

△ NOTES

- 1

LOCATE PROPOSED CONTROL SYSTEM IN AN AREA ACCESSIBLE FOR MAINTENANCE VEHICLES AND OUTSIDE OF CLEAR ZONE AS DEFINED BY THE 2024 AASHTO ROADSIDE DESIGN GUIDE.
- 2

INSTALL RIGID GALVANIZED CONDUIT (RGC) ABOVE GROUND, AND POLYVINYL CHLORIDE (PVC) SCHEDULE 40 CONDUIT UNDERGROUND, EXCEPT AS MODIFIED ON THESE PLAN SHEETS OR IN APPLICABLE SECTIONS OF THE ROADWAY STANDARD DRAWINGS FOR THIS PROJECT.
- 3

ALL JUNCTION BOXES ALONG PEDESTRIAN BRIDGE SHALL BE MOUNTED ABOVE TOP OF HANDRAIL.
- 4

SERVICE POLE SHALL NOT BE INSTALLED PRIOR TO COORDINATION WITH THE LOCAL UTILITY. PROVIDE PROOF OF COORDINATION AND PROOF OF NEED TO THE ENGINEER AFTER CONSULTING WITH THE LOCAL UTILITY. THE SERVICE POLE MAY BE DELETED FROM THE CONTRACT IF NOT REQUIRED. REFER TO ARTICLE 1407-3 OF THE 2024 NCDOT STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES.

PLANS AND DETAILS FOR PROPOSED LIGHTING / ELECTRICAL CONSTRUCTION

SCOPE OF WORK

PLACE LIGHTING SYSTEM INTO SERVICE AT PEDESTRIAN BRIDGE BY PROVIDING AND INSTALLING LIGHTS WITH LIGHT EMITTING DIODE LUMINAIRES, UNDERGROUND CIRCUITRY, CONTROL SYSTEM AND JUNCTION BOXES.

DESIGN CRITERIA

2018 AASHTO ROADWAY LIGHTING DESIGN GUIDE
2023 NATIONAL ELECTRICAL CODE

ROADWAY STANDARDS

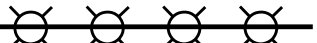
THE FOLLOWING ROADWAY ENGLISH STANDARDS AS INDICATED IN "NCDOT ROADWAY STANDARD DRAWINGS", ROADWAY DESIGN UNIT-N.C. DEPARTMENT OF TRANSPORTATION RALEIGH, N.C., DATED JANUARY 2024 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD NO.	TITLE
1407.01	ELECTRIC SERVICE POLE AND LATERAL
1409.01	ELECTRICAL DUCT
1410.01	FEEDER CIRCUITS
1411.01	ELECTRICAL JUNCTION BOXES

ALL WORK SHALL BE IN CONFORMANCE WITH DIVISION 14 OF THE STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES, DATED JANUARY 2024.

LEGEND

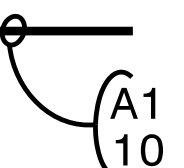
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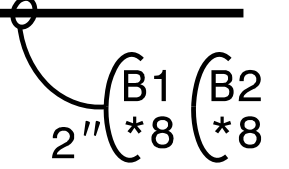
12' POLE WITH DECORATIVE ALCORN POST TOP FIXTURE.
- 

CABLE HANDRAIL WITH INTEGRATED LIGHTING
- 

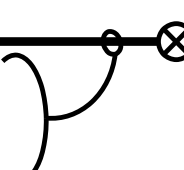
PROPOSED ELECTRICAL JUNCTION BOX.
- 

REFERENCE TO CORRESPONDING NOTE AS NUMBERED.
- PROPOSED FEEDER CIRCUIT:



CONTROLLED AREA (A), CIRCUIT NUMBER (1), PLAN SYMBOL (*10). SEE TABLE "A", THIS SHEET.
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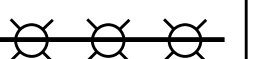
CONTROLLED AREA (B), CIRCUIT NUMBER (1) AND (2), PLAN SYMBOL (*8). CONDUIT SIZE (2") SEE TABLE "A", THIS SHEET.
- SER LAT
3 #6 USE
2" C



PROPOSED 30' CLASS 4 SERVICE POLE AND LATERAL
3 #6 USE CONDUCTORS
2" CONDUIT

ABBREVIATIONS			
BD	BURIED	PVC	PVC SCHEDULE 40 CONDUIT
LT	LIGHT	RGC	RIGID GALVANIZED STEEL CONDUIT
JA	JACKED	C	CONDUIT
MH	MOUNTING HEIGHT	CKT	CIRCUIT
Ø	PHASE	N	NEUTRAL
SER LAT	SERVICE LATERAL	G	GROUND
IGJB	IN GROUND JUNCTION BOX	HM	HIGH MAST
LED	LIGHT EMITTING DIODE	LSJB	LIGHT STANDARD JUNCTION BOX
HMJB	HIGH MAST JUNCTION BOX	CSJB	CONTROL SYSTEM JUNCTION BOX

TABLE "A" CIRCUITRY CONDUCTOR CONDUIT TYPE & SIZE			
PLAN SYMBOL	DESCRIPTION		
12	2 #12 1 #12G 3/4" RGC	2 AWG SIZE #12 CONDUCTOR (BK & WHT) 1 AWG SIZE #12 GROUNDING CONDUCTOR 3/4" RGC CONDUIT	
10	2 #10 1 #10G 1" PVC	2 AWG SIZE #10 CONDUCTOR (BK & RD) 1 AWG SIZE #10 GROUNDING CONDUCTOR 1" PVC CONDUIT	
*6	2 #6 1 #6G	2 AWG SIZE #6 CONDUCTOR (BK & WHT) 1 AWG SIZE #6 GROUNDING CONDUCTOR	
*8	2 #8 1 #8G	2 AWG SIZE #8 CONDUCTOR (BK & WHT) 1 AWG SIZE #8 GROUNDING CONDUCTOR	

LUMINAIRE SCHEDULE (BASIS OF DESIGN SHOWN. SEE PROJECT SPECIAL PROVISIONS FOR EQUIVALENT LUMINAIRES.)										
LUMINAIRE		LAMP TYPE	LAMP WATTS	COLOR TEMP.	LUMENS	VOLTS	MANUFACTURER	CATALOG NUMBER	DESCRIPTION	MOUNTING
TYPE	SYMBOL									
P		LED	70	4000K	10,237	240	COOPER LIGHTING	LUMINAIRE: ULA-A9-D-U-ASYM-VM-9-7040-W-BK POST: RSS-12-3-11-AB-BK	DECORATIVE ACORN LED POST TOP LUMINARIE, DIE-CAST ALUMINUM HOUSING WITH BLACK FINISH, ASYMMETRIC DISTRIBUTION, WET LOCATION LISTED. ROUND STRAIGHT POLE, 3", 11 GAUGE WALL THICKNESS, 12' MOUNTING HEIGHT, BLACK FINISH.	POST
R		LED	2.2W/FT	4000K	122/W	24	WAGNER	LULR6640A5	ILLUMINATED RAILING SYSTEM WITH INTEGRATED LED PUCK STYLE LUMINAIRES SPACED 2' ON-CENTER, ASYMMETRIC OPTICS, STAINLESS STEEL FINISH, WET LOCATION LISTED.	IN RAILING

