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CONTRACT: CXXXXXX TIP PROJECT: I-5987A

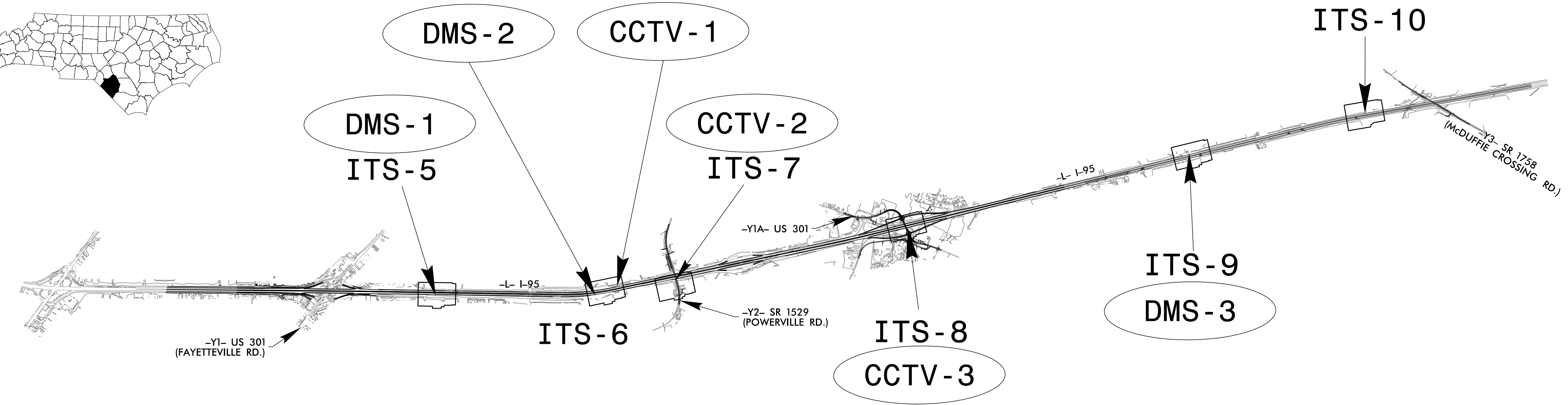
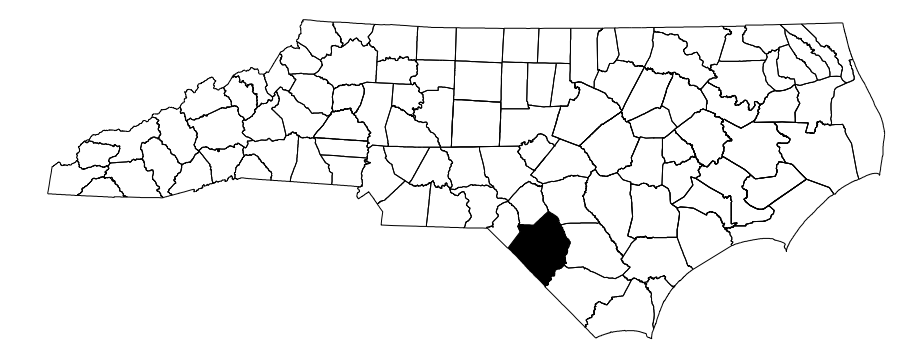
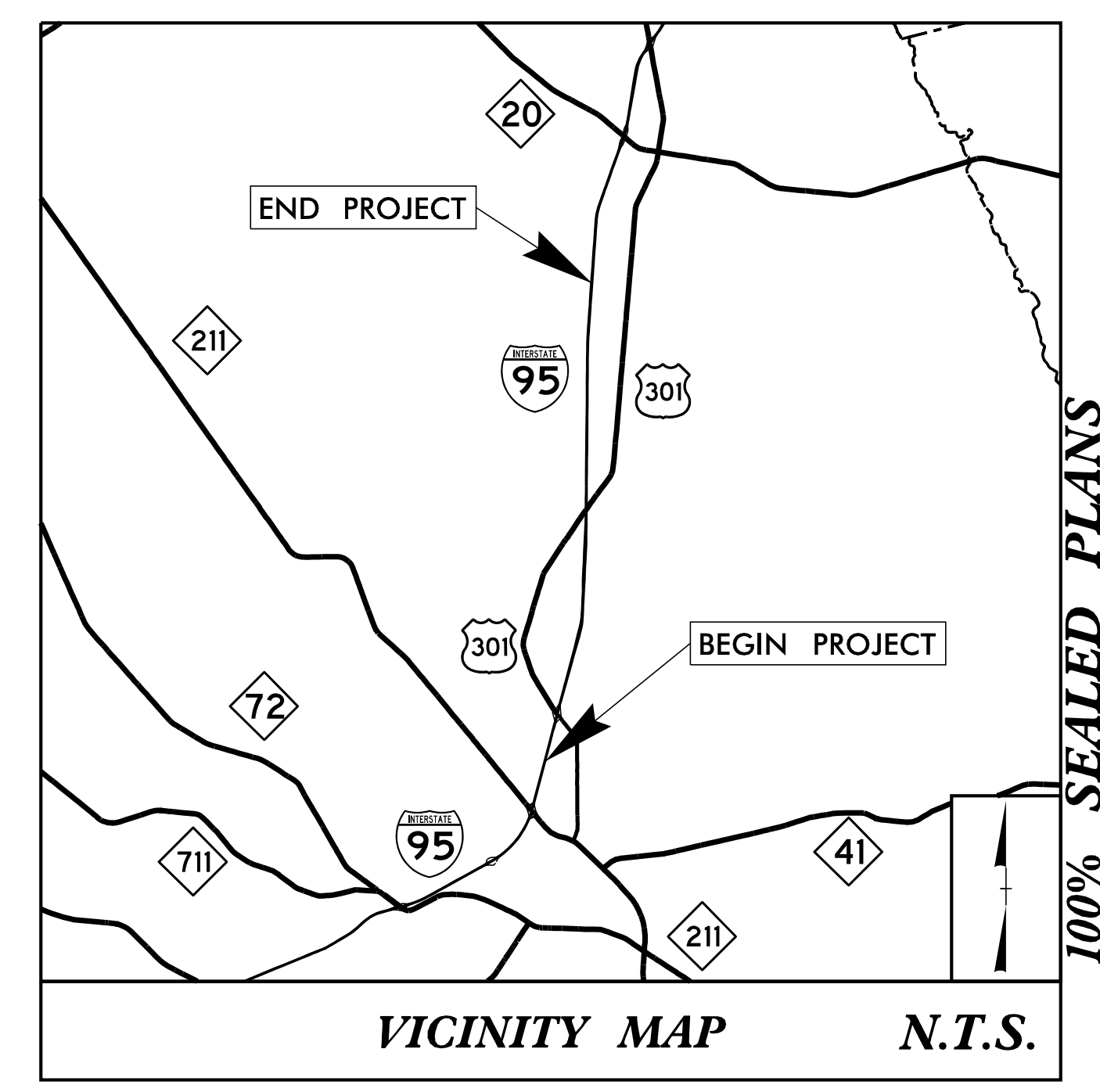
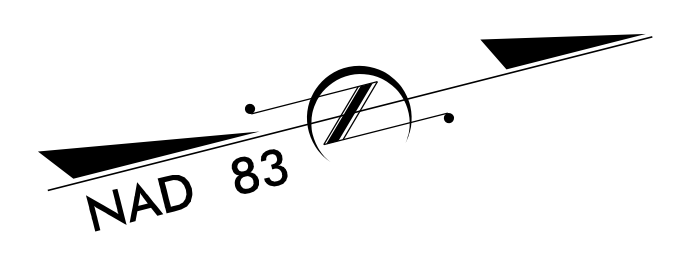
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.
N.C.	I-5987A	ITS-1
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION
47533.3.2		CONST.

ROBESON COUNTY

LOCATION: LUMBERTON - I-95 FROM MM 21 TO MM 29

**TYPE OF WORK: CCTV CAMERA AND
DYNAMIC MESSAGE SIGN INSTALLATIONS**



2018 STANDARD SPECIFICATION

PROJECT LENGTH
PROJECT LENGTH = 8 MILES

LETTING DATE:
AUGUST 16, 2022

INDEX OF SHEETS

SHEET ITS 1	TITLE SHEET
SHEET ITS 2	DEVICE LOCATIONS
SHEET ITS 3-4	CONSTRUCTION NOTES
SHEET ITS 5-10	CCTV / DMS INSTALLATION
SHEET ITS 11-13	DMS CROSS SECTIONS
SHEET ITS 14	CCTV TYPICAL DETAIL
SHEET ITS 15	DMS ELECTRICAL SERVICE AND GROUNDING DETAIL

ROADWAY STANDARD DRAWINGS

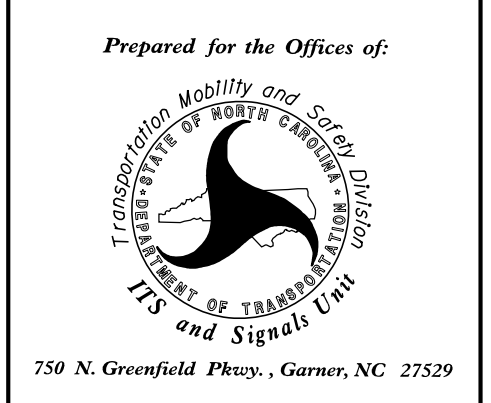
THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" ROADWAY DESIGN UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2018 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1101.02	TEMPORARY LANE CLOSURES
1101.03	TEMPORARY ROAD CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1700.01	ELECTRICAL SERVICE OPTIONS
1700.02	ELECTRICAL SERVICE GROUNDING
1715.01	UNDERGROUND CONDUIT-TRENCHING
1716.01	JUNCTION BOXES

**DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED**

NCDOT CONTACTS:

Frank D. West, Jr. - Div. 6 Traffic Engineer
Janet A. Whetstone-Perez, PE - Regional Traffic Engineer
Andrew J. Sucek, PE - ITS Development & Design



ENGLISH

ALL DIMENSIONS IN THESE PLANS ARE IN FEET UNLESS OTHERWISE NOTED

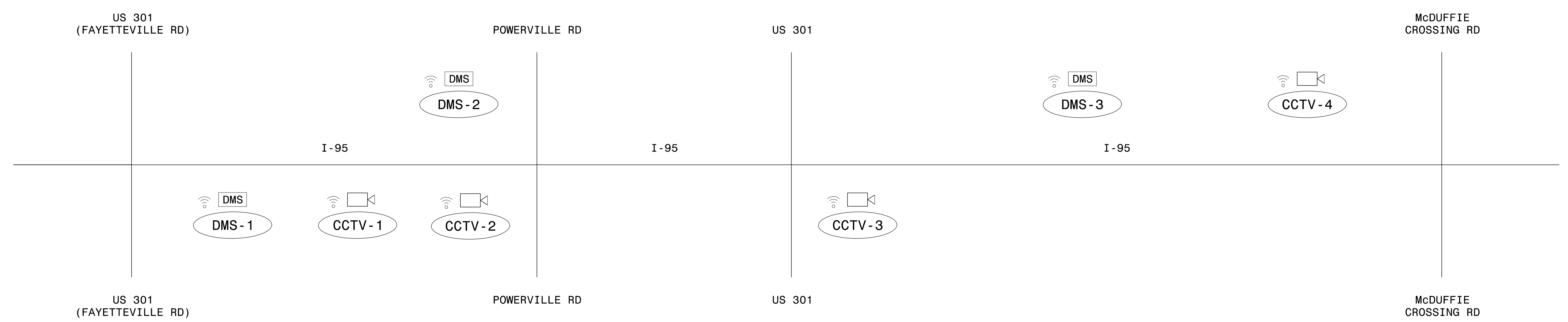
SEAL

DocuSigned by:
Steven G. Payne

4/8/2022

LEGEND

- XXXX - X DEVICE ID NUMBER
- ROADWAY
- CCTV PROPOSED CCTV
- DMS PROPOSED DMS
- CELLULAR MODEMS



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Prepared for the Offices of: DEPARTMENT OF TRANSPORTATION Mobility and Safety Division ITS and Signals Unit	Device Location Schematic Division 6 Robeson County Lumberton PLAN DATE: April 2022 REVIEWED BY: S.G. Haynie PREPARED BY: O. Drobny REVIEWED BY: J. S. Cole	SEAL STEVEN G. HAYNIE PROFESSIONAL ENGINEER No. 029531												
 SCALE NONE	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>REVISIONS</th> <th>INIT.</th> <th>DATE</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>	REVISIONS	INIT.	DATE										DocuSigned by: Steven G. Haynie 4/8/2022 DATE CADD Filename:
REVISIONS	INIT.	DATE												

- 1 INSTALL 3-WIRE COPPER SERVICE ENTRANCE CONDUCTORS
- 2 INSTALL 4-WIRE COPPER FEEDER CONDUCTORS
- 3 INSTALL 3-WIRE COPPER FEEDER CONDUCTORS
- 4 INSTALL SMFO CABLE
- 5 INSTALL CAT 5e CCTV CABLE
- 6 INSTALL FIBER OPTIC DROP CABLE
- 7 INSTALL TRACER WIRE
- 8 TRENCH
- 9 INSTALL PVC CONDUIT
- 10 INSTALL RIGID, GALVANIZED STEEL CONDUIT
- 11 INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD
- 12 INSTALL RIGID, GALVANIZED STEEL RISER WITH HEAT SHRINK TUBING
- 13 INSTALL HEAT SHRINK TUBING RETROFIT KIT
- 14 INSTALL POLYETHYLENE CONDUIT
- 15 DIRECTIONAL DRILL CONDUIT
- 16 BORE AND JACK CONDUIT
- 17 INSTALL CABLE(S) IN EXISTING CONDUIT
- 18 INSTALL CABLE(S) IN NEW CONDUIT
- 19 INSTALL CABLE(S) IN EXISTING RISER
- 20 INSTALL CABLE(S) IN NEW RISER
- 21 INSTALL CABLE(S) IN EXISTING CONDUIT ENTRANCE
- 22 INSTALL NEW CONDUIT INTO NEW CABINET BASE (USE EXISTING CONDUIT STUBOUTS WHEN AVAILABLE)
- 23 INSTALL NEW RISER INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUBOUTS WHEN AVAILABLE)
- 24 INSTALL NEW CONDUIT INTO POLE MOUNTED CABINET
- 25 INSTALL NEW RISER INTO POLE MOUNTED CABINET

- 26 TERMINATE FIBER-OPTIC CABLE ON INTERCONNECT CENTER IN CCTV EQUIPMENT CABINET
- 27 INSTALL NEW ETHERNET EDGE SWITCH IN CABINET
- 28 INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS, AND FUSION SPLICE CABLE IN CABINET
- 29 INSTALL UNDERGROUND SPLICE ENCLOSURE
- 30 INSTALL AERIAL SPLICE ENCLOSURE
- 31 INSTALL SPLICE CABINET
- 32 MODIFY EXISTING SPLICE ENCLOSURE OR INTERCONNECT CENTER
- 33 REMOVE EXISTING SPLICE CABINET
- 34 INSTALL CABINET FOUNDATION
- 35 REMOVE EXISTING CABINET FOUNDATION
- 36 INSTALL CCTV CAMERA ASSEMBLY
- 37 ITS EQUIPMENT REMOVAL (DMS)
- 38 INSTALL CCTV CAMERA METAL POLE AND FOUNDATION
- 39 INSTALL STANDARD (ELECTRICAL) JUNCTION BOX
- 40 INSTALL OVERSIZED JUNCTION BOX
- 41 INSTALL SPECIAL OVERSIZED JUNCTION BOX
- 42 INSTALL NCDOT SUPPLIED CELL MODEM
- 43 REMOVE EXISTING METAL POLE AND FOUNDATION
- 44 INSTALL AERIAL GUY ASSEMBLY
- 45 INSTALL STANDARD GUY ASSEMBLY
- 46 INSTALL SIDEWALK GUY ASSEMBLY
- 47 INSTALL MESSENGER CABLE
- 48 REMOVE EXISTING COMMUNICATIONS CABLE
- 49 EXISTING SIGNAL CABINET (HUB CONNECTION)
- 50 CONDUITS INSTALLED IN BRIDGE STRUCTURE (SEE ROADWAY PLANS)

- 51 INSTALL CABLE STORAGE RACKS (SNOW SHOES) AND STORE 100 FEET OF CABLE
- 52 INSTALL DELINEATOR MARKERS
- 53 STORE 30 FEET OF COMMUNICATIONS CABLE (EACH CABLE), EXCEPT AS NOTED ON PLANS
- 54 REMOVE EXISTING CABINET
- 55 LASH CABLE(S) TO EXISTING SIGNAL/COMMUNICATIONS CABLE
- 56 LASH CABLES TO NEW MESSENGER CABLE
- 57 MODIFY EXISTING ELECTRICAL SERVICE
- 58 INSTALL NEW ELECTRICAL SERVICE
- 59 BOND TRACER WIRE TO EQUIPMENT GROUND BUS ON ONE END
- 60 BOND MESSENGER TO POLE GROUND
- 61 BOND RISER TO POLE GROUND
- 62 INSTALL DMS, PEDESTAL STRUCTURE, ACCESS LADDER AND DMS FOUNDATION
- 63 INSTALL POLE MOUNTED CABINET
- 64 INSTALL NEW EQUIPMENT CABINET DISCONNECT
- 65 INSTALL GROUND MOUNTED SHELL CABINET
- 66 INTERCEPT EXISTING JUNCTION BOX
- 67 INSTALL CCTV CAMERA EXTENSION POLE
- 68 INSTALL SOLAR PANEL ASSEMBLY
- 69 REMOVE WOOD POLE
- 70 INSTALL CCTV WOOD POLE
- 71 ITS EQUIPMENT REMOVAL (CCTV)
- 72 INSTALL STEP-UP /STEP-DOWN TRANSFORMER
- 73 INSTALL WOOD POLE

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	Construction Notes		
	Division 6 Robeson County Lumberton		
	PLAN DATE: April 2022	REVIEWED BY: S.G. Haynie	
	PREPARED BY: O. Drobny	REVIEWED BY: J. S. Cole	
REVISIONS	INIT.	DATE	DocuSigned by: Steven G. Haynie 4/8/2022
			CADD Filename:

