

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 2012 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

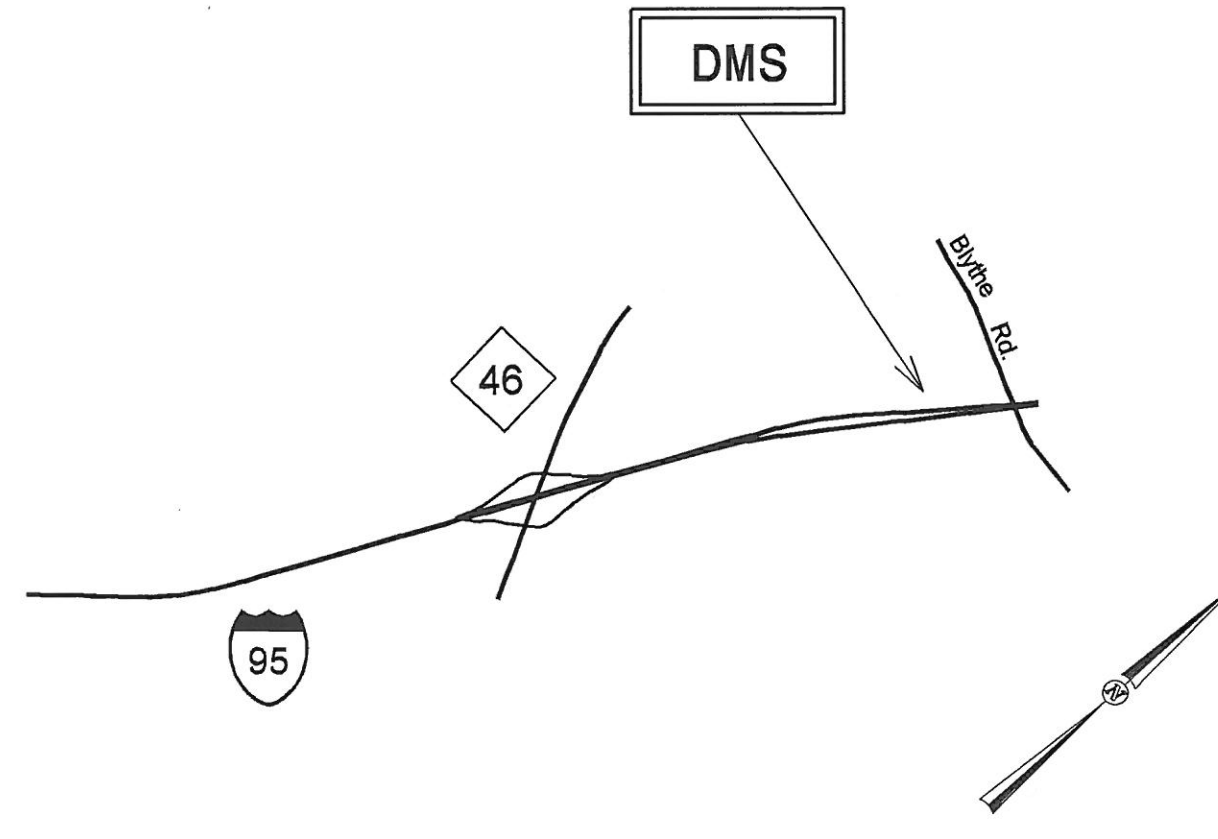
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

NORTHAMPTON COUNTY

**PLANS FOR PROPOSED
DYNAMIC MESSAGE SIGN REPLACEMENT**

THIS PROJECT CONSISTS OF FURNISHING AND INSTALLING EQUIPMENT AND MATERIALS FOR THE INSTALLATION OF ONE (1) DYNAMIC MESSAGE SIGN ON I-95 NEAR MILE MARKER 176 IN NORTHAMPTON COUNTY, NORTH CAROLINA. RELATED MATERIALS CONSIST OF DMS ASSEMBLIES, PEDESTAL STRUCTURES, WALKWAYS, LADDERS, LOCAL CABINET AND CONTROLLER.