DES BY: _____

DATE : _____

DWG BY: _____

DATE : _____

DES CHK: _____

DATE : _____

CHK BY: _____

DATE : _____



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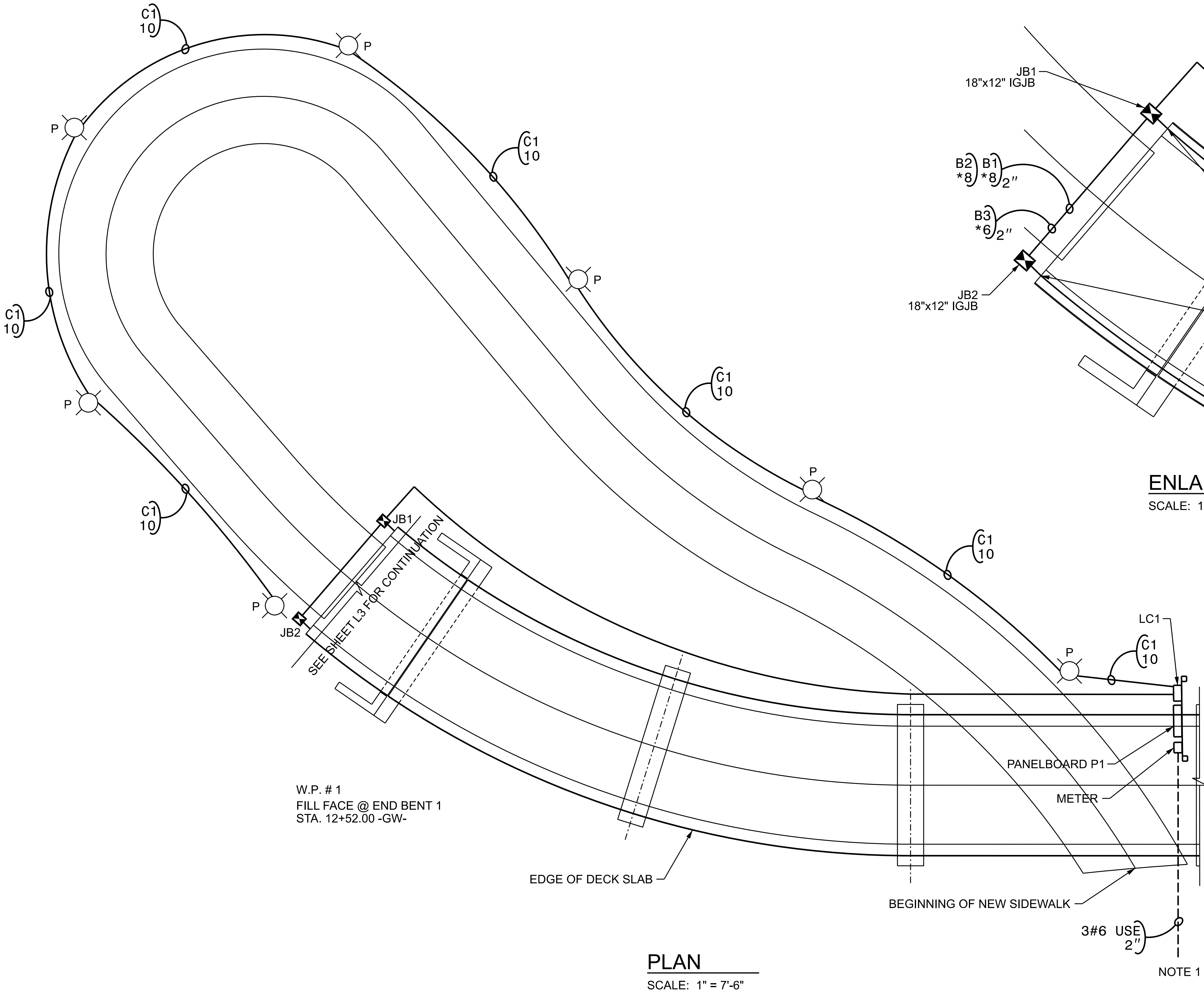
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PROJECT NO. BL-0119
MECKLENBURG COUNTY
STATION: 15+46.20 -GW-

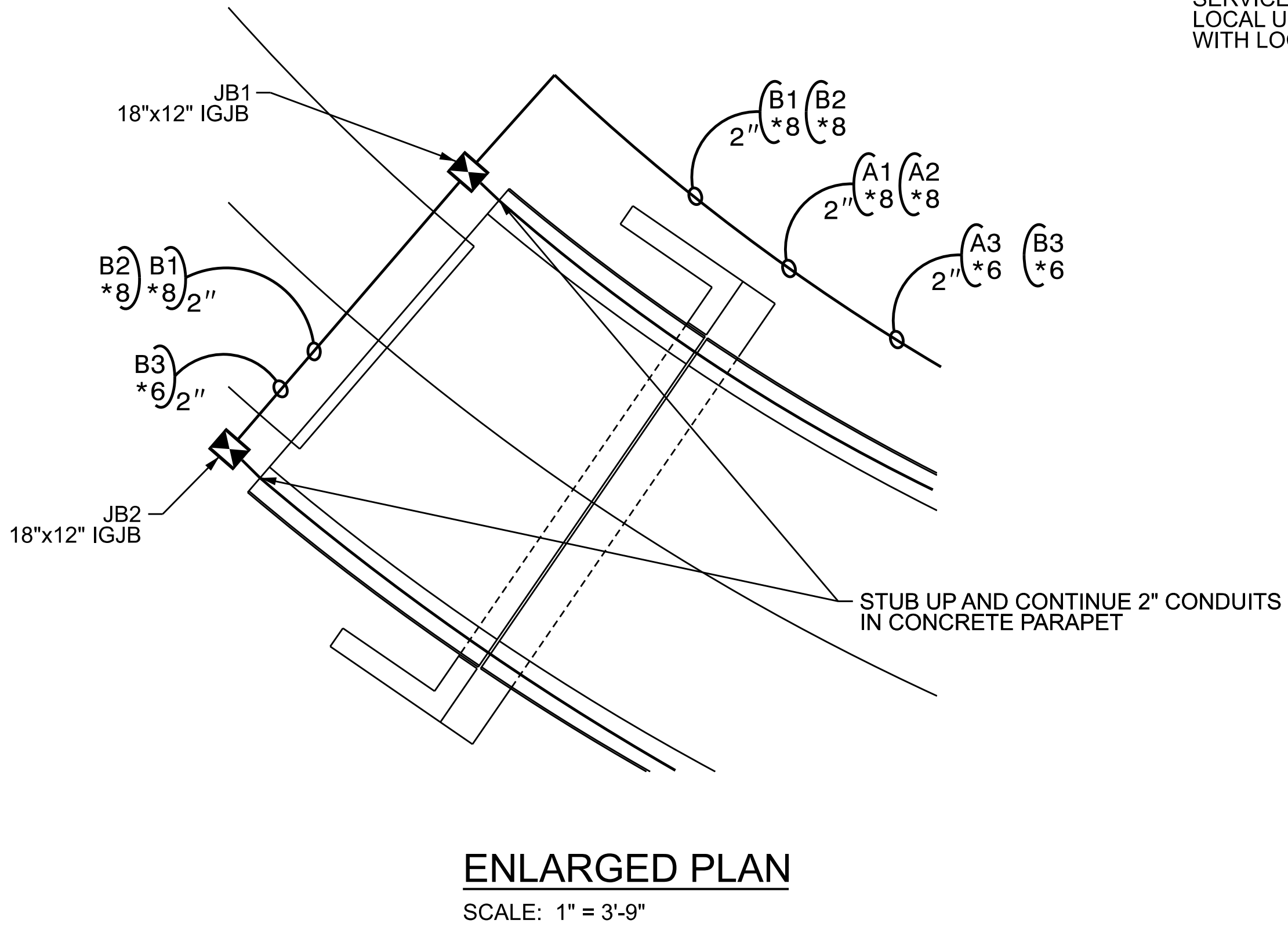
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