LEGEND

	EXISTING COMMUNICATIONS CABLE		NEW ELECTRICAL SERVICE
	EXISTING COMMUNICATIONS CABLE TO BE REMOVED		EXISTING ELECTRICAL SERVICE
	NEW CONDUIT	SP	SIGNAL POLE
	EXISTING CONDUIT		EXISTING ANTENNA
	NEW DIRECTIONAL DRILLED CONDUIT		CCTV /DMS NUMBER
	EXISTING GUARDRAIL		SIGNAL INVENTORY NUMBER
	NEW GUARDRAIL		NEW JUNCTION BOX
	NEW CHAIN LINK FENCE		EXISTING JUNCTION BOX
	EXISTING RIGHT OF WAY		NEW OVERSIZED HEAVY DUTY JUNCTION BOX WITH SPLICE ENCLOSURE
	NEW CCTV CAMERA ASSEMBLY		EXISTING OVERSIZED HEAVY DUTY JUNCTION BOX WITH SPLICE ENCLOSURE
	EXISTING CCTV CAMERA ASSEMBLY		NEW WOOD POLE
	NEW STANDARD GUY ASSEMBLY		EXISTING WOOD POLE
	EXISTING STANDARD GUY ASSEMBLY		NEW METAL POLE
	NEW SIGNAL CABINET		EXISTING METAL POLE
	EXISTING SIGNAL CABINET		STEP-UP STEP-DOWN TRANSFORMER
	NEW ITS EQUIPMENT CABINET		NEW DMS
	EXISTING ITS EQUIPMENT CABINET		EXISTING DMS
	NEW SOLAR PANEL ASSEMBLY		EXISTING STRUCTURE FOUNDATIONS

CONSTRUCTION NOTE SYMBOLOGY KEY

NUMBER OF CABLE(S), LOOPS, ETC.		NUMBER OF FIBERS / TWISTED PAIRS PER CABLE, ETC.
NUMBER OF RISER(S) / CONDUIT(S)		DIAMETER OF RISER(S) / CONDUIT(S) (INCH)
NUMBER OF DEVICES		NUMBER OF FIBERS
NUMBER OF CABLES		REMOVE OR MODIFY CABLE

ATTACHMENT POINT

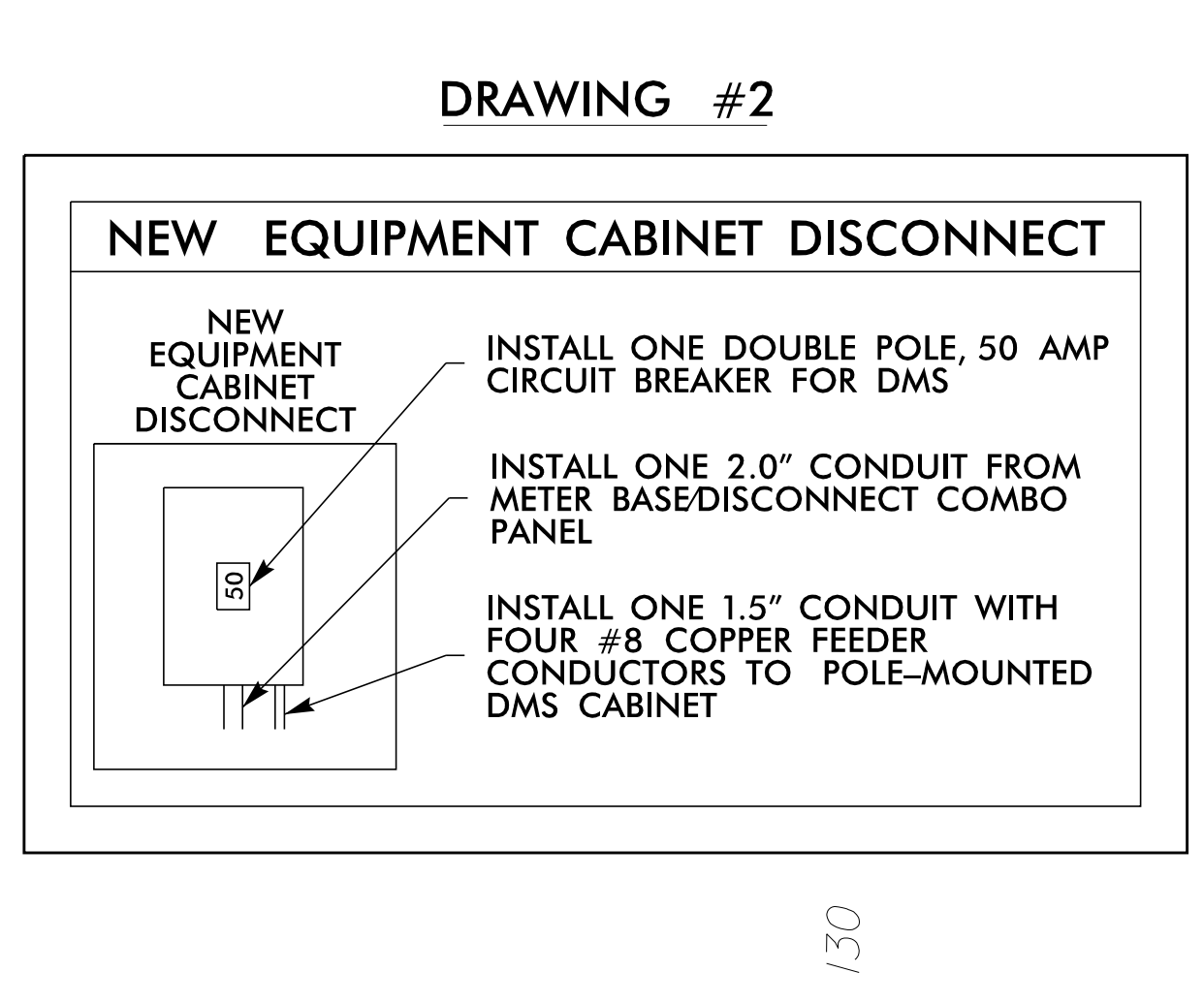
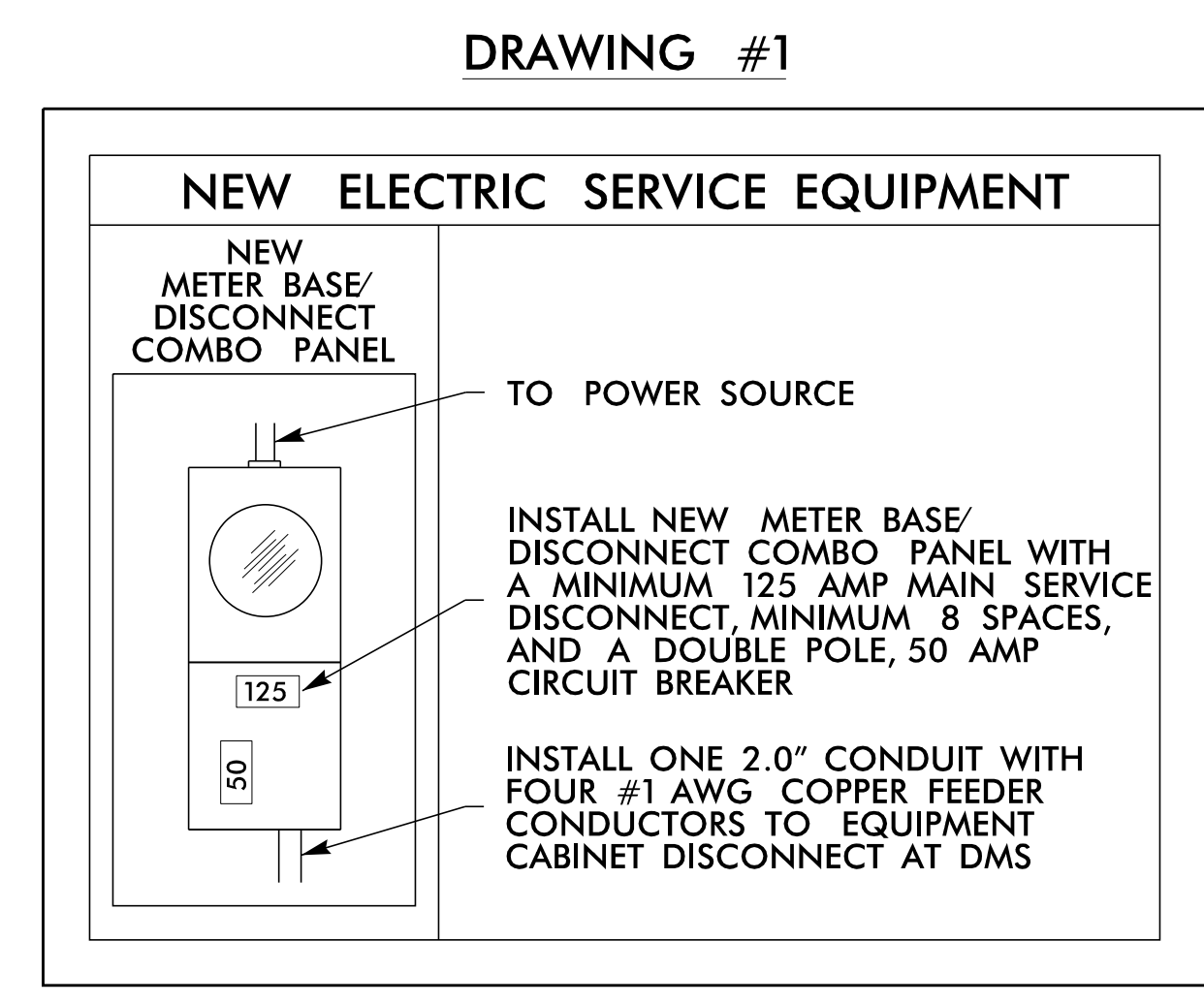
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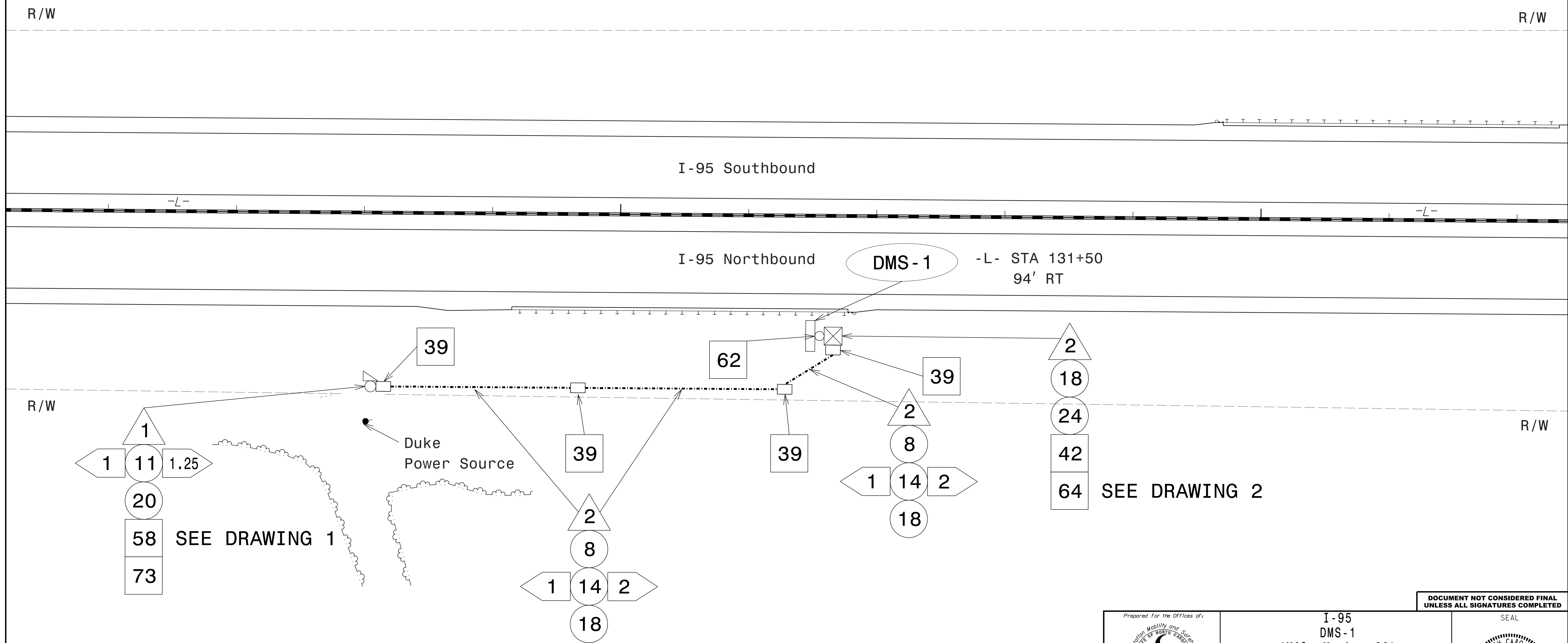


Prepared for the Offices of: ITS and Signals Unit		Construction Note Symbolology/ Legend		SEAL 	
Division 6 Robeson County Lumberton		PLAN DATE: April 2022 REVIEWED BY: S.G. Haynie		DocuSigned by: Steven G. Haynie 4/8/2022	
PREPARED BY: O. Drobny		REVIEWED BY: J. S. Cole		DATE: 4/8/2022	
REVISIONS	INIT.	DATE			
CADD File name:					



DMS-1 GPS COORDINATES

34.67927° N
79.00264° W



NOTES:

1. POWER COMPANY CONTACT - DUKE ENERGY - ERIC CHAVIS (910) 506-6531.
2. REFER TO SHEETS 3B-5 THROUGH 3B-7 FOR GUARDRAIL INFORMATION.
3. MAINTAIN A MINIMUM OF 6 FEET FROM THE EDGE OF PAVEMENT WHEN TRENCHING PARALLEL TO THE ROADWAY.
4. CONTACT DIVISION 6 TRAFFIC ENGINEER FRANK D. WEST, JR. AT (910) 364-0606 TO CONFIRM THE LOCATION OF THE CCTV/DMS.
5. DO NOT INSTALL CONDUIT OR JUNCTION BOXES UNTIL THE PROPOSED LOCATION OF THE CCTV CAMERA OR DMS HAVE BEEN CONFIRMED BY THE DIVISION TRAFFIC ENGINEER.
6. MOUNT THE CCTV CAMERA 45 FEET ABOVE GRADE.
7. MOUNT THE CCTV CAMERA 5 FEET BELOW THE TOP OF THE POLE.

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NC FIRM LICENSE No: F-0493
8521 SIX FORKS ROAD, SUITE 400
RALEIGH, NC 27615
(919) 926-4100

Prepared For the Offices of:

750 N. Greenfield Pkwy, Garner, NC 27529

**I-95
DMS-1
(Mile-Marker 22)**

Division 6 Robeson County Lumberton

PLAN DATE: April 2022 REVIEWED BY: S.G. Haynie

PREPARED BY: O. Drobny REVIEWED BY: J. S. Cole

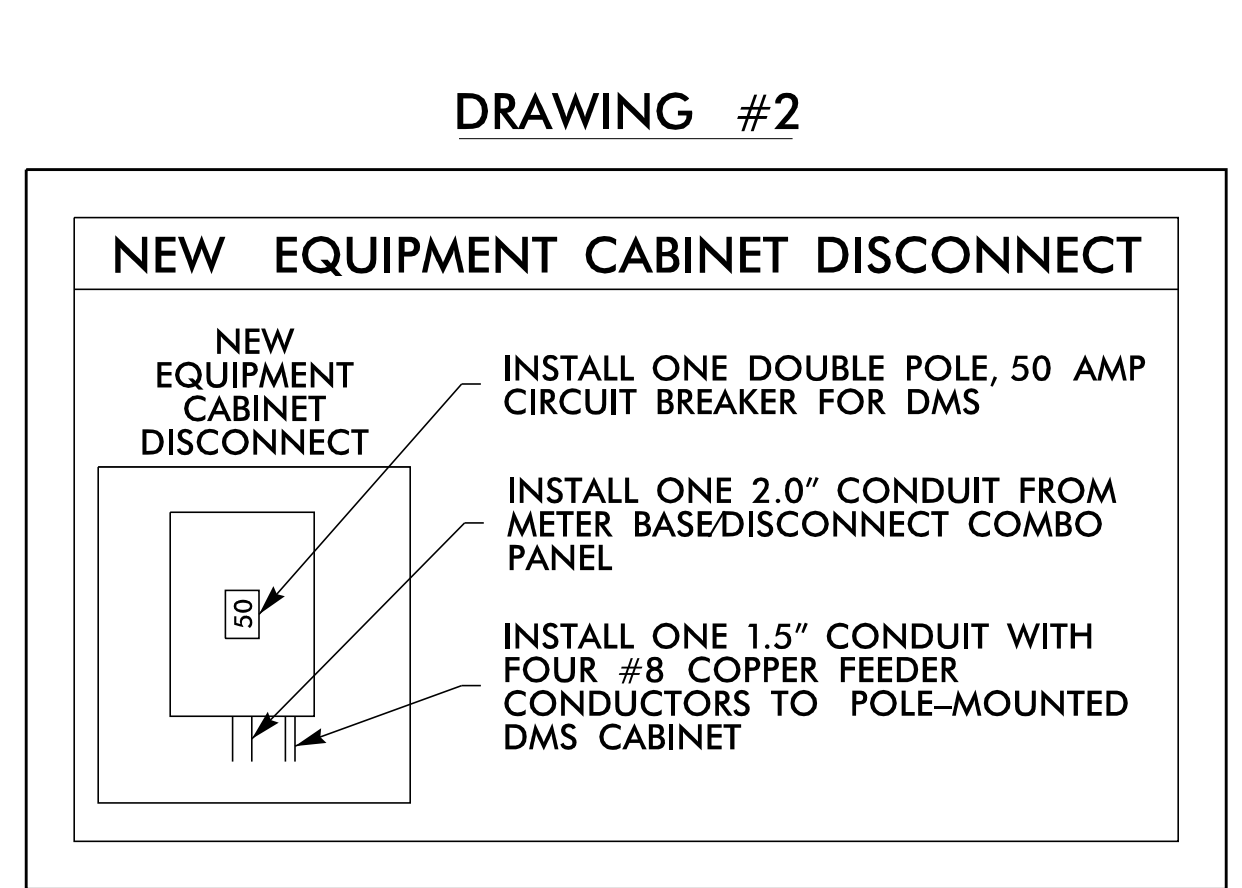
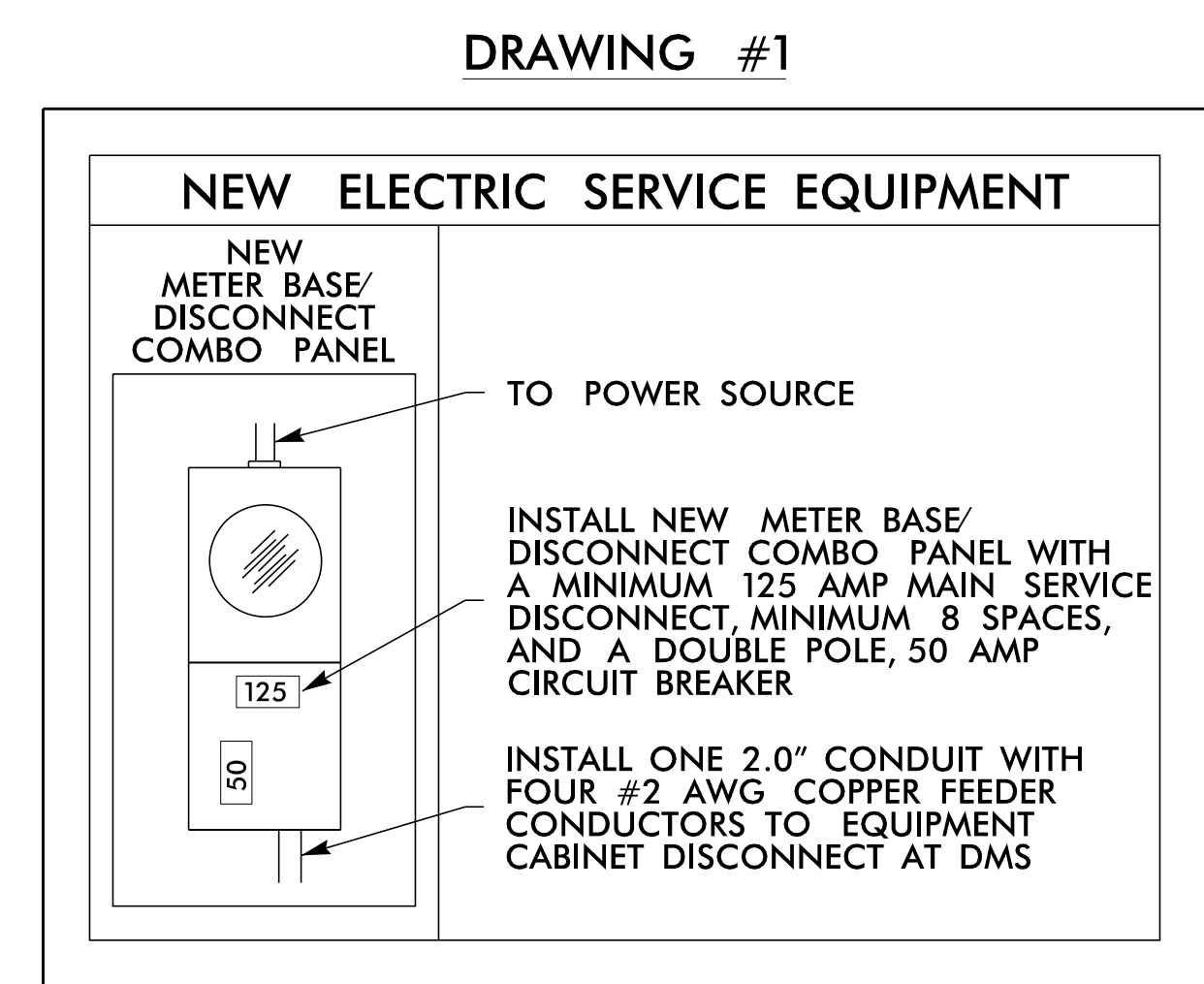
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DocuSigned by:
Steven G. Haynie 4/8/2022