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.
N.C.		ITS-1
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION



LEGEND

	NEW CONDUIT
	EXISTING GUARDRAIL
	EXISTING ELECTRICAL SERVICE
	NEW WOOD POLE
	EXISTING WOOD POLE
	NEW DMS PEDESTAL STRUCTURE

INDEX OF SHEETS

- SHEET 1 TITLE SHEET, INDEX OF SHEETS, ROADWAY STANDARD DRAWINGS, AND LEGEND
- SHEET 2-3 PLAN SHEETS
- SHEET 4 TYPICAL DETAILS

2012 STANDARD SPECIFICATION

NCDOT CONTACT:
TRANSPORTATION MOBILITY AND SAFETY

G. A. FULLER, P.E.
STATE ITS & SIGNALS ENGINEER



ENGLISH

ALL DIMENSIONS IN THESE PLANS ARE IN FEET UNLESS OTHERWISE NOTED

SEAL

PROFESSIONAL ENGINEER

SEAL 023919

GREGORY A. FULLER

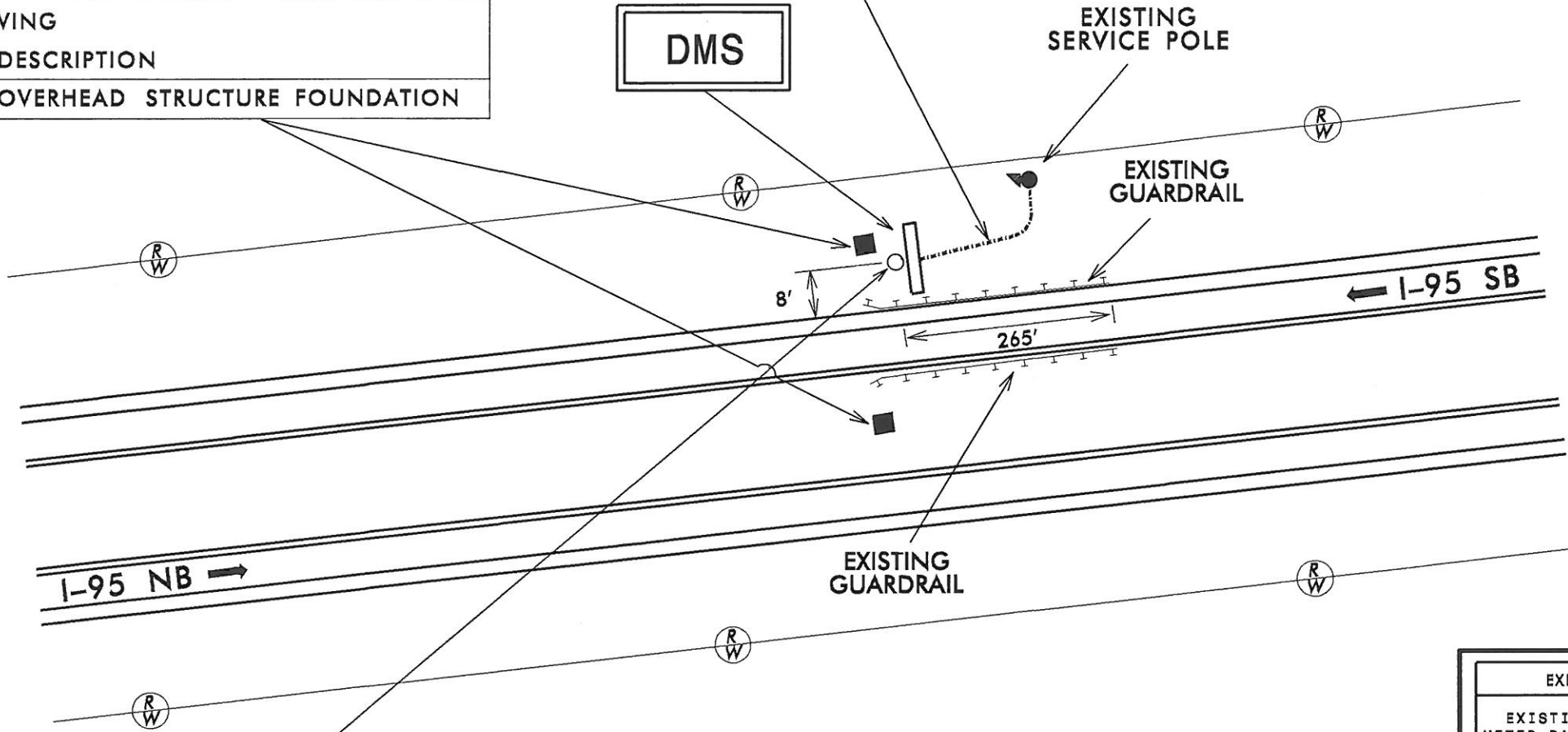
Gregory A. Fuller 2/27/17

DMS-1 GPS COORDINATES

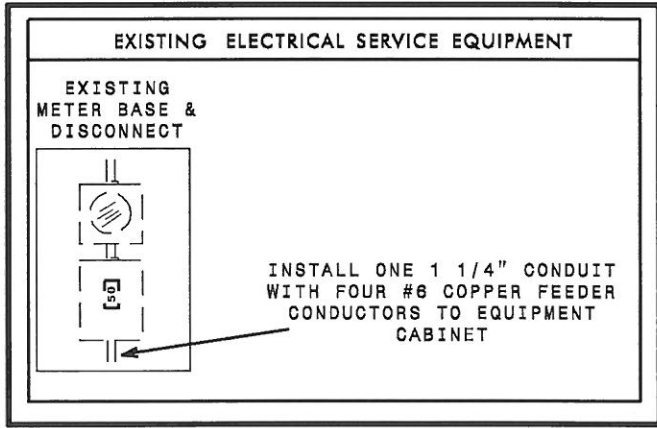
36° 28.925 N
77° 36.319 W

INSTALL THE FOLLOWING	
QUANTITY	DESCRIPTION
140'	UNPAVED TRENCHING (1)(1 1/4")
150'	4-WIRE COPPER FEEDER CONDUCTORS

REMOVE THE FOLLOWING	
QUANTITY	DESCRIPTION
2	OVERHEAD STRUCTURE FOUNDATION



INSTALL THE FOLLOWING	
QUANTITY	DESCRIPTION
1	DMS
1	STRUCTURE
1	FOUNDATION
1	LADDER
1	5/8" x 10' COPPER CLAD GROUNDING ELECTRODE
10'	#4 AWG SOLID BARE COPPER GROUNDING CONDUCTOR