LEGEND, NOTES
AND SCHEDULES
PEDESTRIAN BRIDGE OVER
NC 73 (SAM FURR RD.)
HUNTERSVILLE NC

REVISIONS						SHEET NO. E-1
NO.	BY:	DATE:	NO.	BY:	DATE:	
1	--	--	3	--	--	TOTAL SHEETS 6
2	--	--	4	--	--	



PLAN
SCALE: 1" = 7'-6"



ENLARGED PLAN
SCALE: 1" = 3'-9"

- NOTES:
1. PROVIDE 2" PVC FROM METER BASE TO UTILITY SERVICE POINT. SERVICE CONDUCTORS BY LOCAL UTILITY. COORDINATE SERVICE POINT WITH LOCAL UTILITY.

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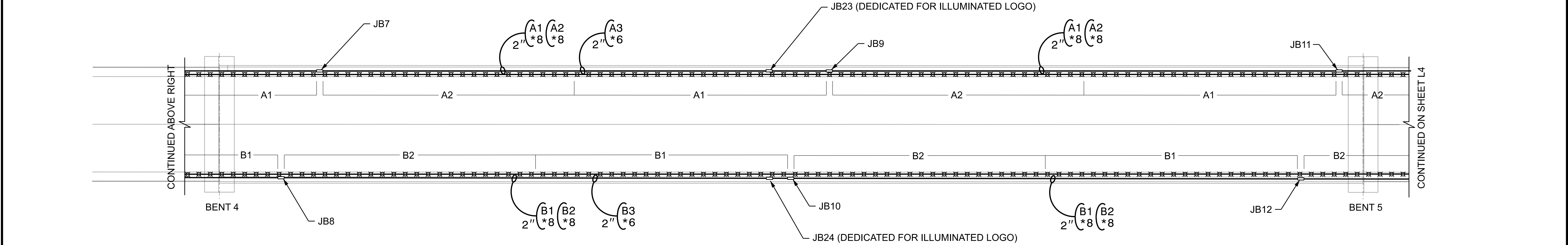
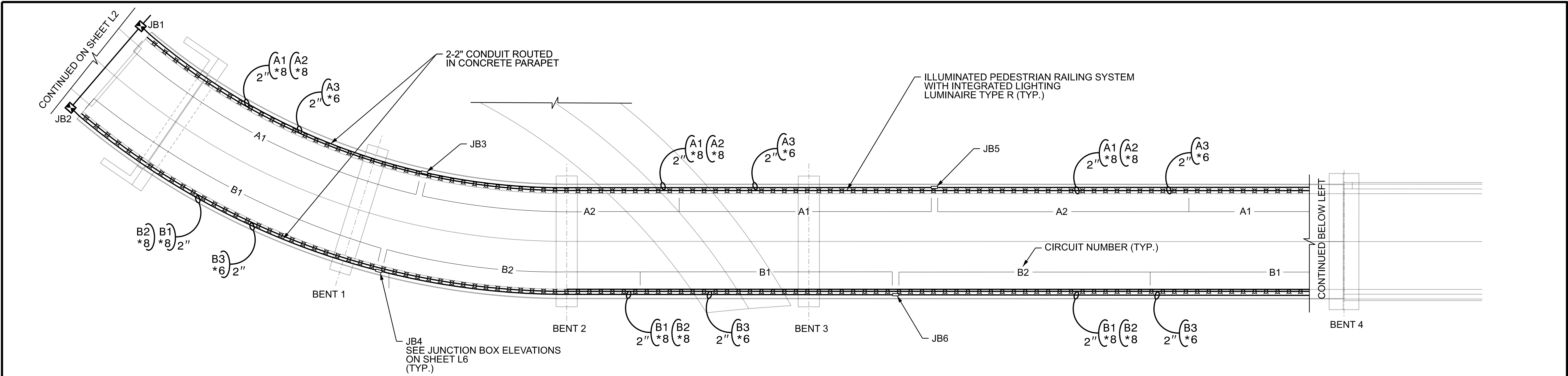
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH					
LIGHTING PLAN					
PEDESTRIAN BRIDGE OVER NC 73 (SAM FURR RD.) HUNTERVILLE NC					
REVISIONS					SHEET NO.
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TOTAL SHEETS					6



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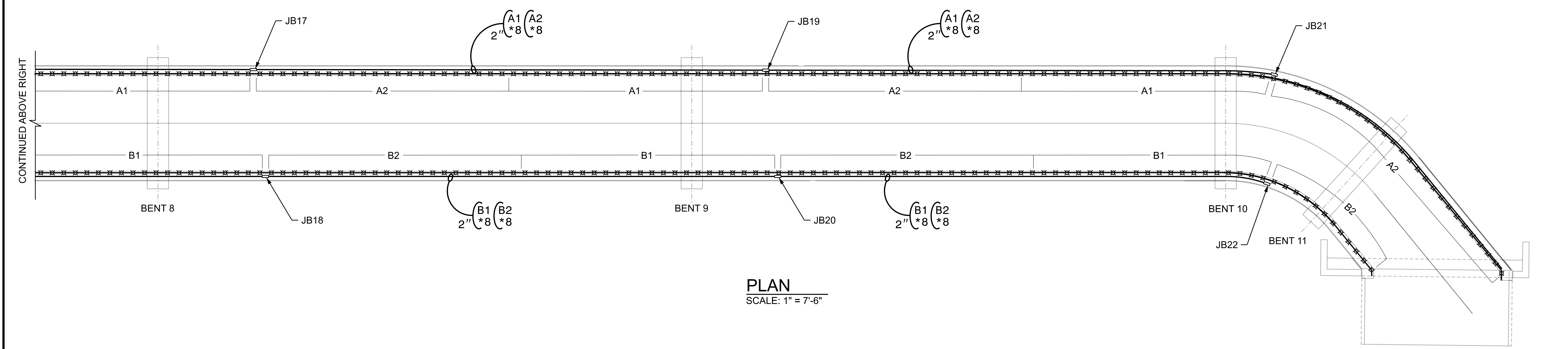
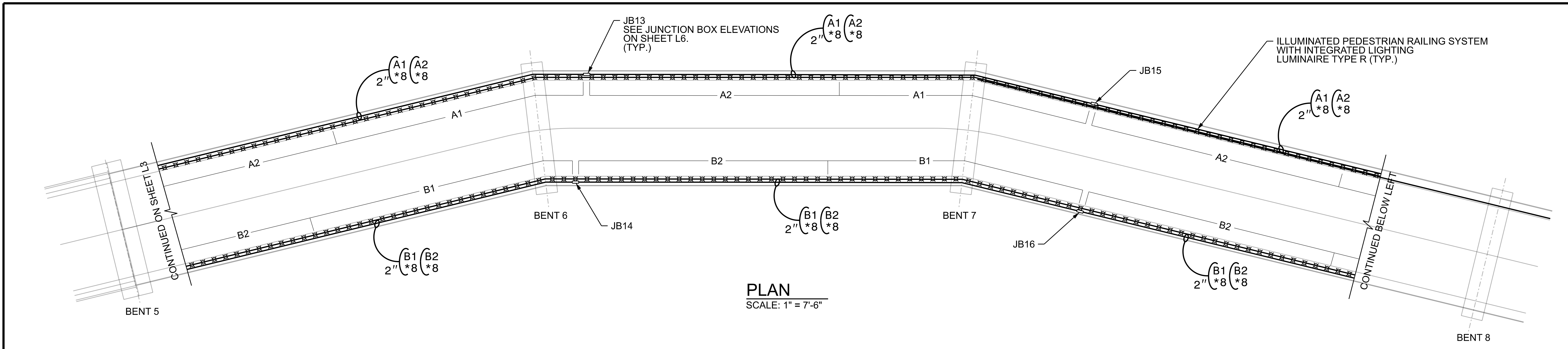


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LIGHTING PLAN					
PEDESTRIAN BRIDGE OVER NC 73 (SAM FURR RD.) HUNTERVILLE NC					
REVISIONS					SHEET NO.
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2	--	--	4	--	--
TOTAL SHEETS					6



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STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

LIGHTING PLAN

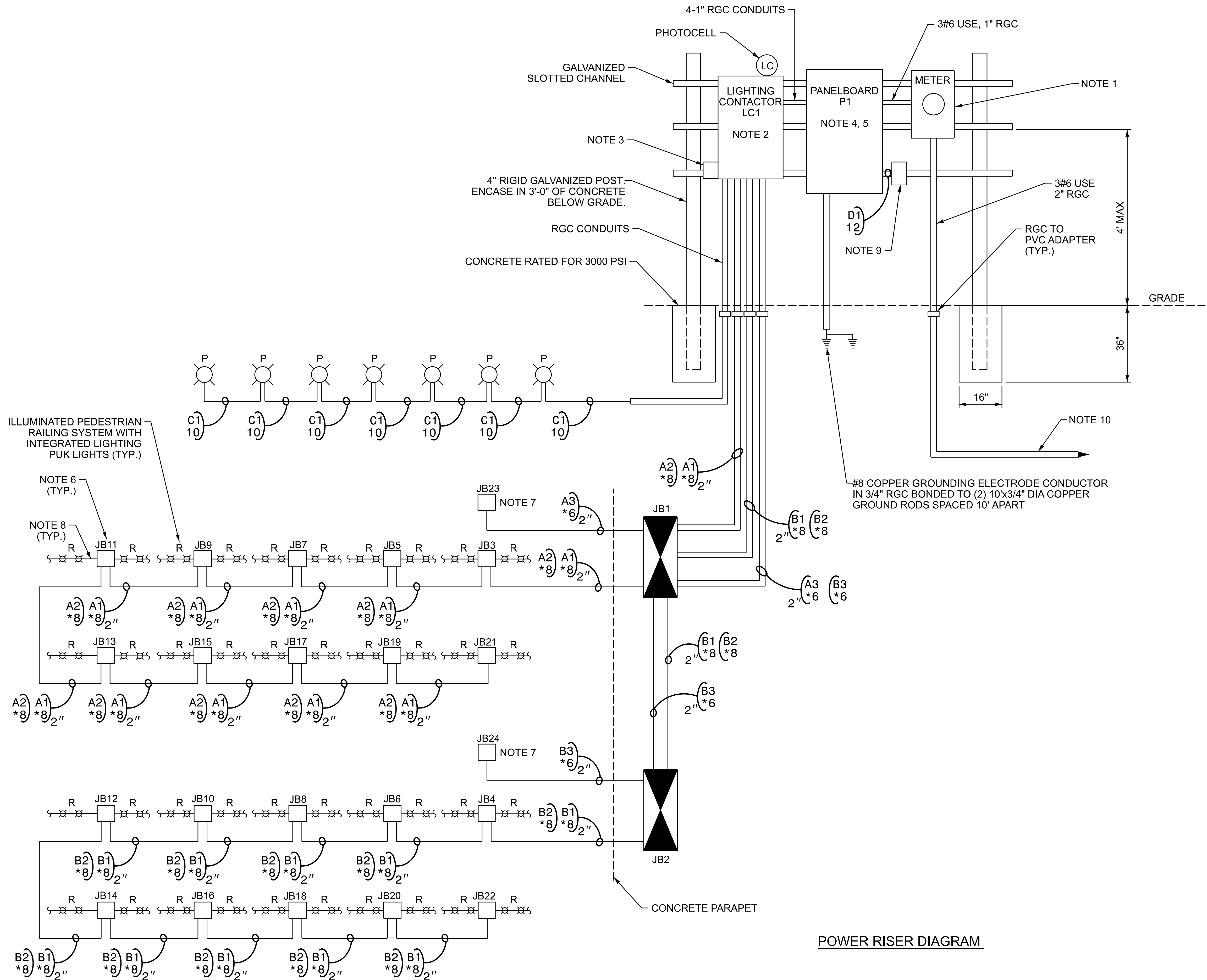
PEDESTRIAN BRIDGE OVER
NC 73 (SAM FURR RD.)
HUNTERVILLE NC

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DES CHK: _____	DATE : _____	CHK BY: _____	DATE : _____



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NOTES:

- 240/120V, 1 PHASE, 3 WIRE SERVICE WITH 60A METER BASE. PROVIDE LOCKABLE, PROTECTIVE ENCLOSURE FOR METER BASE. BOND METER BASE PER CODE.
- LC1: MECHANICALLY HELD CONTACTOR WITH LOCKABLE ENCLOSURE. ENCLOSURE: NEMA 4X STAINLESS STEEL. CONTACTOR RATING: 20A. NUMBER OF POLES: 12 N.O. COIL: 120VAC. OPERATORS: NONE. INDICATING LIGHTS: NONE. LIGHTING CONTACTOR AND PHOTOCELL WILL BE PAIRED TOGETHER TO OPERATE THE DECORATIVE ACORN POST LUMINAIRE, ILLUMINATED LOGO AND CABLE HANDRAIL WITH INTEGRATED LIGHTING.
- PHOTOCELL BYPASS TOGGLE SWITCH MOUNTED IN CAST METAL BOX WITH LOCKABLE CAST METAL COVER. CLOSE COUPLE CAST BOX TO CONTACTOR ENCLOSURE.
- PANELBOARD P1: VOLTAGE: 240/120V. PHASE/WIRE: 1 / 3+G. BUS RATING: 60A. MAIN OC DEVICE: 60A, SE RATED. INTERRUPTING RATING (KA): 10. ENCLOSURE: NEMA 4X WITH LOCKABLE DOOR.
- CIRCUIT BREAKERS: 1-20A, 2P (CKT C1). 6-20A, 1P, GFCI (CKT'S A1, A2, A3, B1, B2, B3). 1-20A, 1P (LC1). 1-15A, 1P (GFI RECEPTACLE).
- 12"x10"x6" NEMA 4X JUNCTION BOX WITH BACK PLATE TO HOUSE LED DRIVERS FOR RAILING LUMINAIRES. DESIGN CALLS FOR 2 DRIVERS PER JUNCTION BOX. JUNCTION BOX PROVIDED BY LUMINAIRE MANUFACTURER AND INSTALLED BY ELECTRICAL CONTRACTOR.
- 6"x6"x4" NEMA 4X JUNCTION BOX WITH BACK PLATE FOR ILLUMINATED LOGO WIRING. THE 120V CIRCUIT IS DESIGNED FOR A MAXIMUM 1,000W LOAD. JUNCTION BOX PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR.
- 24VDC, 16 GAUGE, 2-CONDUCTOR STRANDED CONDUCTOR ROUTED THROUGH HANDRAIL TO PUK RAIL LIGHTS.
- GFCI RECEPTACLE IN WEATHER-PROOF ENCLOSURE.
- PROVIDE 2" PVC FROM METER BASE TO UTILITY SERVICE POINT. SERVICE CONDUCTORS BY LOCAL UTILITY. COORDINATE SERVICE POINT LOCATION WITH LOCAL UTILITY.

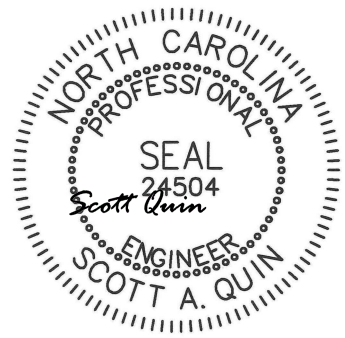
PROJECT NO. BL-0119
MECKLENBURG COUNTY
STATION: 15+46.20 -GW-

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH					
POWER RISER DIAGRAM					
PEDESTRIAN BRIDGE OVER NC 73 (SAM FURR RD.) HUNTERVILLE NC					
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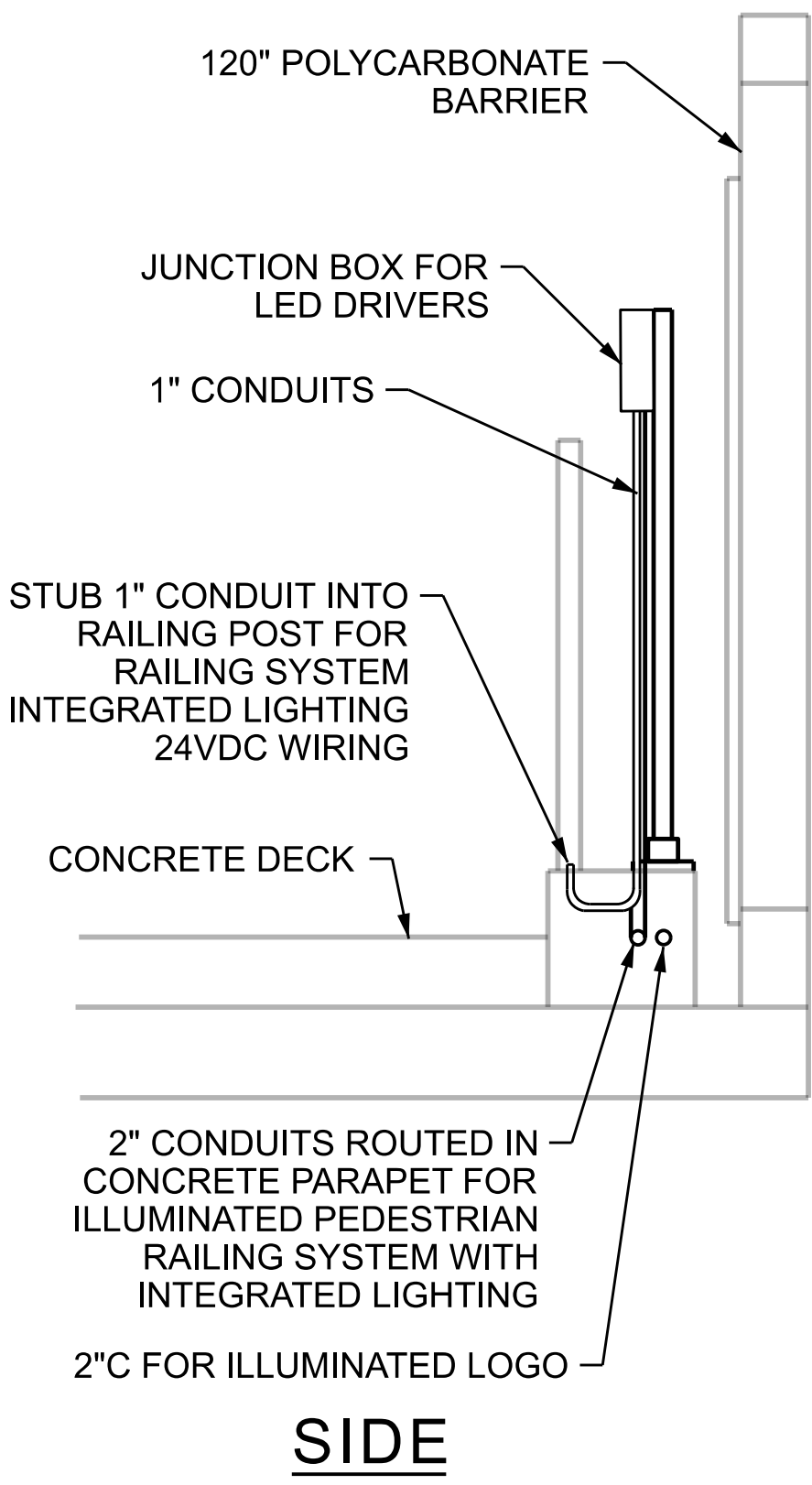