REVISIONS	INIT.	DATE

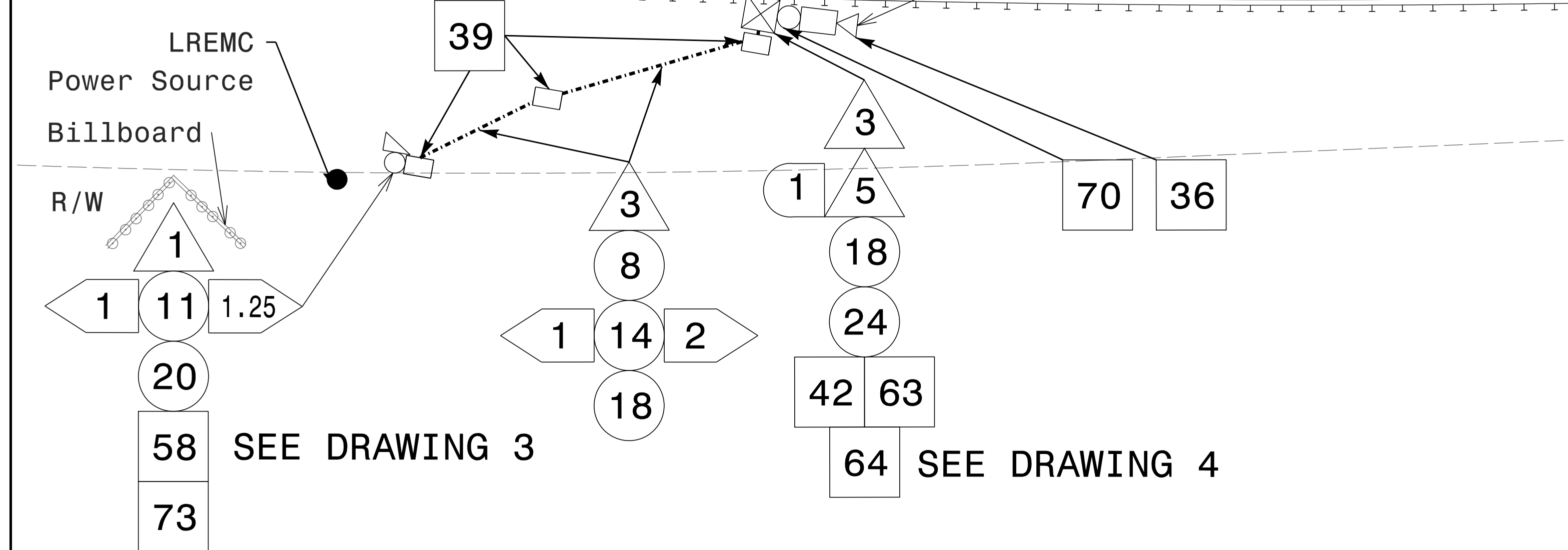
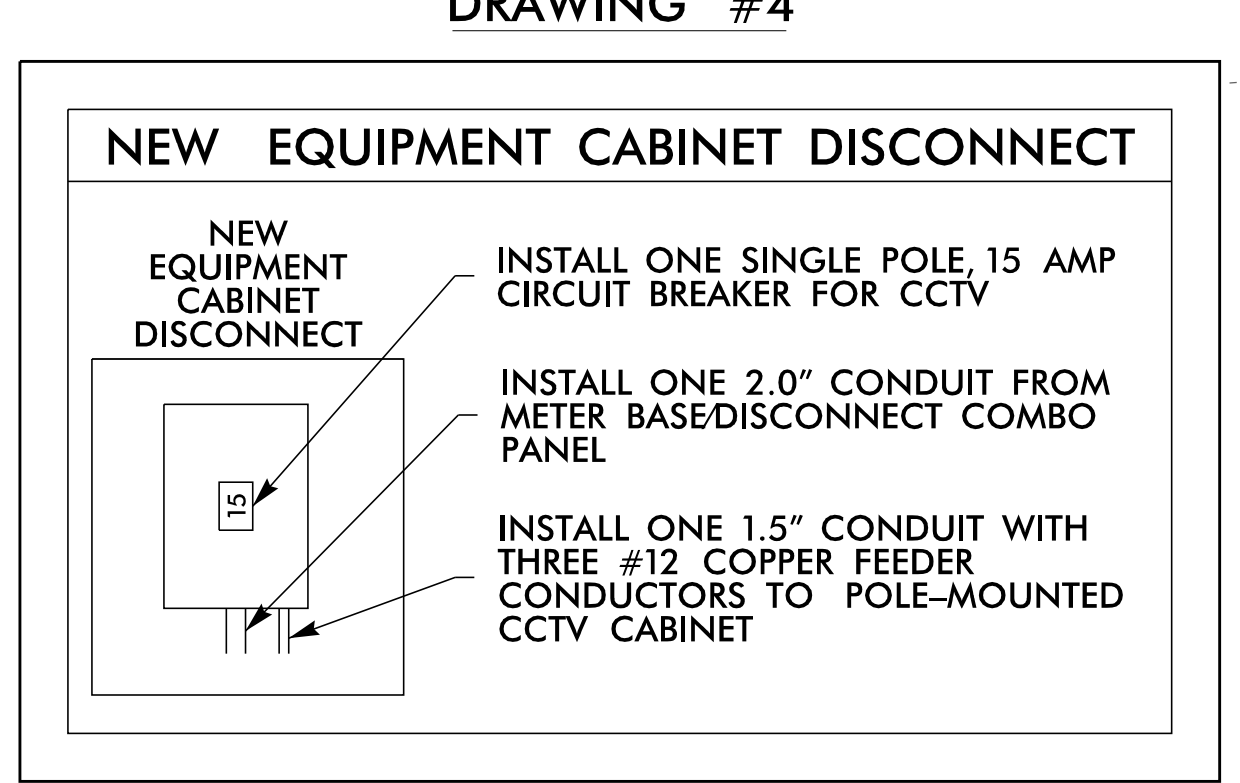
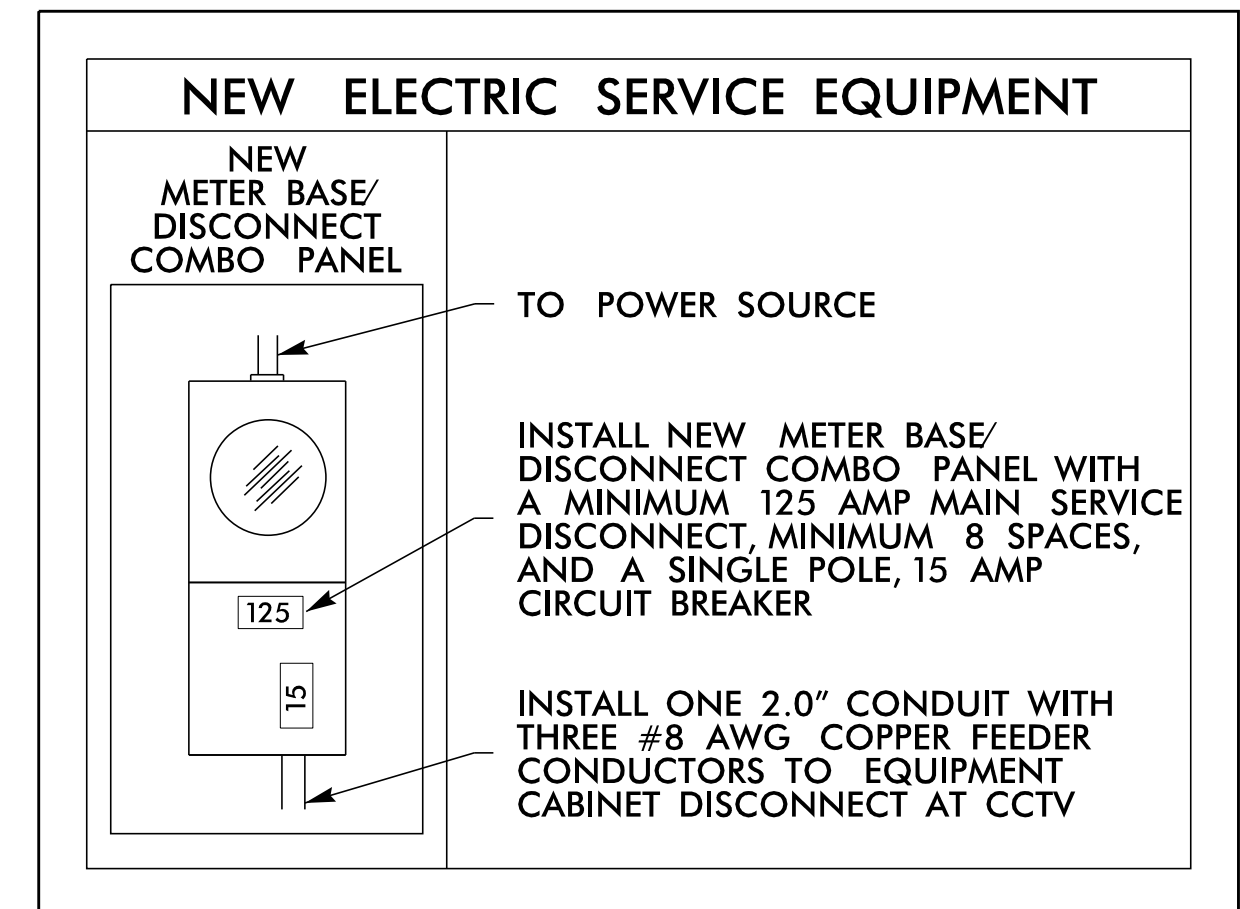
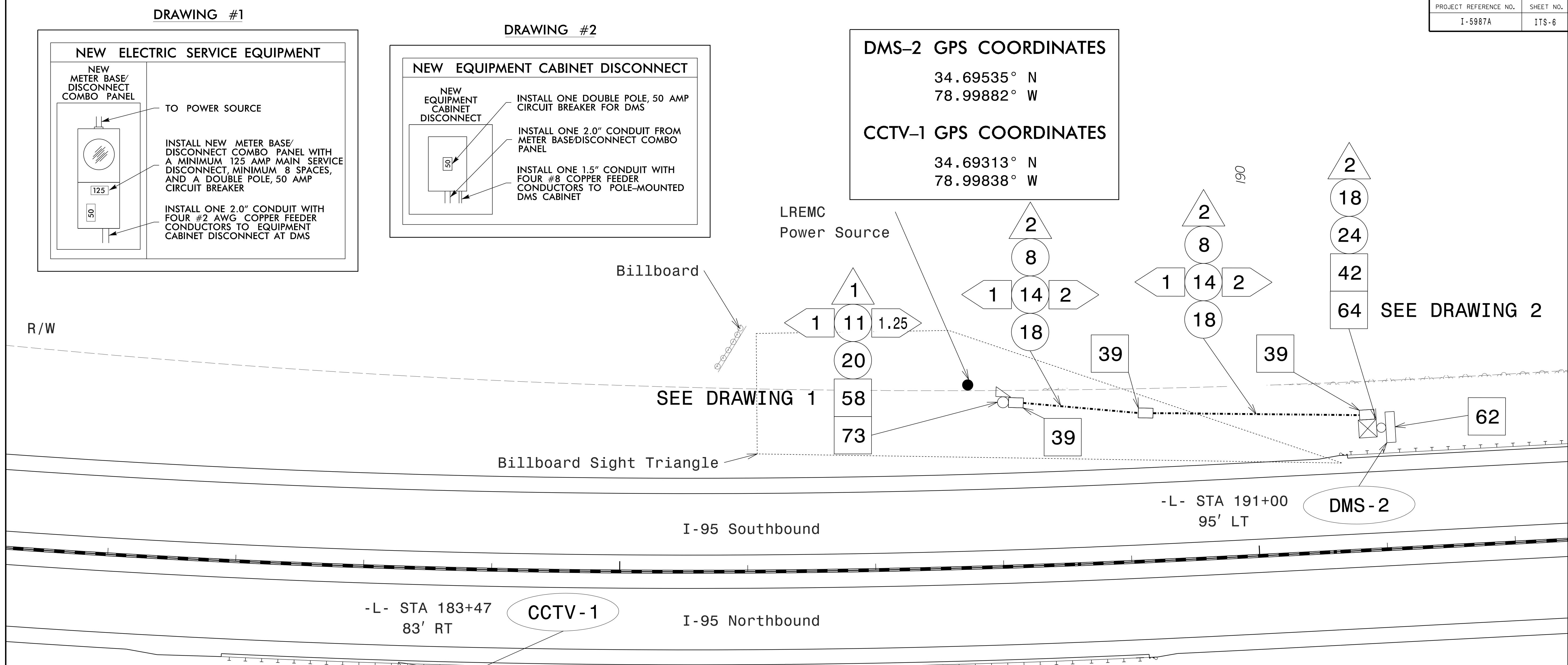
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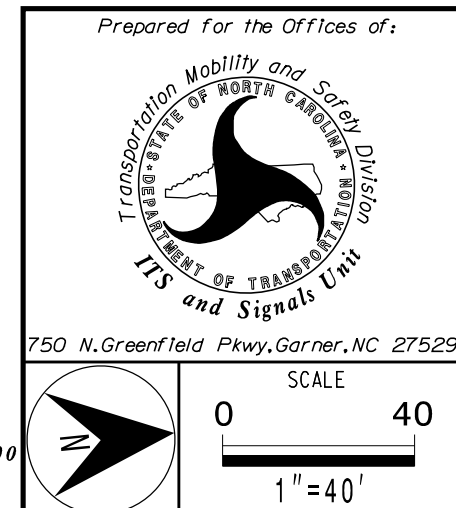
CCTV-1 GPS COORDINATES
 34.69313° N
 78.99838° W



- NOTES:**
- POWER COMPANY CONTACT - LUMBEE RIVER EMC - KEN ROWELL (910) 843-7953
 - REFER TO SHEETS 3B-5 THROUGH 3B-7 FOR GUARDRAIL INFORMATION.
 - MAINTAIN A MINIMUM OF 6 FEET FROM THE EDGE OF PAVEMENT WHEN TRENCHING PARALLEL TO THE ROADWAY.
 - CONTACT DIVISION 6 TRAFFIC ENGINEER FRANK D. WEST, JR. AT (910) 364-0606 TO CONFIRM THE LOCATION OF THE CCTV/DMS.
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 - MOUNT THE CCTV CAMERA 5 FEET BELOW THE TOP OF THE POLE.
 - INSTALL CCTV POLE A MINIMUM OF 8 FEET BEHIND GUARDRAIL.

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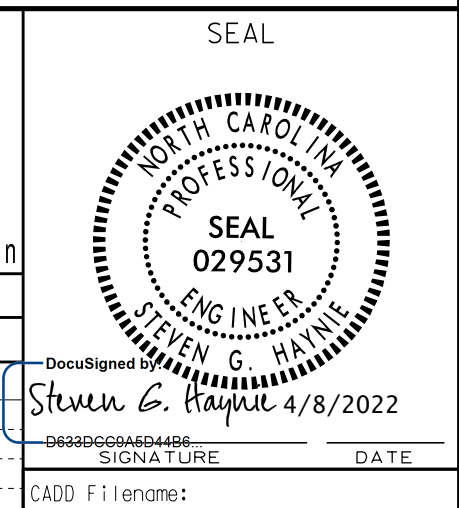
I-95
CCTV-1 & DMS-2
(Mile-Marker 23)

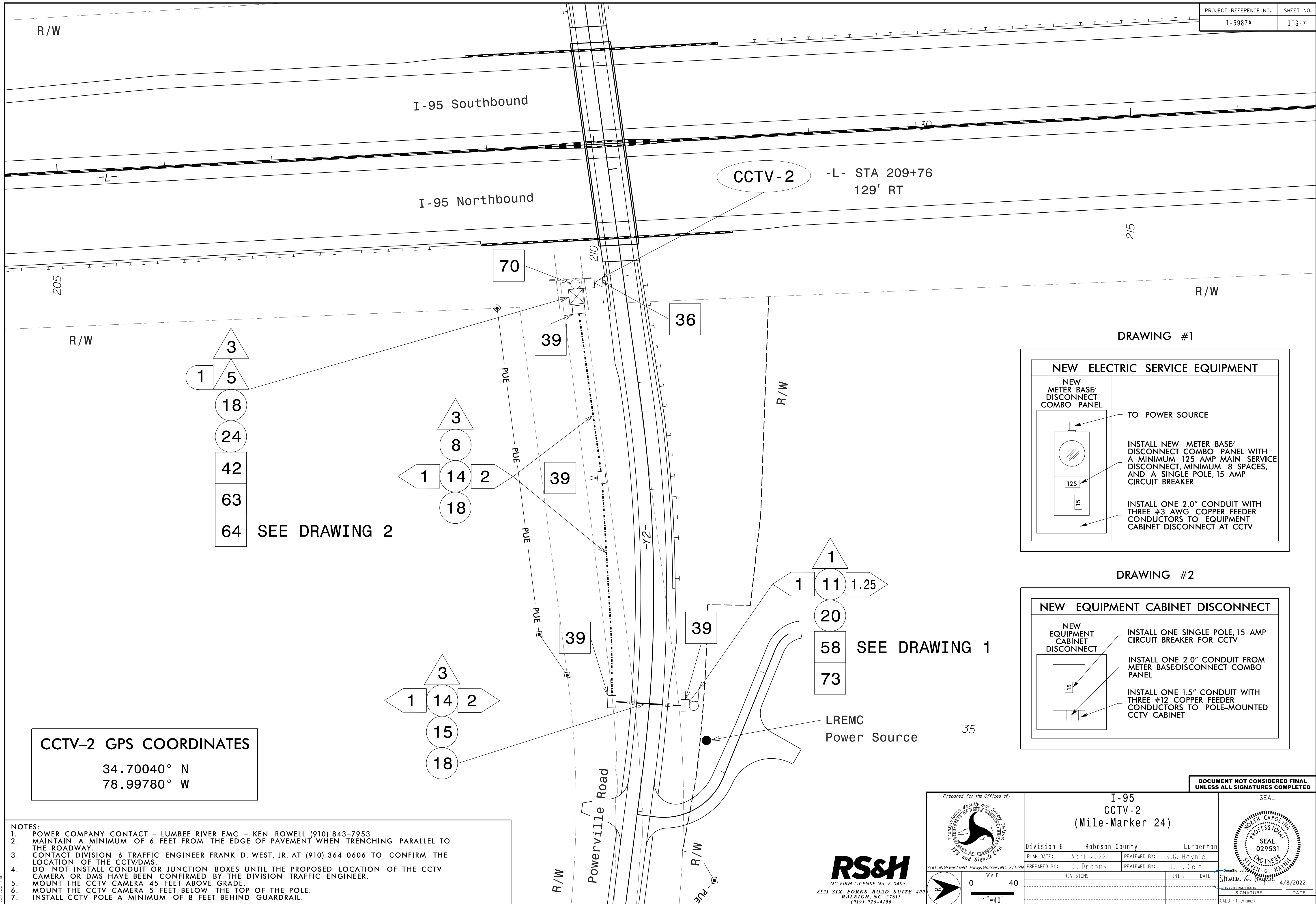
Division 6 Robeson County Lumberton

PLAN DATE: April 2022 REVIEWED BY: S.G. Haynie

PREPARED BY: O. Drobny REVIEWED BY: J. S. Cole

REVISIONS	INIT.	DATE

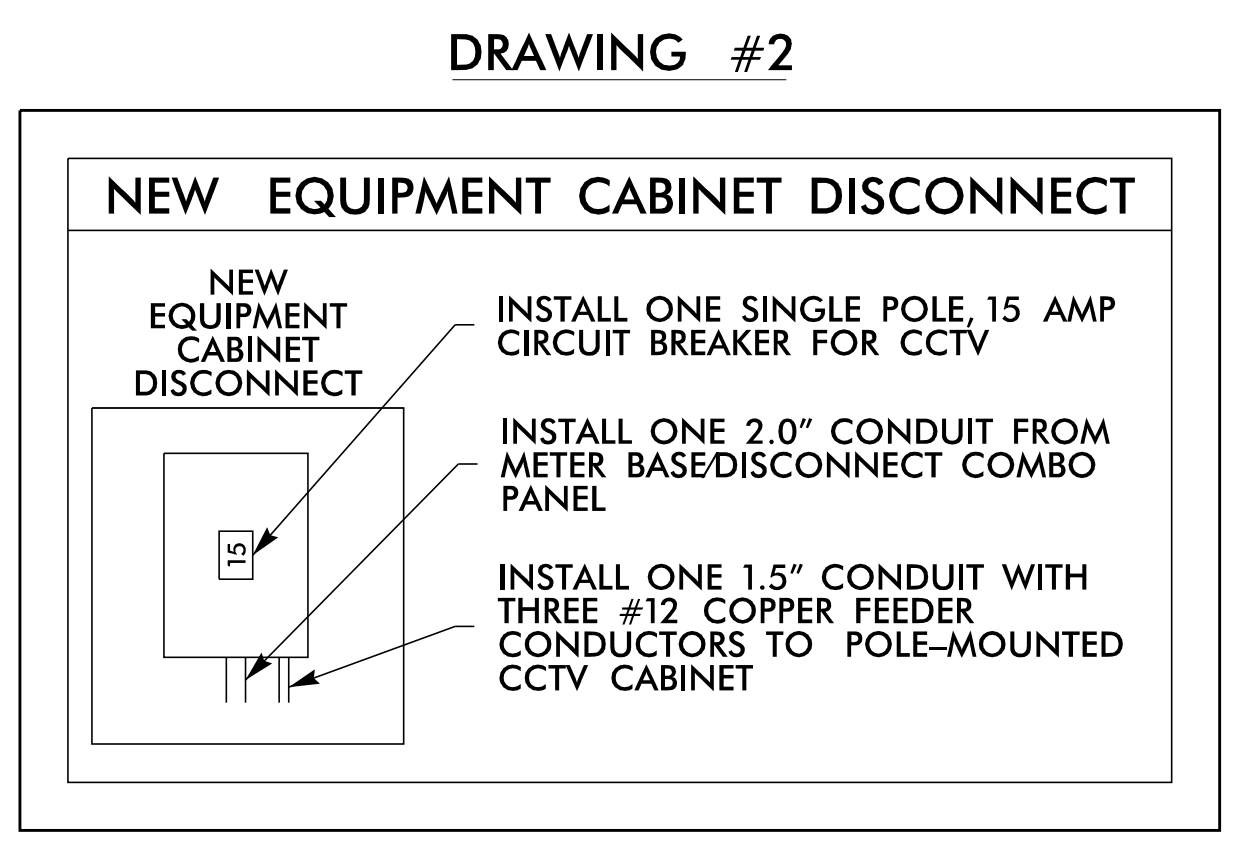
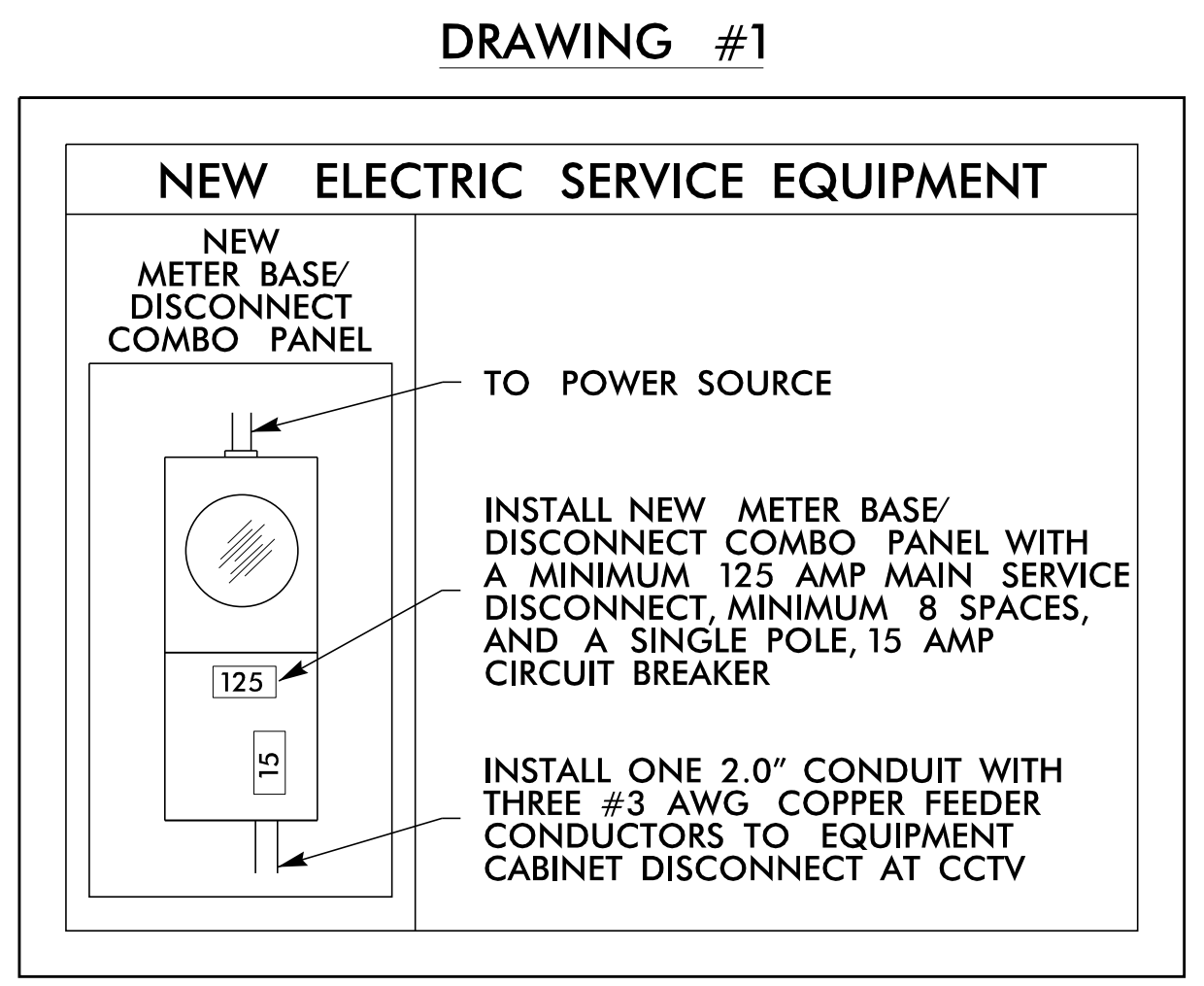




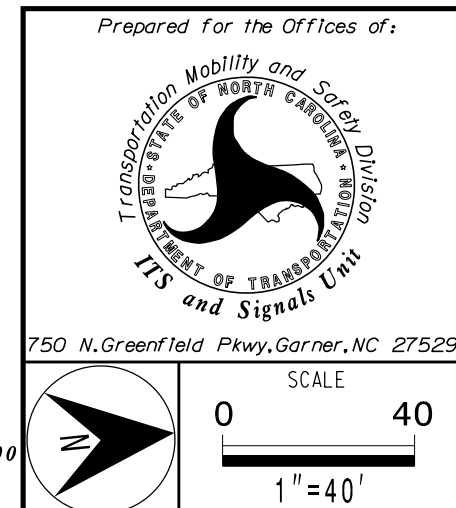
CCTV-2 GPS COORDINATES
 34.70040° N
 78.99780° W

SEE DRAWING 2

SEE DRAWING 1



- NOTES:**
1. POWER COMPANY CONTACT - LUMBEE RIVER EMC - KEN ROWELL (910) 843-7953
 2. MAINTAIN A MINIMUM OF 6 FEET FROM THE EDGE OF PAVEMENT WHEN TRENCHING PARALLEL TO THE ROADWAY.
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 6. MOUNT THE CCTV CAMERA 5 FEET BELOW THE TOP OF THE POLE.
 7. INSTALL CCTV POLE A MINIMUM OF 8 FEET BEHIND GUARDRAIL.



I-95 CCTV-2 (Mile-Marker 24)

Division 6 Robeson County Lumberton

PLAN DATE: April 2022 REVIEWED BY: S.G. Haynie

PREPARED BY: O. Drobny REVIEWED BY: J. S. Cole

REVISIONS	INIT.	DATE

4/8/2022

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SEAL

PROFESSIONAL ENGINEER

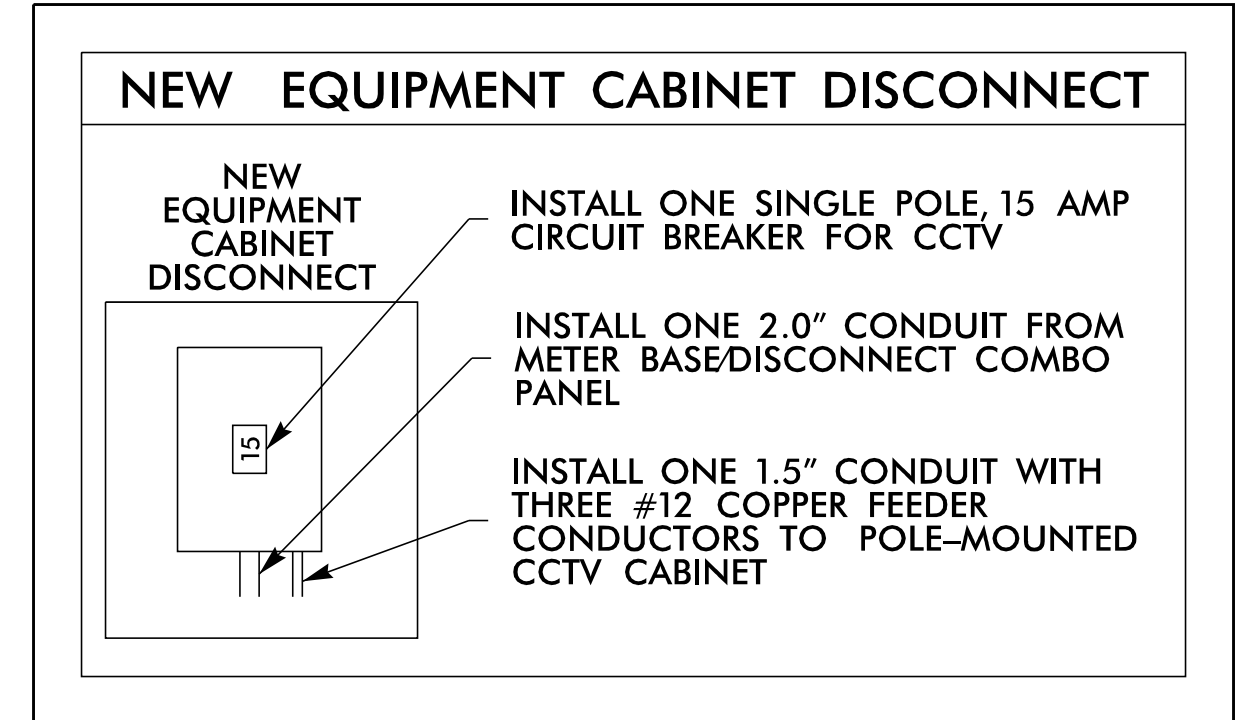
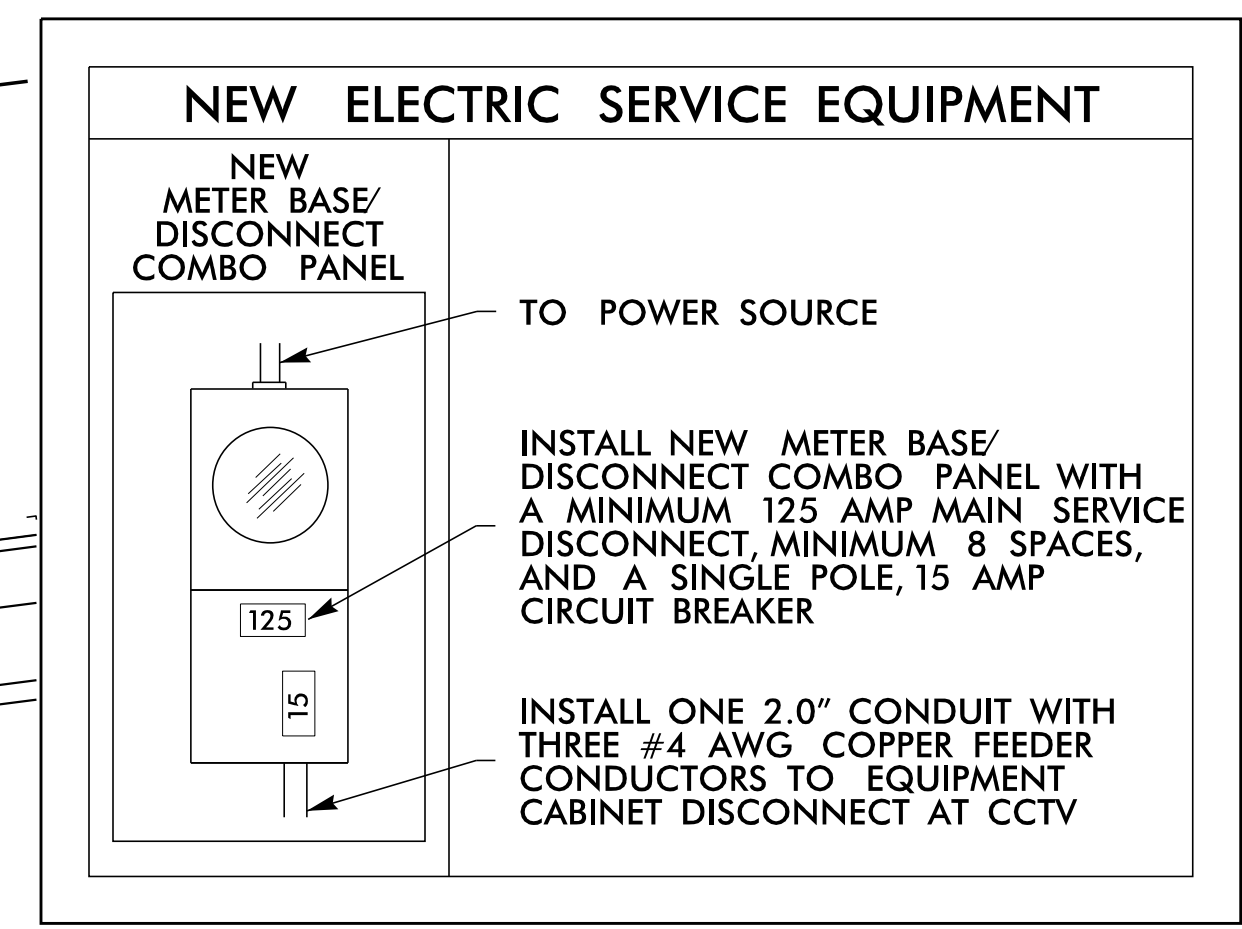
STEVEN G. HAYNIE

029531

4/8/2022

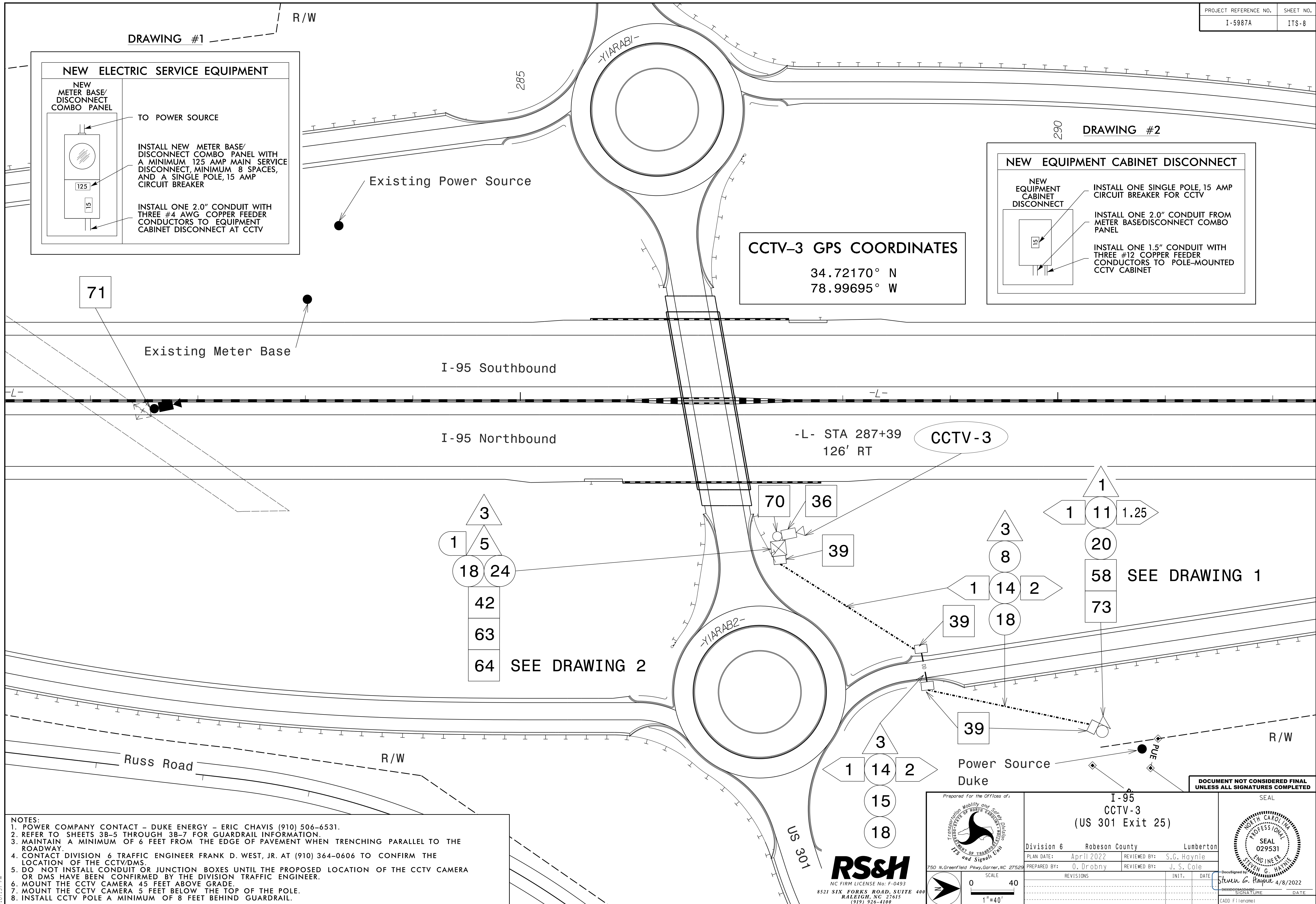


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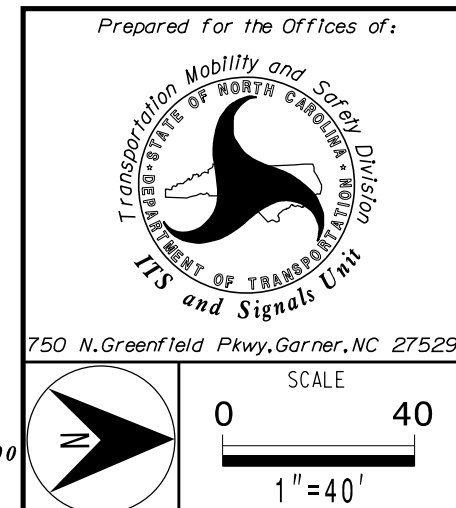


CCTV-3 GPS COORDINATES

34.72170° N
78.99695° W



- NOTES:**
1. POWER COMPANY CONTACT - DUKE ENERGY - ERIC CHAVIS (910) 506-6531.
 2. REFER TO SHEETS 3B-5 THROUGH 3B-7 FOR GUARDRAIL INFORMATION.
 3. MAINTAIN A MINIMUM OF 6 FEET FROM THE EDGE OF PAVEMENT WHEN TRENCHING PARALLEL TO THE ROADWAY.
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**I-95
CCTV-3
(US 301 Exit 25)**

Division 6 Robeson County Lumberton

PLAN DATE: April 2022 REVIEWED BY: S.G. Haynie

PREPARED BY: O. Drobny REVIEWED BY: J. S. Cole

REVISIONS

INIT. DATE

Signature: Steven G. Haynie 4/8/2022

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**DOCUMENT NOT CONSIDERED FINAL
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SEAL

PROFESSIONAL ENGINEER

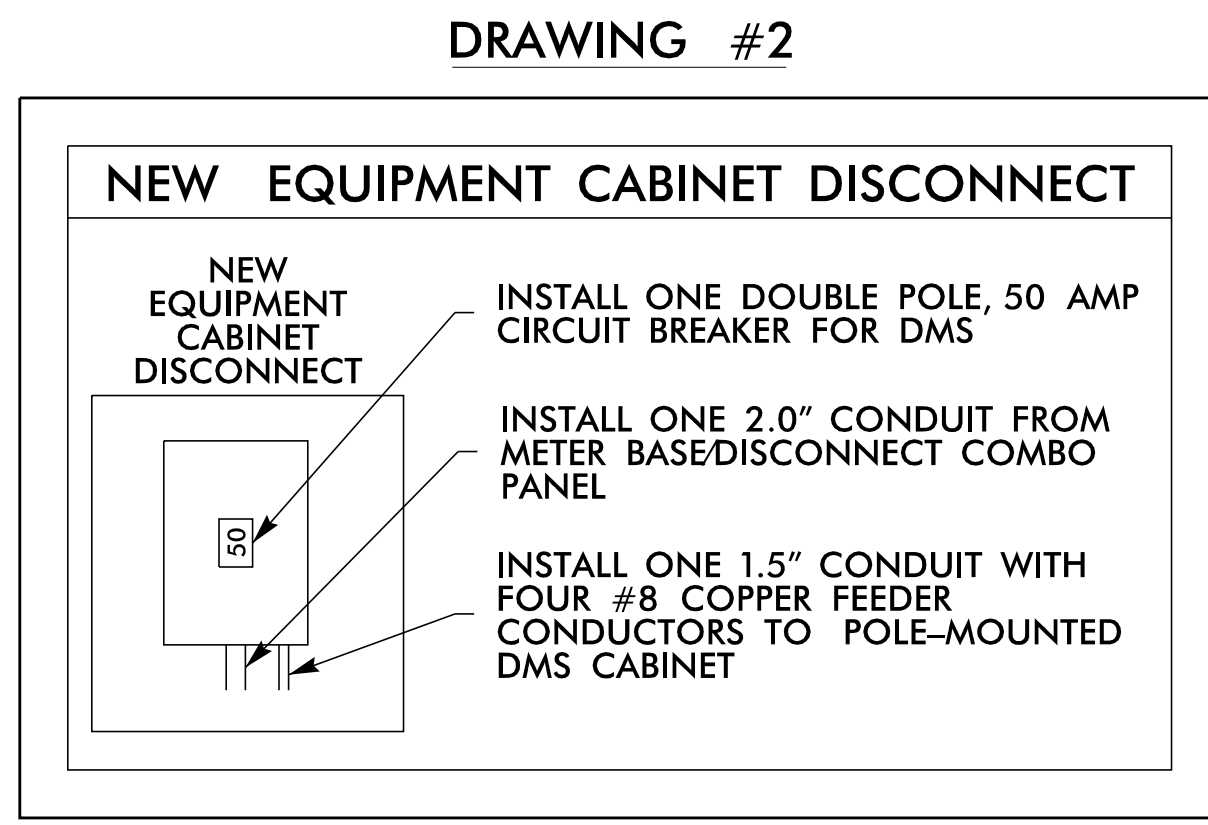
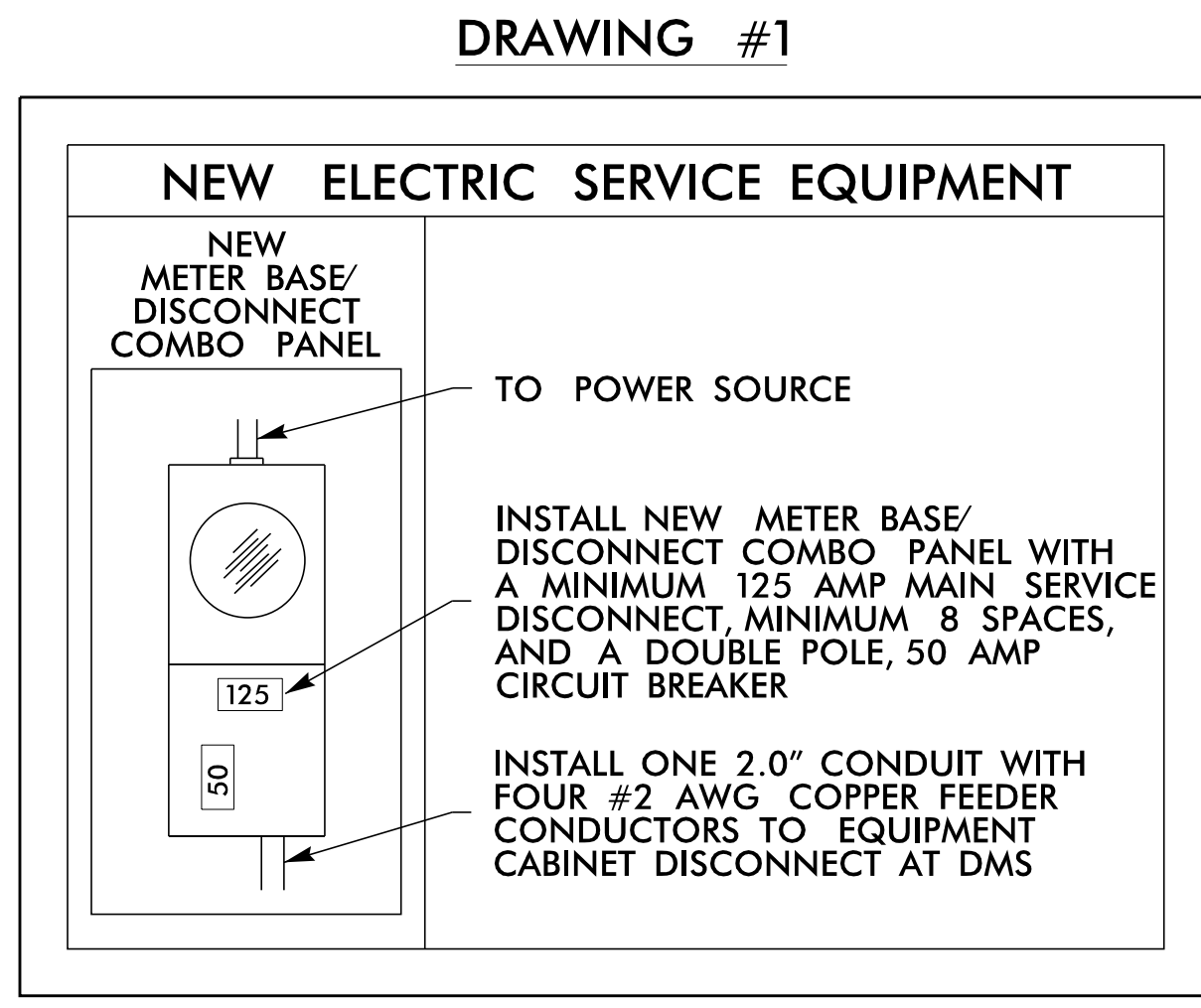
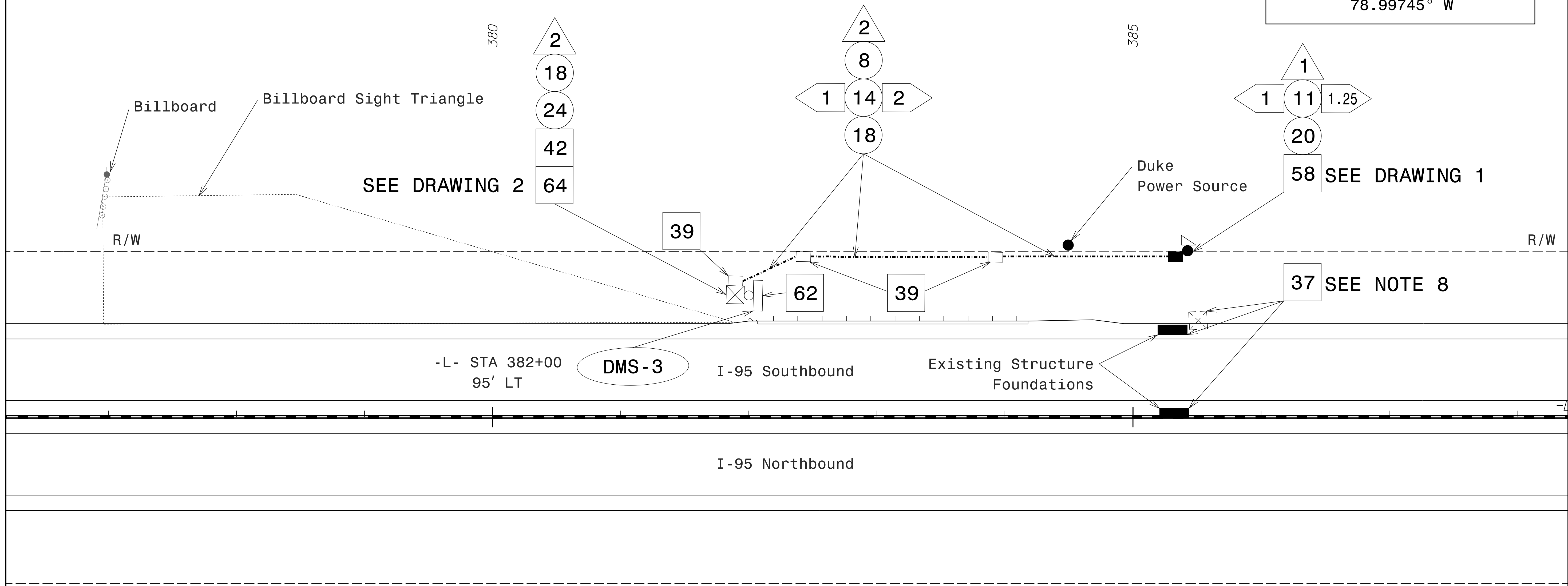
STEVEN G. HAYNIE

029531

STATE OF NORTH CAROLINA

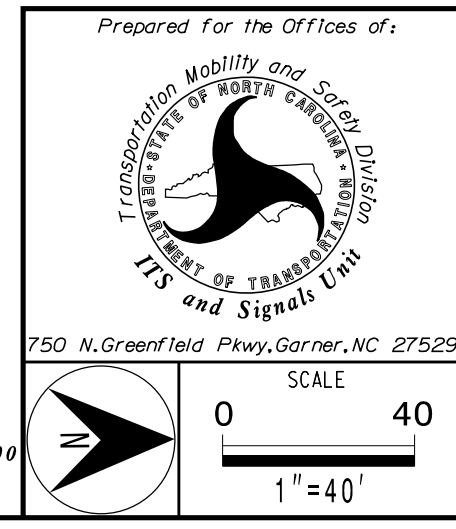
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DMS-3 GPS COORDINATES
34.74770° N
78.99745° W



- NOTES:**
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 4. CONTACT DIVISION 6 TRAFFIC ENGINEER FRANK D. WEST, JR. AT (910) 364-0606 TO CONFIRM THE LOCATION OF THE CCTV/DMS.
 5. DO NOT INSTALL CONDUIT OR JUNCTION BOXES UNTIL THE PROPOSED LOCATION OF THE CCTV CAMERA OR DMS HAVE BEEN CONFIRMED BY THE DIVISION TRAFFIC ENGINEER.
 6. MOUNT THE CCTV CAMERA 45 FEET ABOVE GRADE.
 7. MOUNT THE CCTV CAMERA 5 FEET BELOW THE TOP OF THE POLE.
 8. REMOVE DMS STRUCTURE FOUNDATIONS (2), CABINET, AND CABINET FOUNDATION

4/6/2022
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I-95 DMS-3 (Mile-Marker 27)

Division 6 Robeson County Lumberton

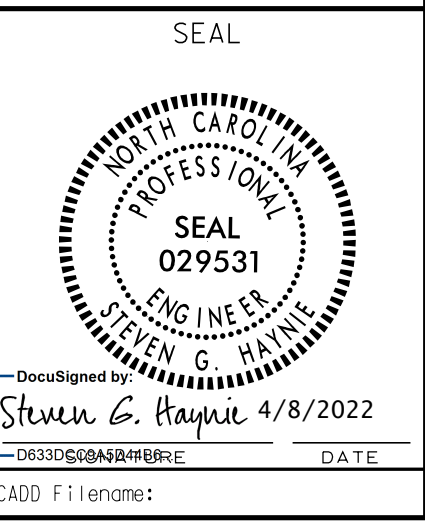
PLAN DATE: April 2022 REVIEWED BY: S.G. Haynie

PREPARED BY: O. Drobny REVIEWED BY: J. S. Cole

REVISIONS	INIT.	DATE

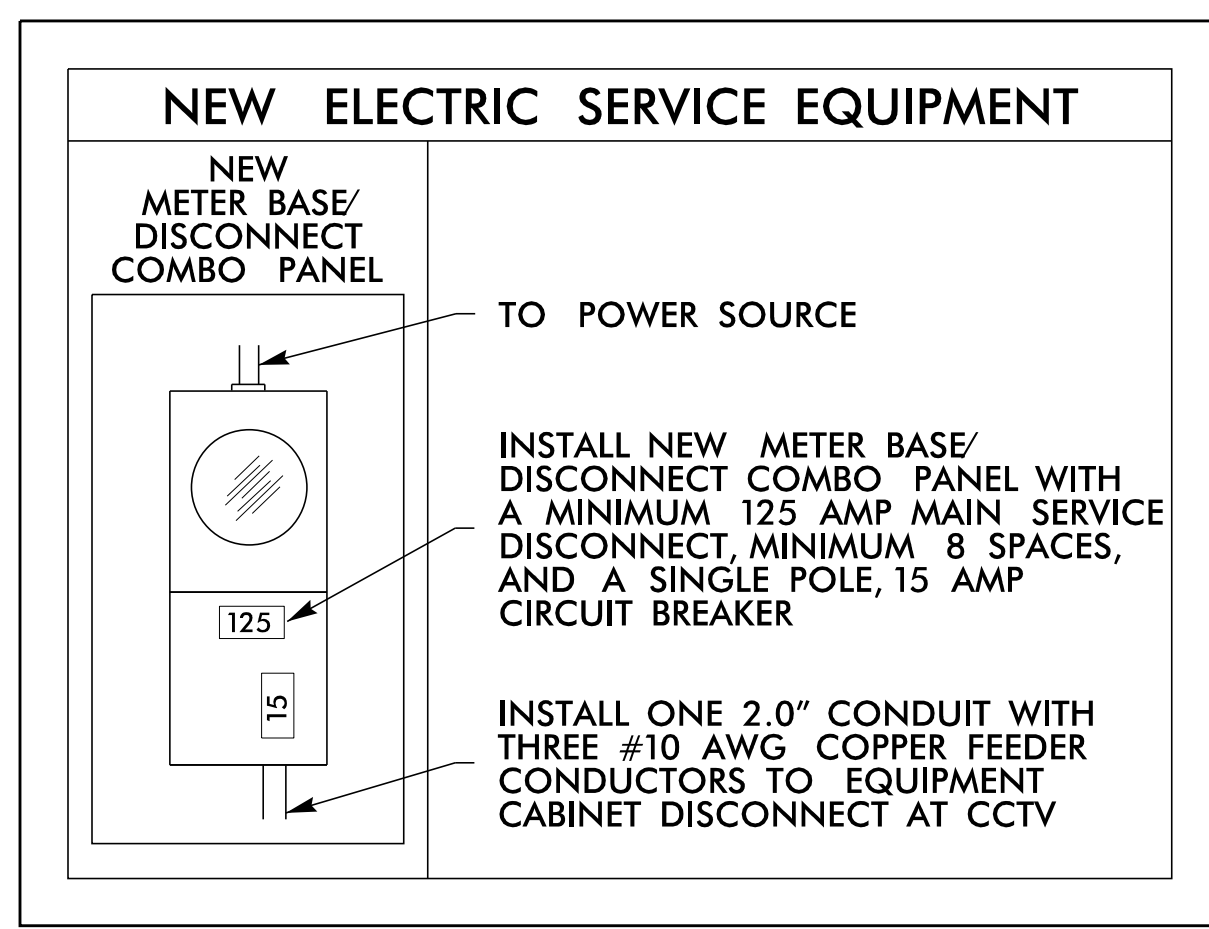
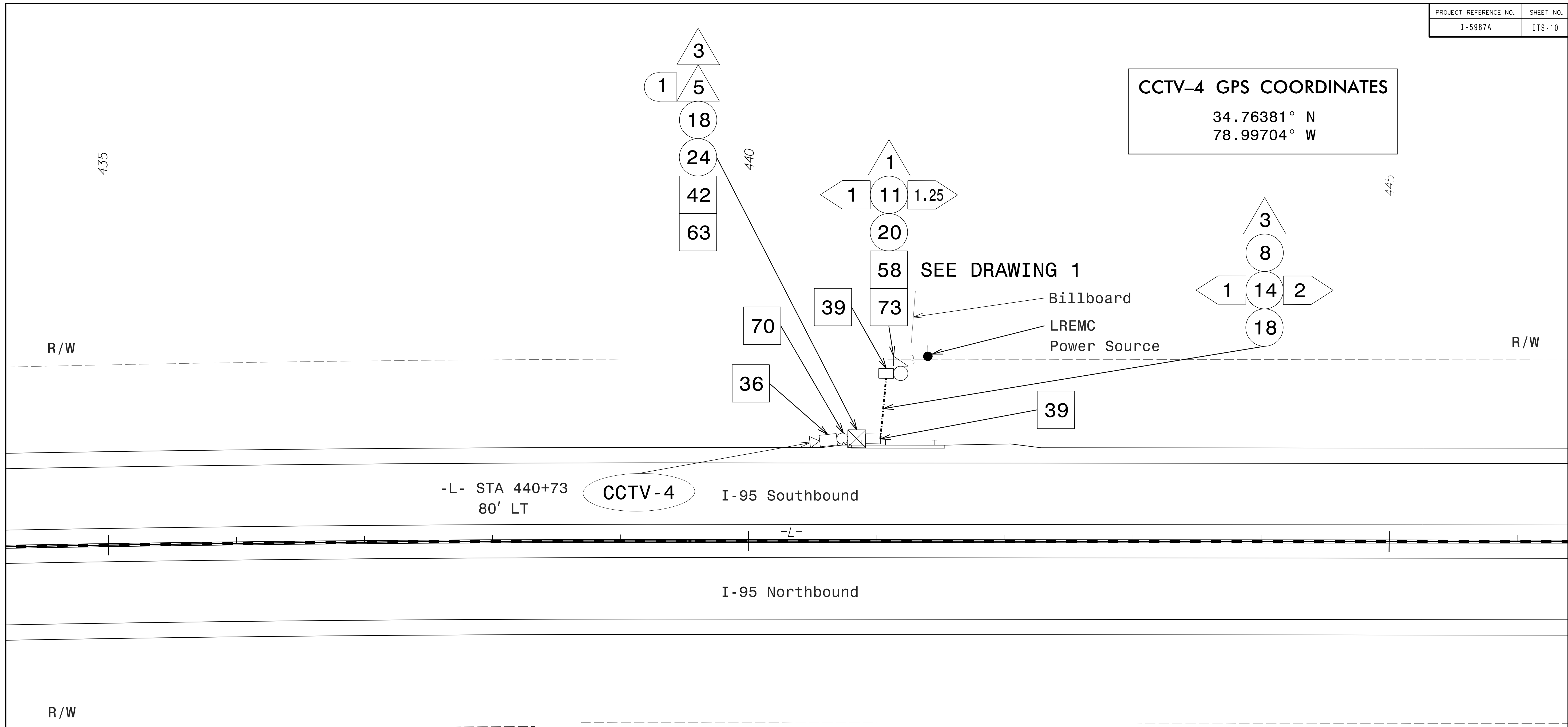
DocuSigned by: **Steven G. Haynie** 4/8/2022

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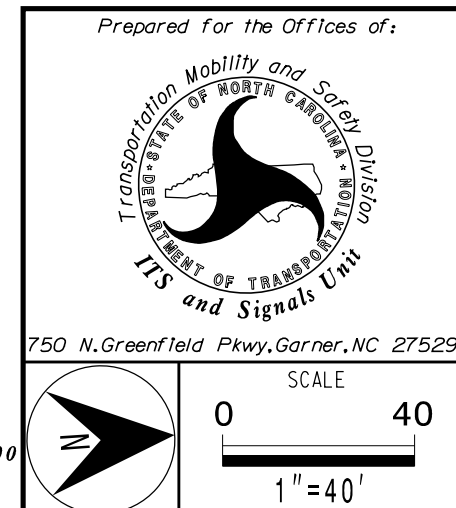


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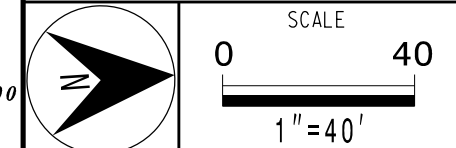
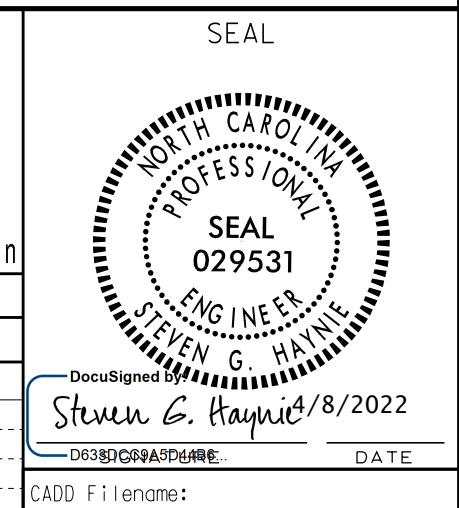
CCTV-4 GPS COORDINATES
 34.76381° N
 78.99704° W



- NOTES:**
- POWER COMPANY CONTACT - LUMBEE RIVER EMC - KEN ROWELL (910) 843-7953
 - REFER TO SHEETS 38-5 THROUGH 38-7 FOR GUARDRAIL INFORMATION.
 - MAINTAIN A MINIMUM OF 6 FEET FROM THE EDGE OF PAVEMENT WHEN TRENCHING PARALLEL TO THE ROADWAY.
 - CONTACT DIVISION 6 TRAFFIC ENGINEER FRANK D. WEST, JR. AT (910) 364-0606 TO CONFIRM THE LOCATION OF THE CCTV/DMS.
 - DO NOT INSTALL CONDUIT OR JUNCTION BOXES UNTIL THE PROPOSED LOCATION OF THE CCTV CAMERA OR DMS HAVE BEEN CONFIRMED BY THE DIVISION TRAFFIC ENGINEER.
 - MOUNT THE CCTV CAMERA 45 FEET ABOVE GRADE.
 - MOUNT THE CCTV CAMERA 5 FEET BELOW THE TOP OF THE POLE.
 - INSTALL CCTV POLE A MINIMUM OF 8 FEET BEHIND GUARDRAIL.



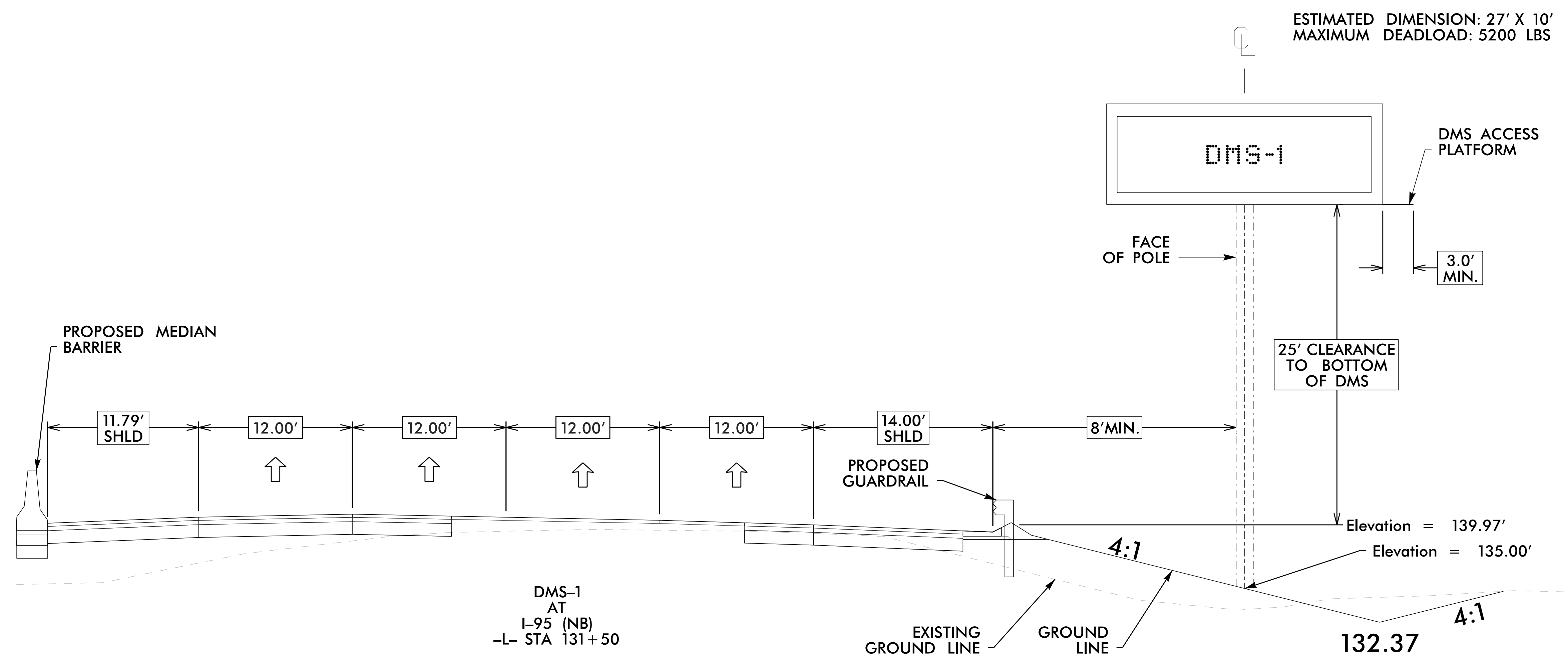
I-95 CCTV-4 (Mile-Marker 28)	
Division 6	Robeson County
Lumberton	
PLAN DATE: April 2022	REVIEWED BY: S.G. Haynie
PREPARED BY: O. Drobny	REVIEWED BY: J. S. Cole
REVISIONS	INIT. DATE



1/24/2022
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UNLESS ALL SIGNATURES COMPLETED**

DATE: 8/18/2022
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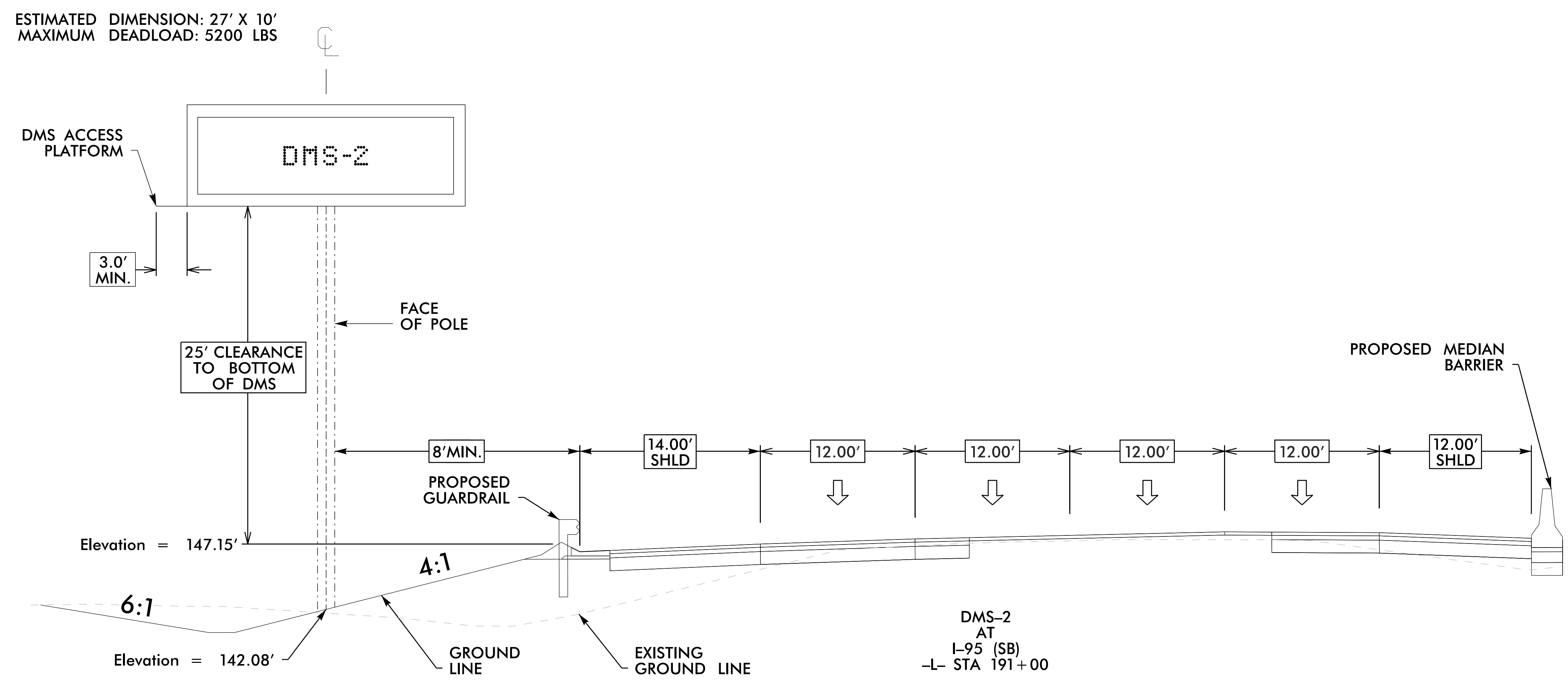
1. FIELD VERIFY ALL FOOTING ELEVATIONS AND GROUND SLOPES AT THE FOOTING USING THE LATEST NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES. CONTRACTOR IS RESPONSIBLE FOR FURNISHING ELEVATION DRAWINGS FOR ENGINEER'S APPROVAL.
2. USE ACTUAL DIMENSIONS AND WEIGHT OF THE DMS TO COMPLETE THE DESIGN OF THE DMS STRUCTURE.
3. ENSURE THAT THE TOP OF THE FOOTING EXTENDS AT LEAST 6 INCHES AND NOT MORE THAN 24 INCHES ABOVE THE HIGHEST POINT OF THE GROUND SURFACE AT THE FOOTING.
4. DESIGN AND CONSTRUCT THE PEDESTAL STRUCTURE AND DMS ENCLOSURE TO WITHSTAND WIND VELOCITIES OF 110 MPH.
5. VERIFY ALL UNDERGROUND UTILITY LOCATIONS BEFORE BEGINNING ANY UNDERGROUND WORK. DO NOT DAMAGE ANY EXISTING UTILITIES OR NCDOT CABLES DURING CONSTRUCTION.

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Prepared for the Offices of: ITS and Signals Unit	I-95 Northbound DMS-1 Elevation (Mile-Marker 22)		SEAL STEVEN G. HAYNIE ENGINEER
	Division 6 Robeson County Lumberton	PLAN DATE: April 2022 REVIEWED BY: S.G. Haynie	
NC FIRM LICENSE No: F-0493 750 N. Greenfield Pkwy, Garner, NC 27529	REVISIONS INIT. DATE		DocuSigned by: Steven G. Haynie 4/8/2022



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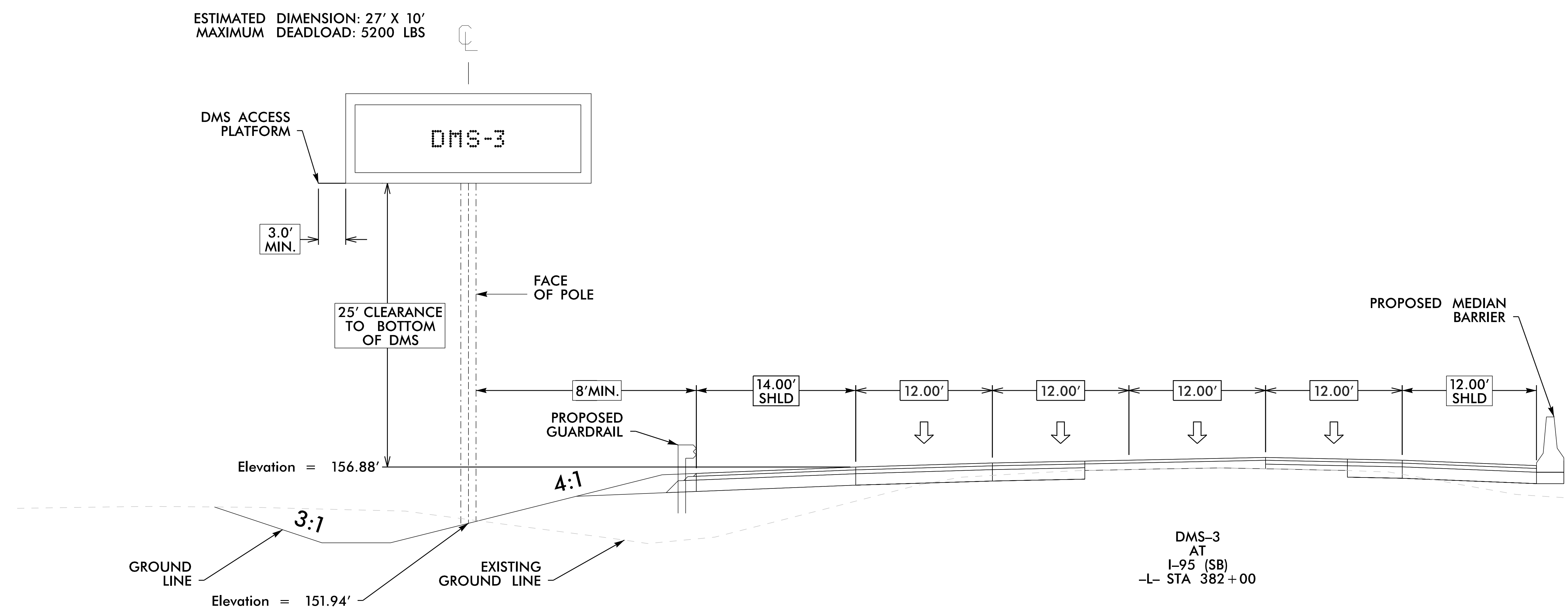
1. FIELD VERIFY ALL FOOTING ELEVATIONS AND GROUND SLOPES AT THE FOOTING USING THE LATEST NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES. CONTRACTOR IS RESPONSIBLE FOR FURNISHING ELEVATION DRAWINGS FOR ENGINEER'S APPROVAL.
2. USE ACTUAL DIMENSIONS AND WEIGHT OF THE DMS TO COMPLETE THE DESIGN OF THE DMS STRUCTURE.
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4. DESIGN AND CONSTRUCT THE PEDESTAL STRUCTURE AND DMS ENCLOSURE TO WITHSTAND WIND VELOCITIES OF 110 MPH.
5. VERIFY ALL UNDERGROUND UTILITY LOCATIONS BEFORE BEGINNING ANY UNDERGROUND WORK. DO NOT DAMAGE ANY EXISTING UTILITIES OR NCDOT CABLES DURING CONSTRUCTION.

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DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



Prepared for the Offices of:		I-95 Southbound DMS-2 Elevation (Mile-Marker 23)		SEAL
		Division 6 Robeson County Lumberton		Prepared by: Steven G. Haynie Date: 4/8/2022
PLAN DATE: April 2022	REVIEWED BY: S.G. Haynie	PREPARED BY: O. Drobny	REVIEWED BY: J.S. Cole	
REVISIONS	INIT.	DATE	CADD File name: I-5987A ITS_psh_12.dgn	



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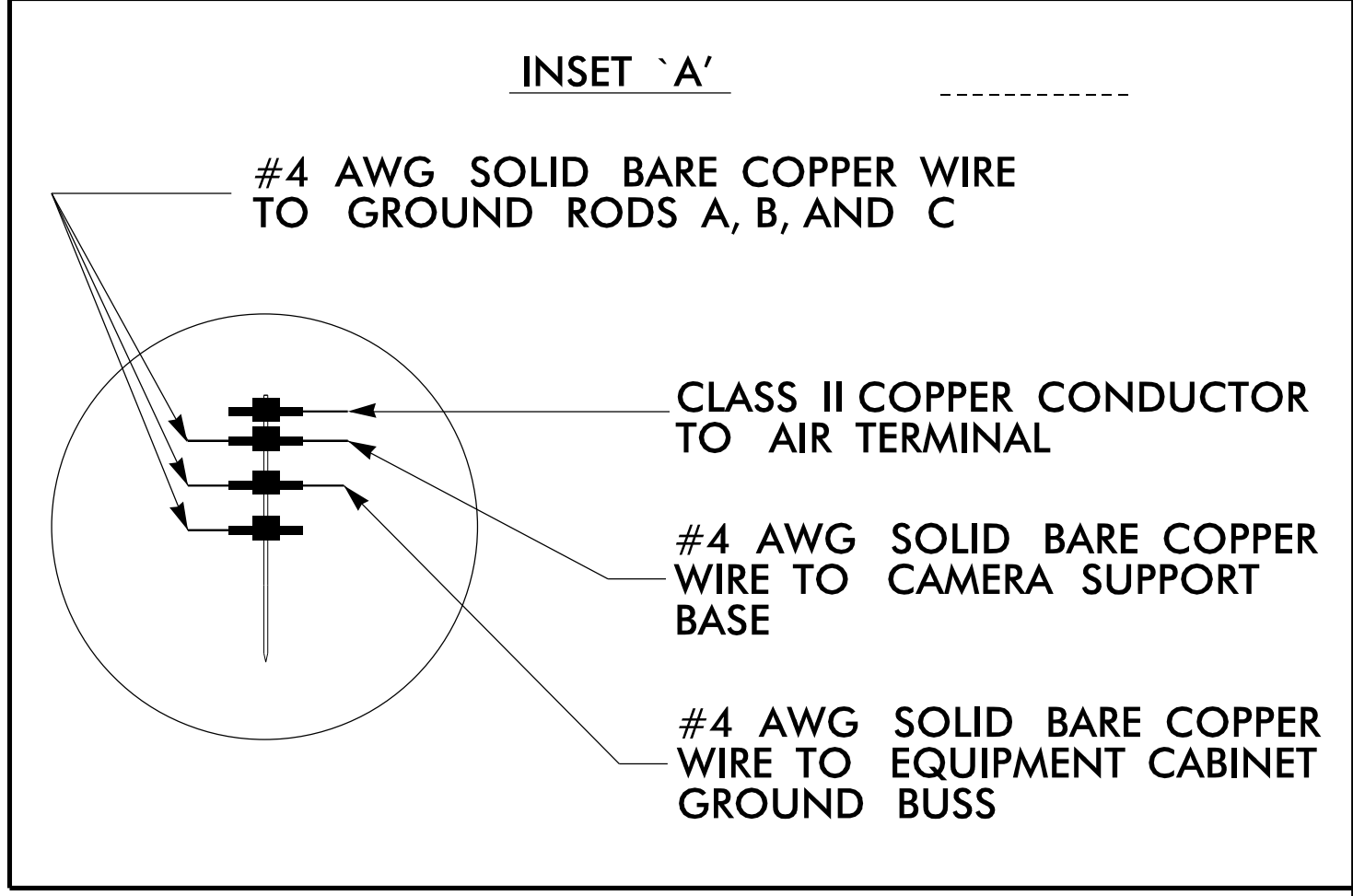
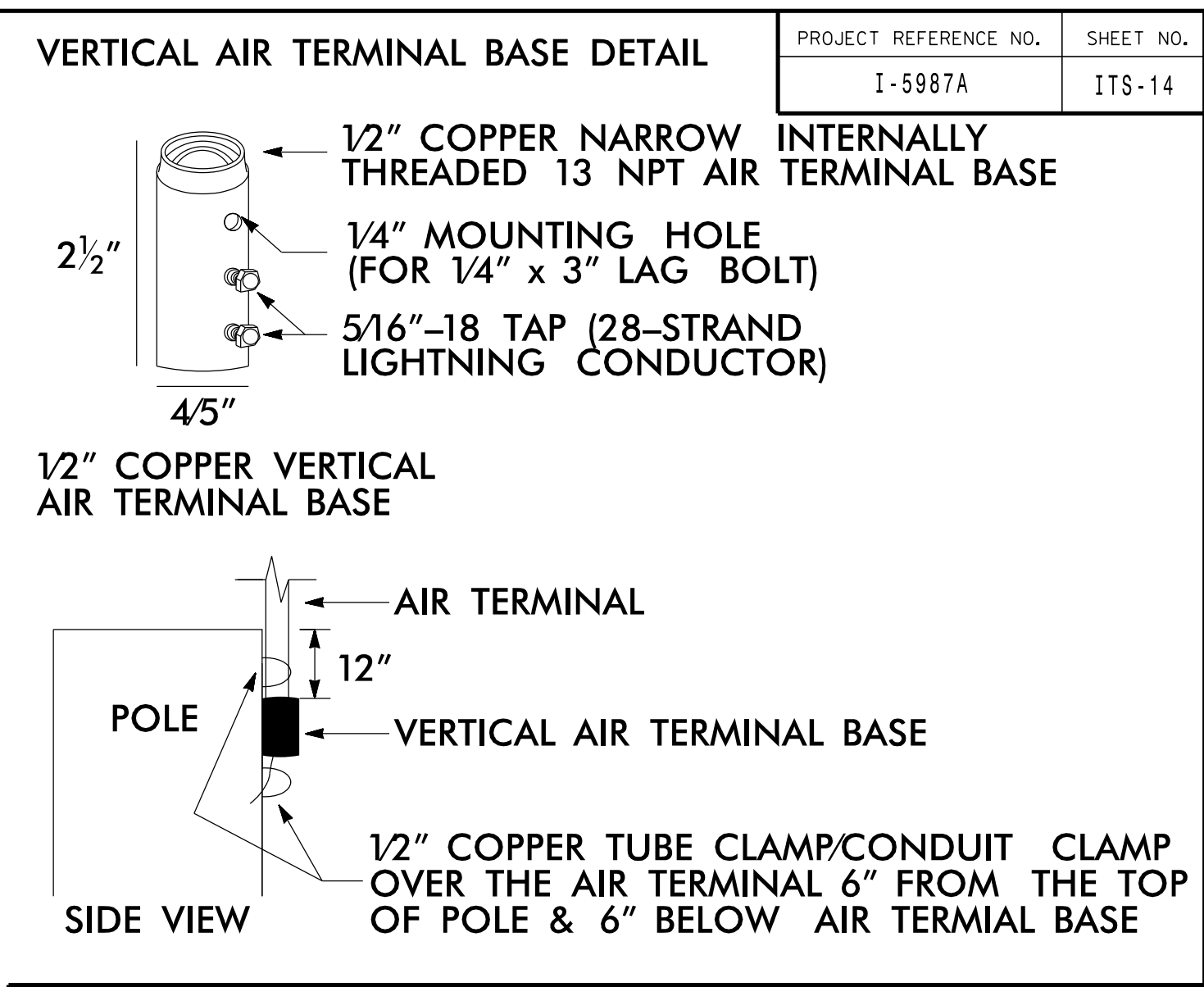
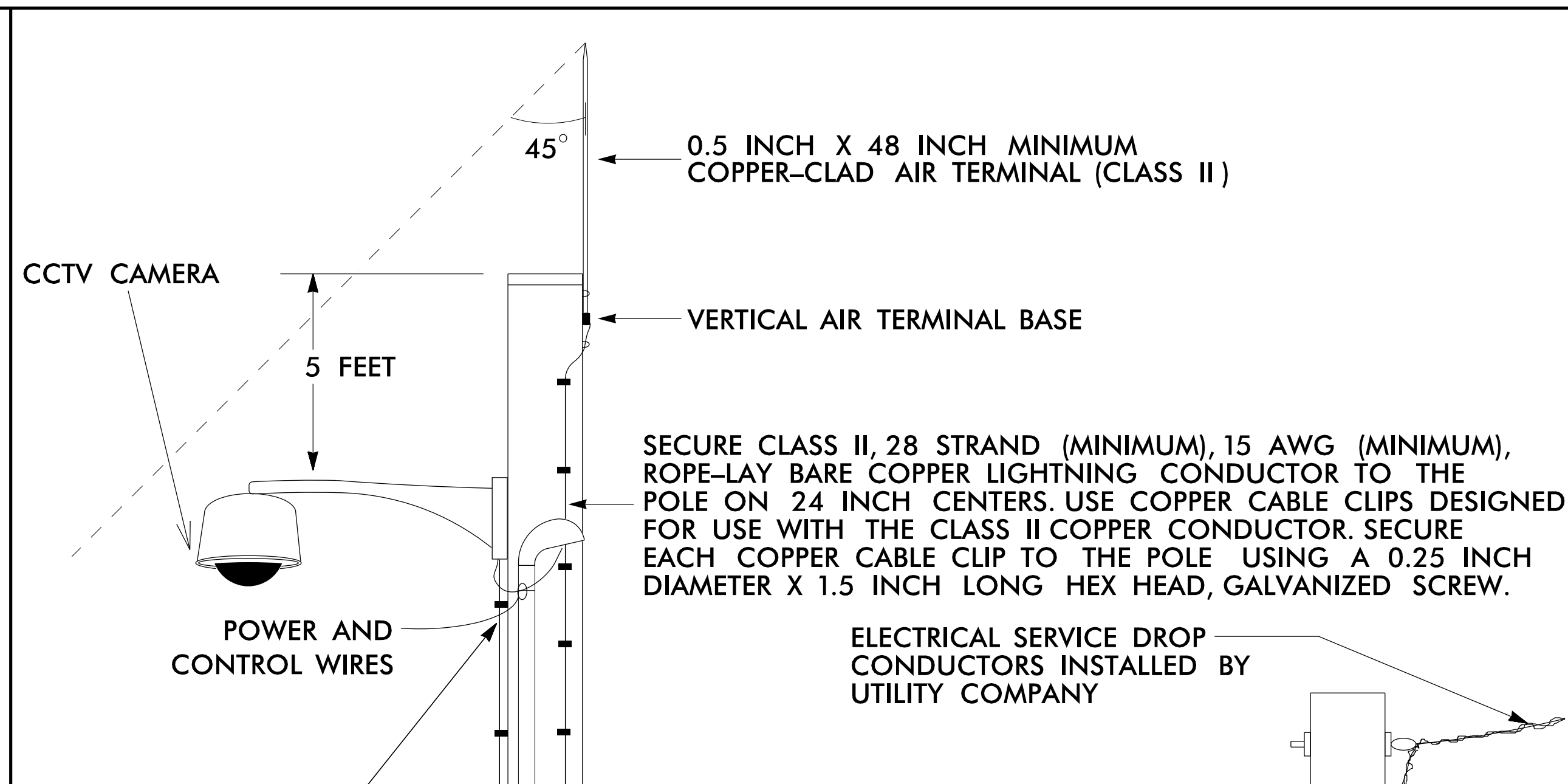
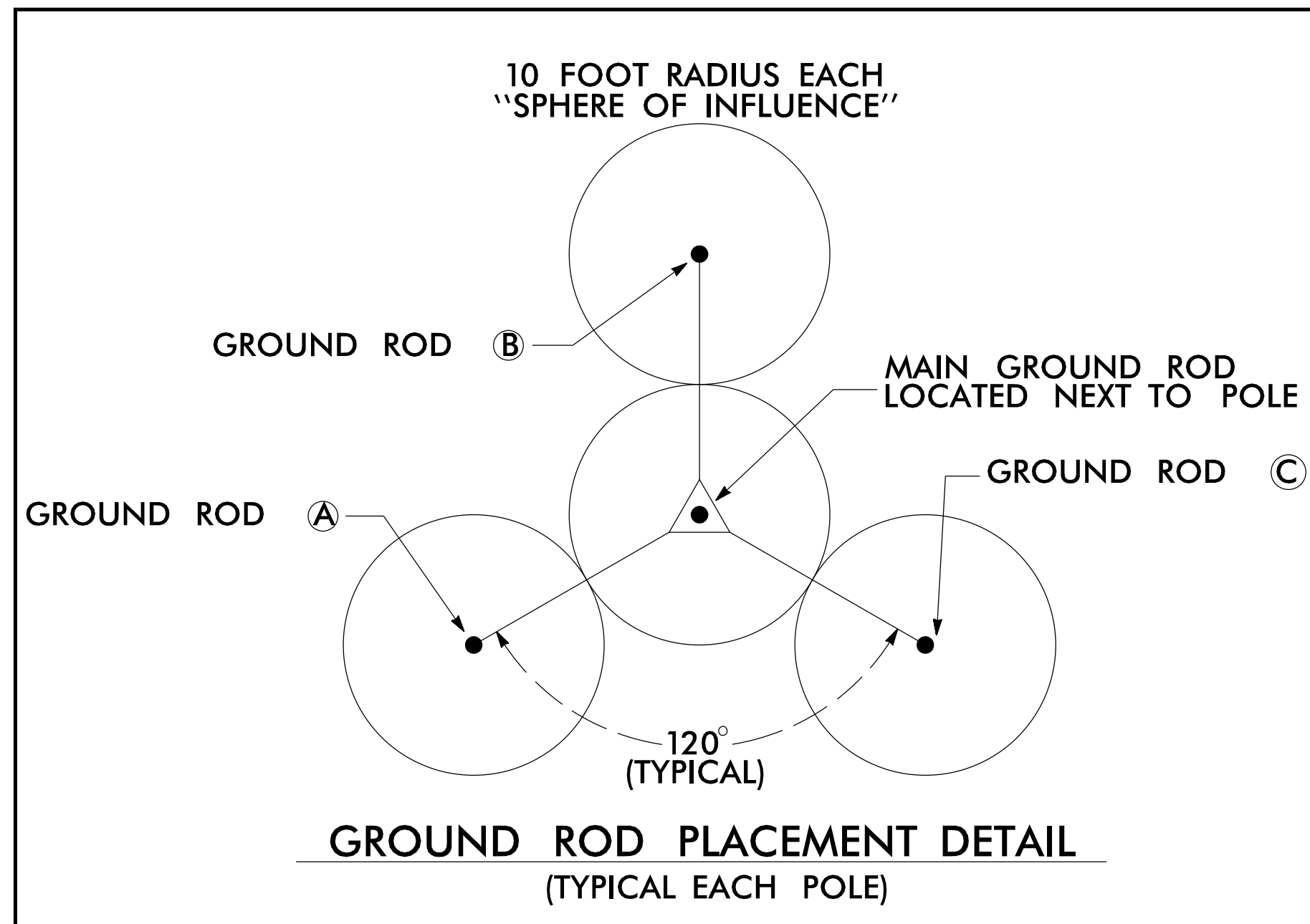
1. FIELD VERIFY ALL FOOTING ELEVATIONS AND GROUND SLOPES AT THE FOOTING USING THE LATEST NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES. CONTRACTOR IS RESPONSIBLE FOR FURNISHING ELEVATION DRAWINGS FOR ENGINEER'S APPROVAL.
2. USE ACTUAL DIMENSIONS AND WEIGHT OF THE DMS TO COMPLETE THE DESIGN OF THE DMS STRUCTURE.
3. ENSURE THAT THE TOP OF THE FOOTING EXTENDS AT LEAST 6 INCHES AND NOT MORE THAN 24 INCHES ABOVE THE HIGHEST POINT OF THE GROUND SURFACE AT THE FOOTING.
4. DESIGN AND CONSTRUCT THE PEDESTAL STRUCTURE AND DMS ENCLOSURE TO WITHSTAND WIND VELOCITIES OF 110 MPH.
5. VERIFY ALL UNDERGROUND UTILITY LOCATIONS BEFORE BEGINNING ANY UNDERGROUND WORK. DO NOT DAMAGE ANY EXISTING UTILITIES OR NCDOT CABLES DURING CONSTRUCTION.