NEAR MM 176

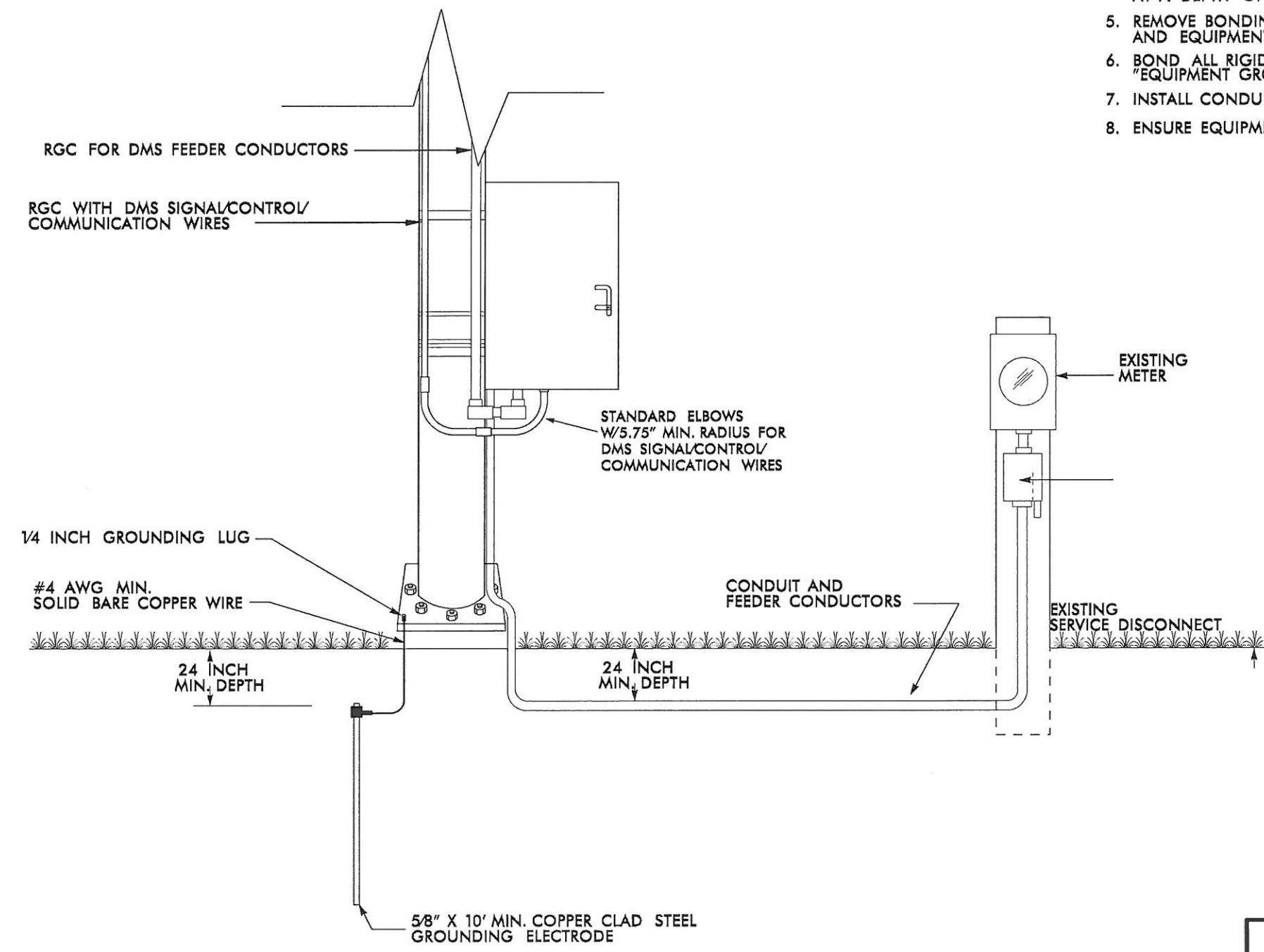
NOTES

1. DMS LOCATION TO BE STAKED AND APPROVED BY THE DIVISION INCIDENT MANAGEMENT ENGINEER BEFORE FOUNDATION IS INSTALLED.
2. INSTALL NEW DMS, WALKWAY, AND LADDER ON NEW DMS STRUCTURE.
3. INSTALL NEW DMS POLE MOUNTED CABINET ON NEW DMS STRUCTURE.
4. INSTALL NEW GROUNDING SYSTEM AS SHOWN ON SHEET ITS-4 AND AS DESCRIBED IN THE PROJECT SPECIAL PROVISIONS.

	DMS REPLACEMENT										
	DIVISION 04 NORTHAMPTON CO. NEAR ROANOKE RAPIDS PLAN DATE: FEBRUARY 2017 REVIEWED BY: PARKER PREPARED BY: GREEN REVIEWED BY:										
	<table border="1"> <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> </tbody> </table>	REVISIONS	INIT.	DATE							SIGNATURE: <i>Gregory A. Fuller</i> DATE: 2/21/17 SEAL: 023919 CADD FILED:
REVISIONS	INIT.	DATE									

NOTES

1. INSTALL A MINIMUM OF ONE (1) GROUNDING ELECTRODE. 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. EXOTHERMICALLY WELD ALL CONNECTIONS TO GROUND RODS.
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.



	DMS EXISTING ELECTRICAL SERVICE AND GROUNDING DETAIL	
	PLAN DATE: FEBRUARY 2017 PREPARED BY: GREEN SCALE: 0 N/A	REVIEWED BY: PARKER REVISIONS: _____ INT: _____ DATE: _____
Prepared in the Office of DEPARTMENT OF TRANSPORTATION 250 N. Greenfield Plaza, Garner, NC 27529		SIGNATURE: <i>Gregory A. Fuller</i> 2/27/17 DATE: