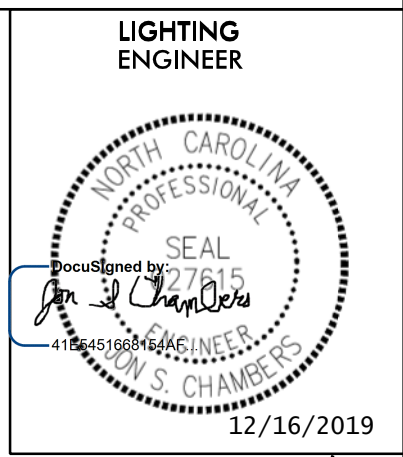
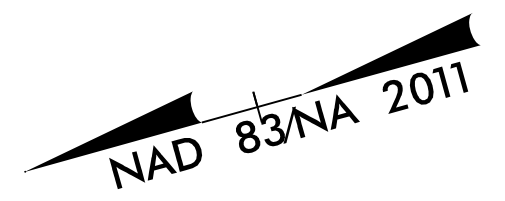
Symbol	Quantity*	Description	Luminaire Lumens	Total Light Loss Factor	Luminaire Watts	Arrangement
	12	Proposed 174W City Standard Decorative Teardrop LED Fixture Mounted at 25ft on a City Standard Arm and Pole on a Concrete Foundation	12464	0.85	174	SINGLE

*QUANTITY REPRESENTS TOTAL PROJECT FIXTURE QUANTITIES

Label	Calculation Type	Units	Target Avg	Avg	Max	Min	Target Avg/Min	Avg/Min
N Main St East of Roundabout	Illuminance	Fc	0.9	1.9	4.9	0.5	3.0	3.8

GENERAL NOTES:

1. PHOTOMETRIC PLANS ARE FOR INFORMATIONAL PURPOSES ONLY.



Label	Calculation Type	Units	Target Avg	Avg	Max	Min	Target Avg/Min	Avg/Min
Vance St North of Roundabout	Illuminance	Fc	0.9	1.3	3.5	0.6	3.0	2.2
Bridge St Extension	Illuminance	Fc	0.4	1.4	2.7	0.7	6.0	2.0

REVISIONS



*QUANTITY REPRESENTS TOTAL PROJECT FIXTURE QUANTITIES

Symbol	Quantity*	Description	Luminaire Lumens	Total Light Loss Factor	Luminaire Watts	Arrangement
57W	11	Proposed 57W City Standard Decorative Teardrop LED Fixture Mounted at 25ft on a City Standard Arm and Pole on a Concrete Foundation	4951	0.85	57	SINGLE
6FT	2	Existing Duke Roadway Fixture with a 6ft Arm	10721	0.69	193	SINGLE