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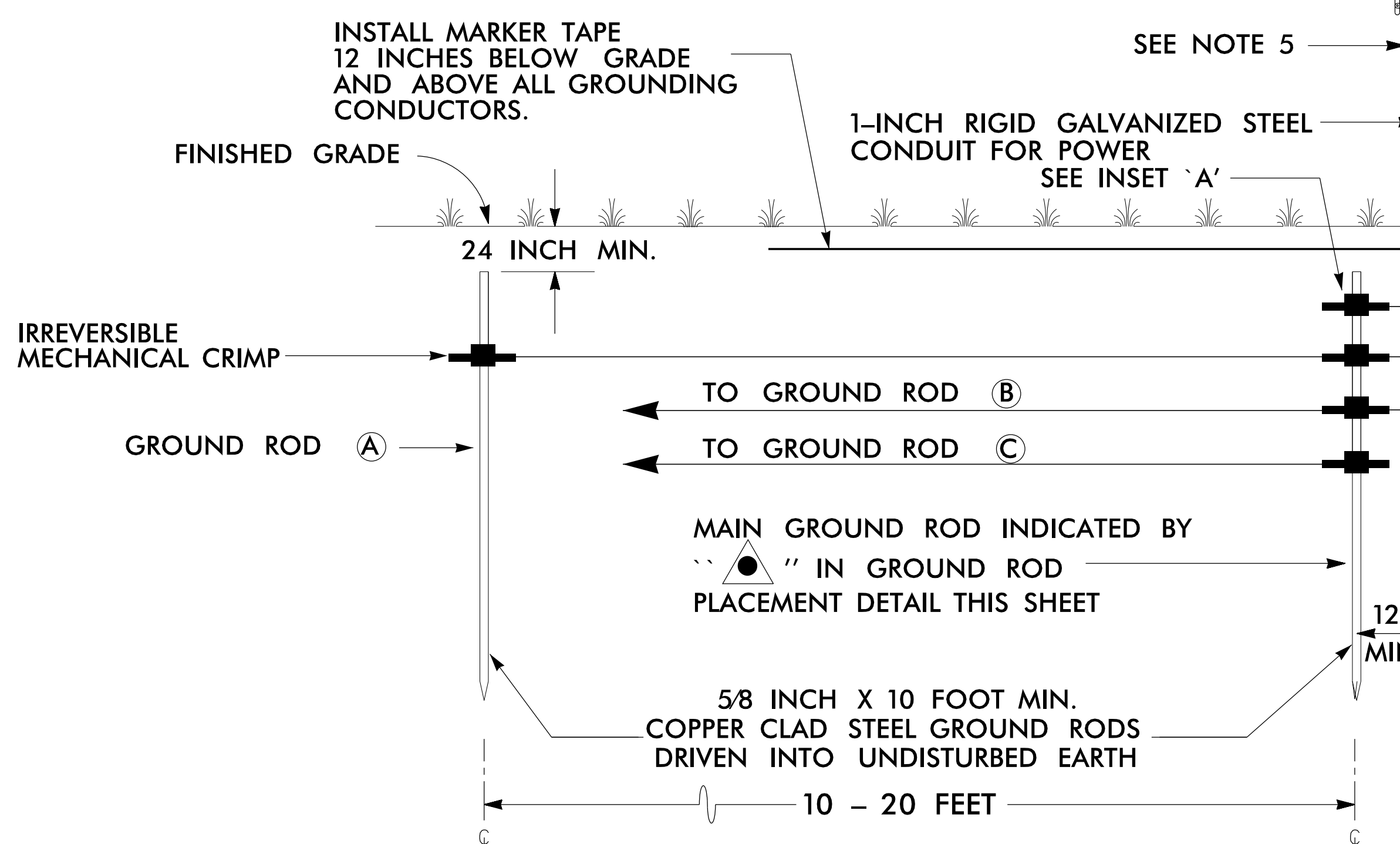
Prepared for the Offices of:		I-95 Southbound DMS-3 Elevation (Mile-Marker 27)		SEAL
		Division 6 Robeson County Lumberton		
PLAN DATE:	April 2022	REVIEWED BY:	S.G. Haynie	
PREPARED BY:	O. Drobny	REVIEWED BY:	J. S. Cole	
REVISIONS		INIT.	DATE	
Steven G. Haynie PROFESSIONAL ENGINEER No. 029531		4/8/2022		
CADD Filename: I-5987A_ITS_psh_13.dgn				



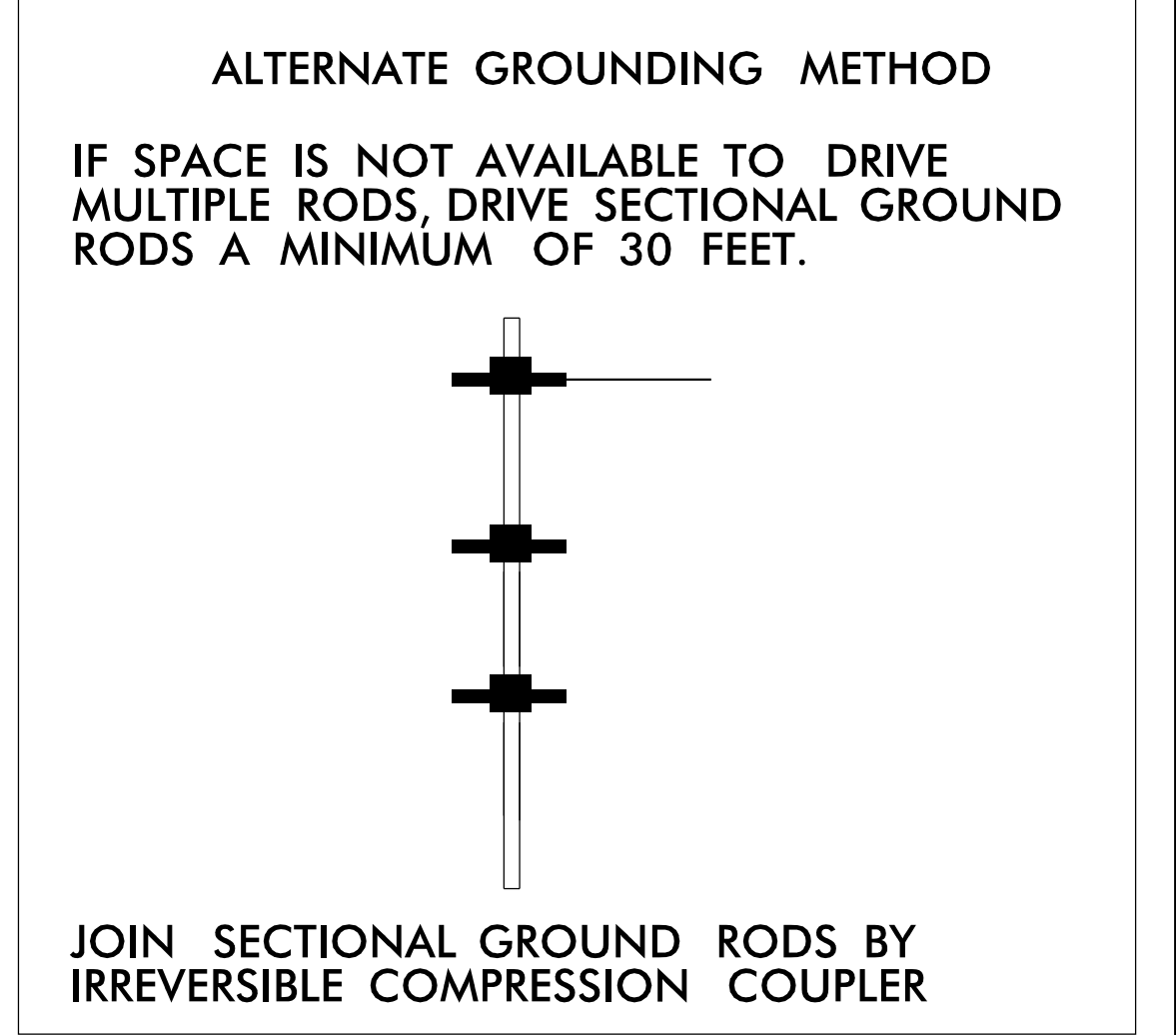
BOND #4 AWG SOLID BARE COPPER WIRE TO CAMERA SUPPORT BASE BY AN ALUMINUM TO COPPER #2 - #14 AWG LUG. ATTACH TO CAMERA BASE WITH A STAINLESS STEEL SELF TAPPING SCREW. REMOVE PAINT OR PROTECTIVE COATING WHERE ATTACHING LUG ONLY.

INSTALL 2-INCH PVC U-GUARD OVER COPPER CONDUCTOR FROM GROUND LEVEL TO 10 FEET (MINIMUM) ABOVE THE GROUND.

2-INCH RIGID GALVANIZED STEEL RISER FOR POWER AND CONTROL WIRES



INSTALL ELECTRICAL SERVICE POLE NEAR RIGHT OF WAY OR AS DIRECTED BY THE ENGINEER.



NOTES

- BOND CLASS II, 28 STRAND (MINIMUM), 15 AWG (MINIMUM) ROPE-LAY BARE COPPER CONDUCTOR TO THE MAIN GROUND ROD BY AN IRREVERSIBLE MECHANICAL CRIMP. MAINTAIN MAXIMUM HORIZONTAL SEPARATION BETWEEN COPPER CONDUCTOR AND RISER.
- ALL CONNECTIONS TO GROUND RODS SHOULD BE MADE WITH AN IRREVERSIBLE MECHANICAL CRIMP METHOD.
- REFER TO STANDARD DRAWING 1700-2 FOR ALTERNATE GROUND ROD INSTALLATION METHOD AS APPROVED BY THE ENGINEER.
- INSTALL MARKER TAPE DIRECTLY ABOVE ALL GROUNDING ELECTRODES AND CONDUCTORS AT A DEPTH OF 12 INCHES.
- REMOVE BONDING JUMPER BETWEEN EQUIPMENT CABINET GROUND BUSS AND NEUTRAL BUSS.



Prepared For the Offices of:

CCTV CAMERA INSTALLATION FOR WOOD POLES WITH AERIAL ELECTRICAL SERVICE TYPICAL DETAIL

Division 6 Robeson County Lumberton

PLAN DATE: April 2022 REVIEWED BY: S.G. Haynie

PREPARED BY: O. Drobny REVIEWED BY: J.S. Cole

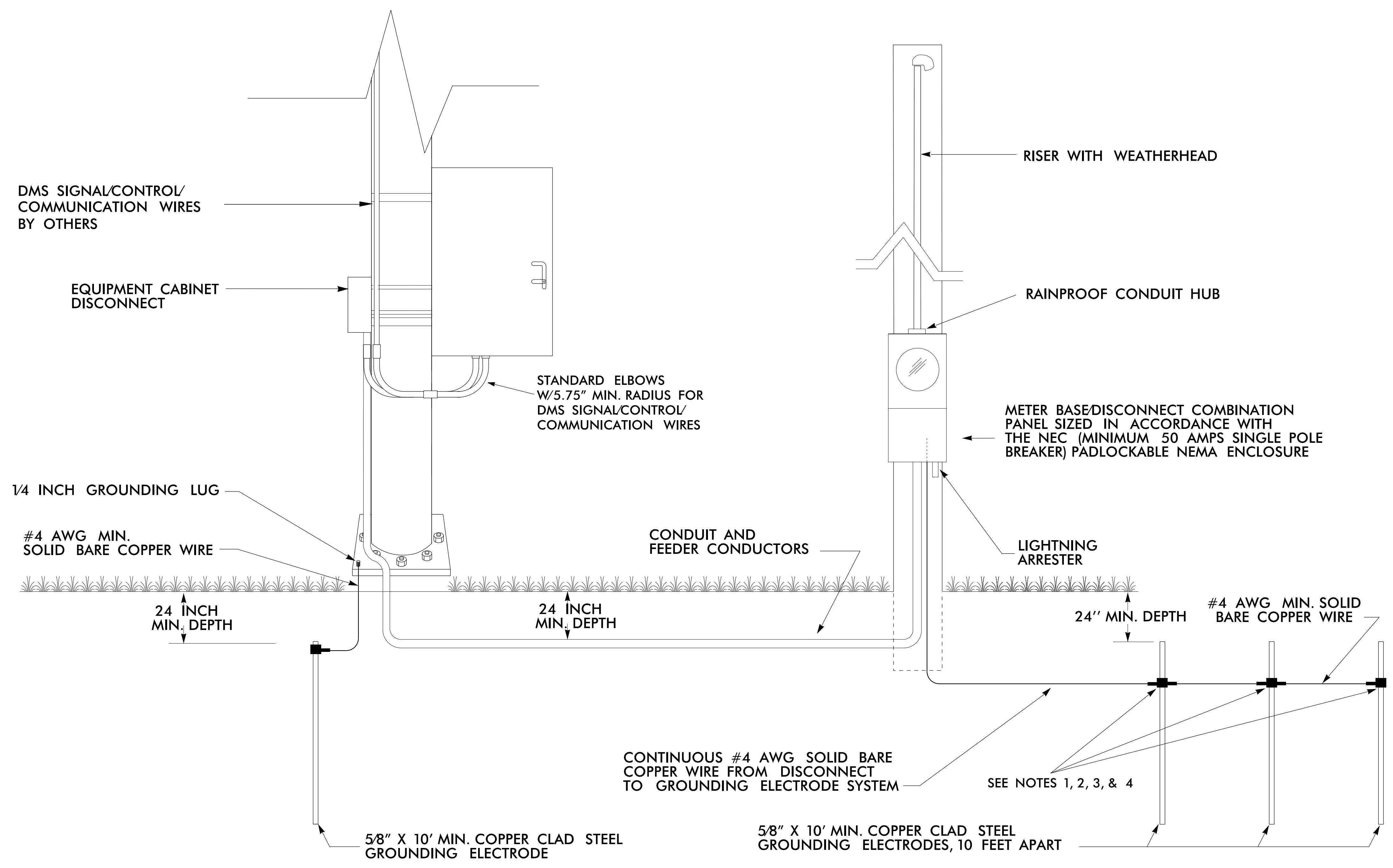
REVISIONS	INIT.	DATE

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SEAL

Steven G. Haynie 4/8/2022



NOTES

1. INSTALL A MINIMUM OF THREE (3) GROUNDING ELECTRODES SPACED A MINIMUM OF 10 FEET APART. ENSURE THAT EXISTING UNDERGROUND FACILITIES ARE NOT DAMAGED DURING INSTALLATION.
2. TEST GROUNDING SYSTEM USING AN APPROVED METHOD. SYSTEM SHOULD MEASURE TWENTY (20) OHMS OR LESS. ADDITIONAL GROUNDING ELECTRODES SHALL BE INSTALLED AS DIRECTED BY THE ENGINEER TO MEET THIS REQUIREMENT.
3. MECHANICALLY CRIMP ALL CONNECTIONS TO GROUND RODS USING AN IRREVERSIBLE COMPRESSION TOOL.
4. INSTALL MARKER TAPE DIRECTLY ABOVE ALL GROUNDING ELECTRODES AND CONDUCTORS AT A DEPTH OF 12 INCHES.
5. REMOVE BONDING JUMPER IN EQUIPMENT CABINET IF INSTALLED BETWEEN AC NEUTRAL AND EQUIPMENT GROUND.
6. BOND ALL RIGID GALVANIZED STEEL CONDUITS ENTERING THE CABINET TO "EQUIPMENT GROUND".
7. INSTALL CONDUIT BETWEEN DISCONNECT AND CABINET.
8. ENSURE EQUIPMENT GROUND IS ELECTRICALLY BONDED TO CABINET.

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Prepared For the Offices of: NORTH CAROLINA DEPARTMENT OF TRANSPORTATION TRANSPORTATION SYSTEMS DIVISION 750 N. Greenfield Pkwy, Garner, NC 27529	DYNAMIC MESSAGE SIGN WITH AERIAL ELECTRICAL SERVICE TYPICAL DETAIL		SEAL SEVEN G. HAYNIE ENGINEER License No. 029531
	Division 6 Robeson County Lumberton	PLAN DATE: April 2022 REVIEWED BY: S.G. Haynie	
NTS	REVISIONS	INIT. DATE	DocuSigned by: Steven G. Haynie 4/8/2022