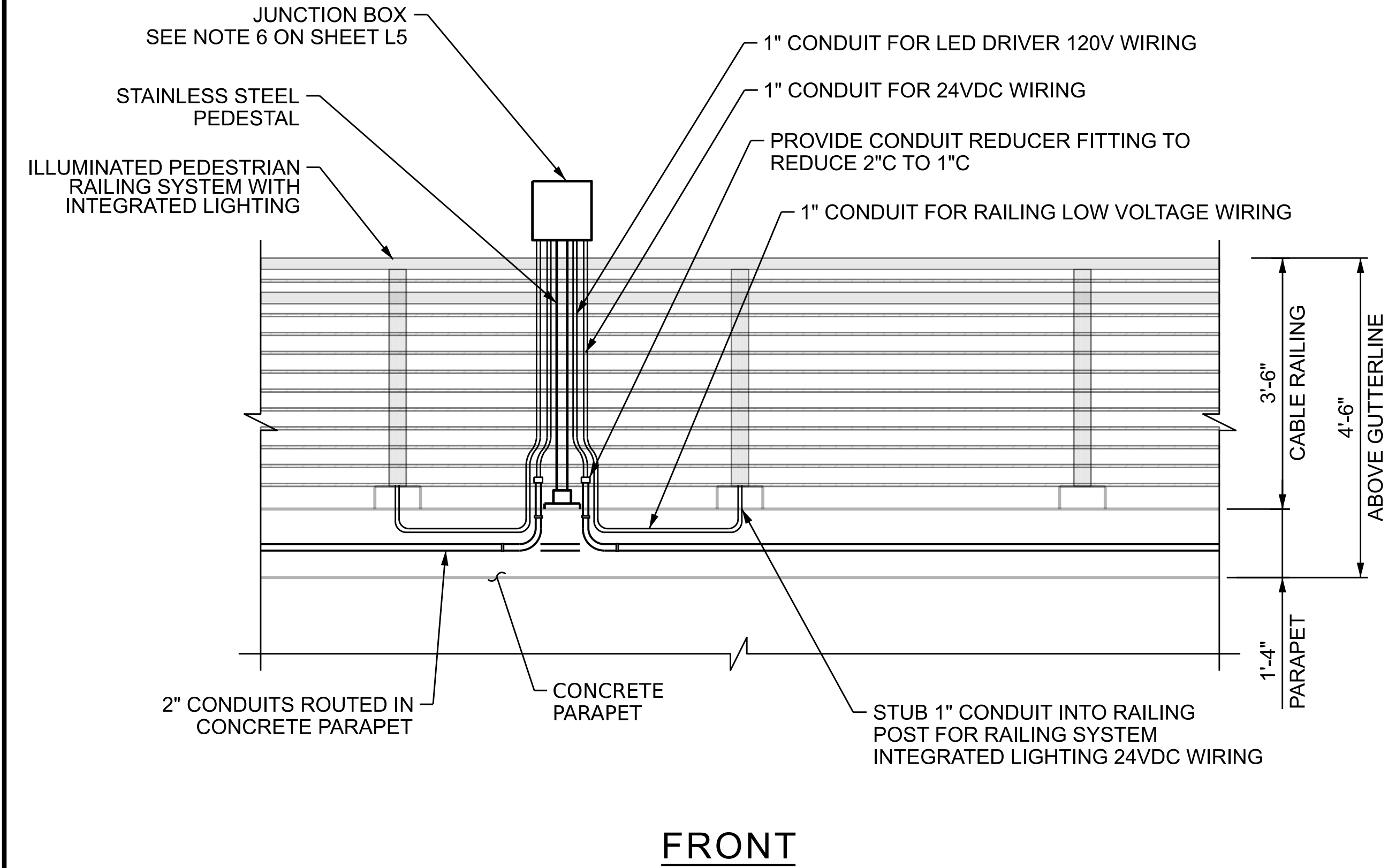
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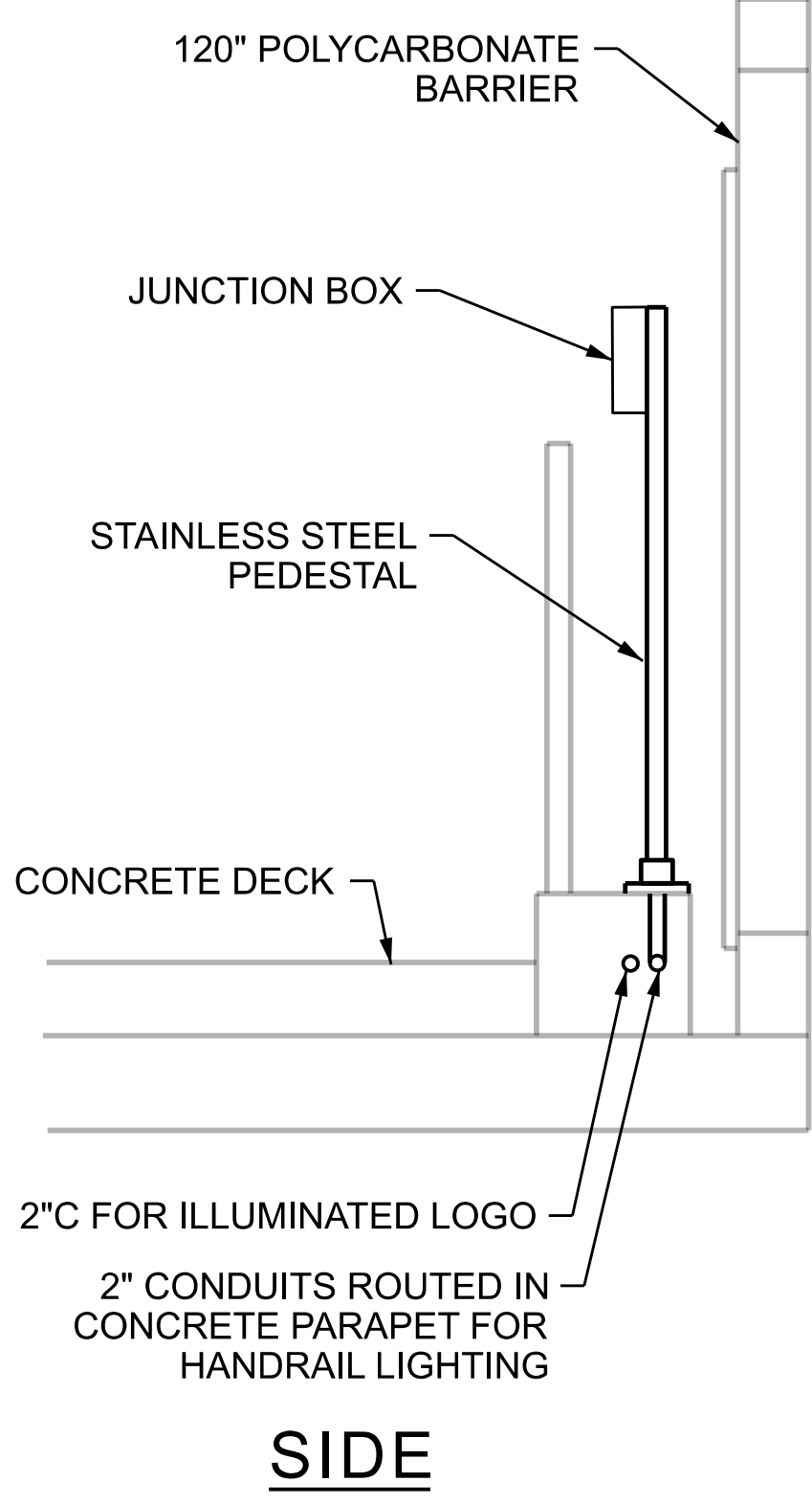
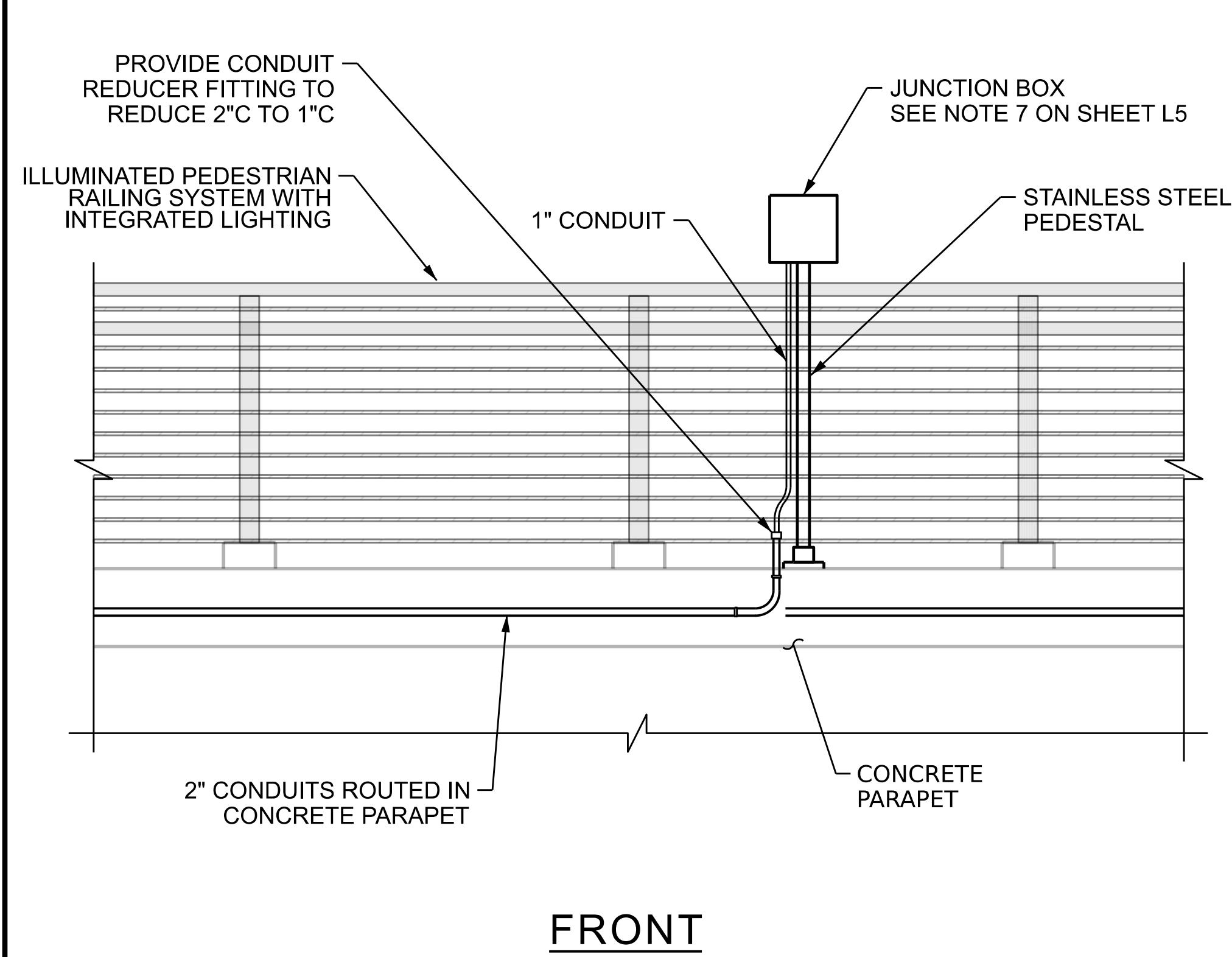
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JB3 - JB22 ELEVATIONS

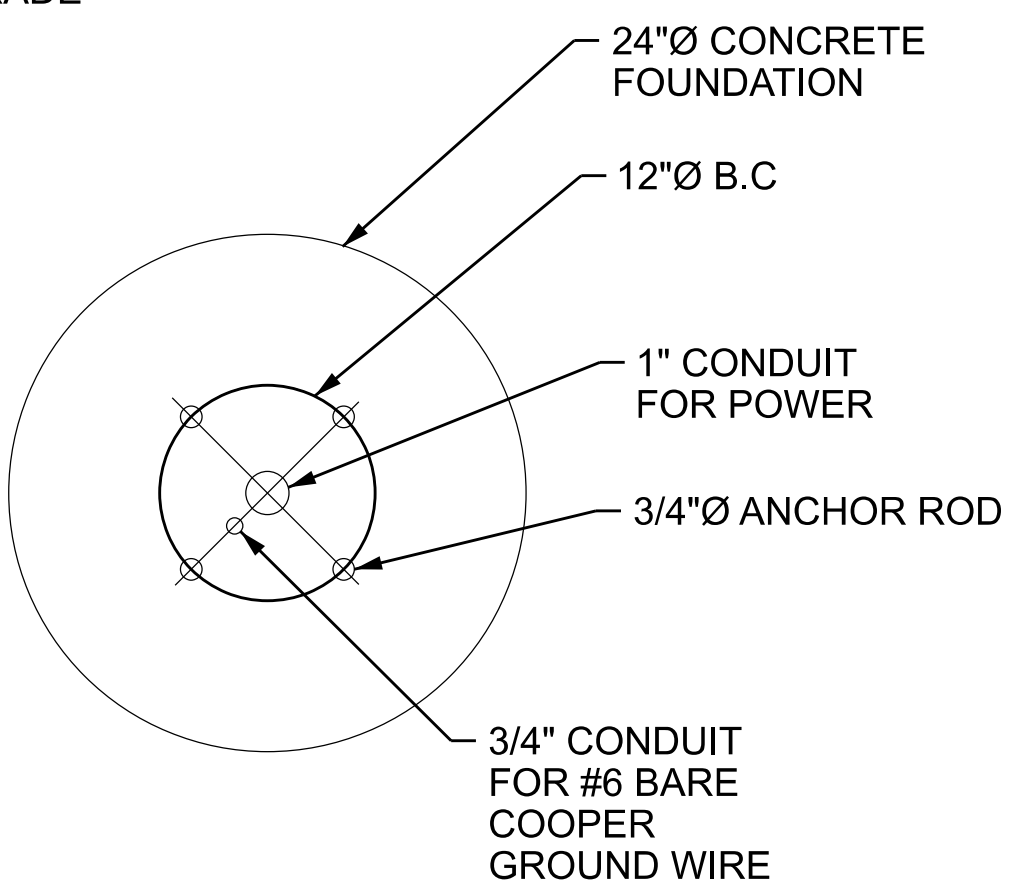


JB23 - JB24 ELEVATIONS

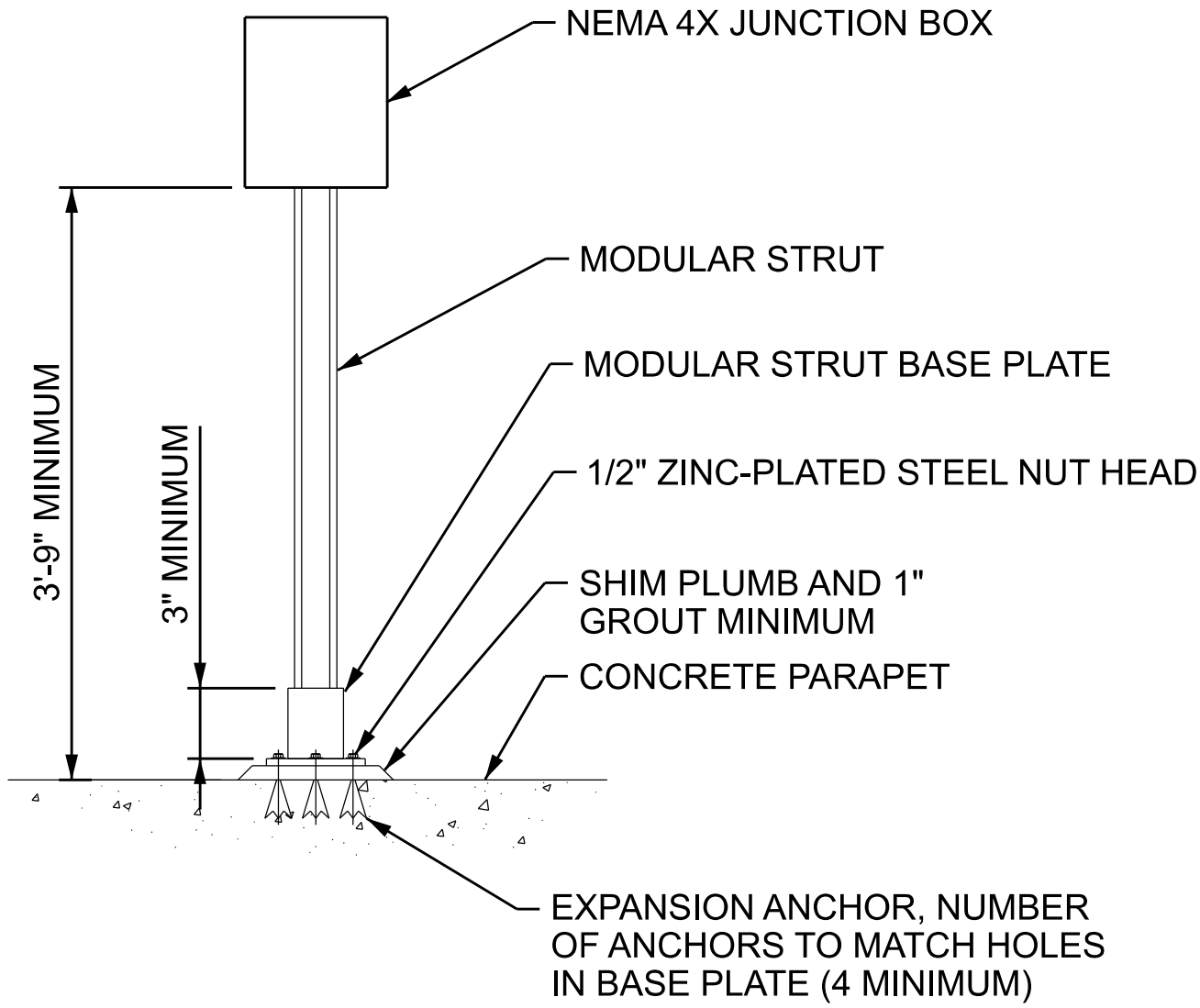


LIGHT POST FOUNDATION

- NOTES:
1. PROVIDE 3" COVER FOR REBAR VERTICALS AND REBAR WRAPS
 2. COORDINATE BOLT PATTERN WITH POLE MANUFACTURER.



**LIGHT POST FOUNDATION
BOLT PATTERN**



- NOTES:
1. DEVICE LOAD SHALL NOT EXCEED 25 LBS.
 2. PEDESTAL MATERIAL: STAINLESS STEEL.
 3. MODULAR STRUT WIDTH: 1-5/8 x 1-5/8"
 4. ANCHORS: STAINLESS STEEL, 1/2" DIAMETER, 3-1/2" EMBEDMENT.

MODULAR DEVICE PEDESTAL

PROJECT NO. **BL-0119**
MECKLENBURG COUNTY
STATION: **15+46.20 -GW-**



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ELEVATIONS & DETAILS					
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