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STATE	STATE PROJECT REFERENCE NO.	SHEET NO.
N.C.	HI-0007	ITS-1

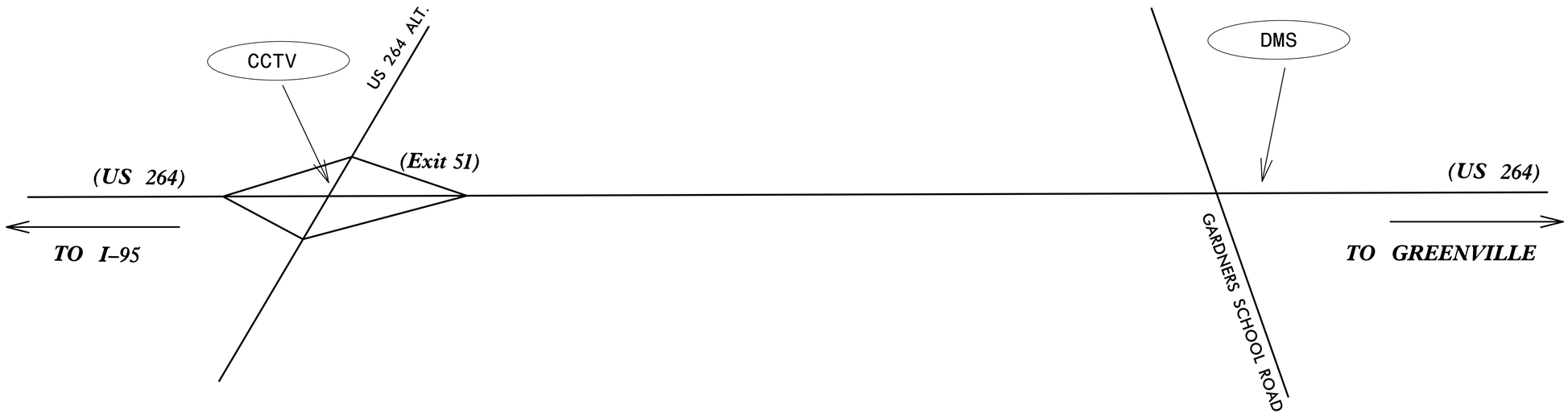
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
49983.3.1		CONST.

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

WILSON COUNTY

LOCATION: *EASTBOUND US 264 AT EXIT 51 AND NEAR MM 52*

TYPE OF WORK: *REMOVE AND DISPOSE OF EXISTING CCTV, DMS AND POWER SERVICE EQUIPMENT, INSTALL NEW NEW CCTV AND DMS ON EXISTING CCTV WOOD POLE AND EXISTNG PEDESTAL STRUCTUE, INSTALL NEW ELECTRICAL SERVICE EQUIPMENT*



CONTRACT: C204734

TIP PROJECT: HI–0007

2018 STANDARD SPECIFICATIONS

PROJECT LENGTH
PROJECT LENGTH = 0.0 MILES

LETTING DATE:
August 16, 2022

INDEX OF SHEETS

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

2018 STANDARD SPECIFICATION

NCDOT CONTACT:
TRANSPORTATION MOBILITY AND SAFETY
M. M. MCDIARMID, P.E, CPM
STATE TRANSPORTATION SYSTEMS
MANAGEMENT & OPERATIONS ENGINEER

Prepared in the Offices of:
750 N. Greenfield Pkwy., Garner, NC 27529

ENGLISH

ALL DIMENSIONS IN THESE PLANS ARE IN FEET UNLESS OTHERWISE NOTED

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 050152 ENGINEER ANDREW J. SKUCE

DocuSigned by:
Andrew J. Skuce
D262B8BC88584... *SIGNATURE*
05/09/2022
DATE

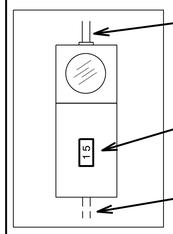
PROJECT REFERENCE NO.	SHEET NO.
HI-0007	ITS-2

CCTV GPS COORDINATES

35° 40.363 N
77° 48.333 W

NEW ELECTRICAL SERVICE EQUIPMENT

NEW METER BASE/ DISCONNECT COMBO PANEL



INSTALL 3-WIRE #3 COPPER SERVICE ENTRANCE CONDUCTORS IN NEW 1-1/2" RIGID GALVANIZED RISER WITH WEATHERHEAD.

INSTALL NEW METER BASE/DISCONNECT COMBO PANEL WITH A SINGLE POLE, 15 AMP CIRCUIT BREAKER

EXISTING 1-1/4" CONDUIT WITH THREE #12 COPPER FEEDER CONDUCTORS TO POLE MOUNTED CABINET

INSTALL THE FOLLOWING	
QUANTITY	DESCRIPTION
1	DIGITAL CCTV CAMERA ASSEMBLY

MODIFY THE FOLLOWING	
QUANTITY	DESCRIPTION
1	METER BASE/DISCONNECT COMBINATION PANEL
1	1 1/2" RISER WITH WEATHERHEAD

NOTE:
ELECTRICAL SERVICE DETAILS AND CONSTRUCTION METHODS DEPICT FIELD CONDITIONS AT THE TIME OF DESIGN. CONTRACTOR TO VERIFY ACTUAL CONDITIONS AT THE TIME OF CONSTRUCTION AND OBTAIN APPROVAL FROM ENGINEER PRIOR TO MAKING ANY CHANGES.

EXIT 51

NOTES

1. MOUNT CAMERA 45' ABOVE GRADE.
2. PRESERVE AND REINSTALL CELL MODEM.
3. PRESERVE EXISTING POLE GROUNDING.
4. RETAIN EXISTING FEEDER CONDUCTORS TO FIELD EQUIPMENT CABINET.

Prepared in the Offices of:
NC DEPARTMENT OF TRANSPORTATION
Transportation Mobility and Safety Division
Traffic Engineering Branch
Traffic Signal Systems Section
750 N. Greenfield Pkwy., Garner, NC 27529

CCTV REPLACEMENT

DIVISION 04 WILSON CO. WILSON

PLAN DATE:	MAY 2022	REVIEWED BY:	G.A. GREEN
PREPARED BY:	L.E. NEAL	REVIEWED BY:	

SCALE 0 N/A

REVISIONS	INIT.	DATE

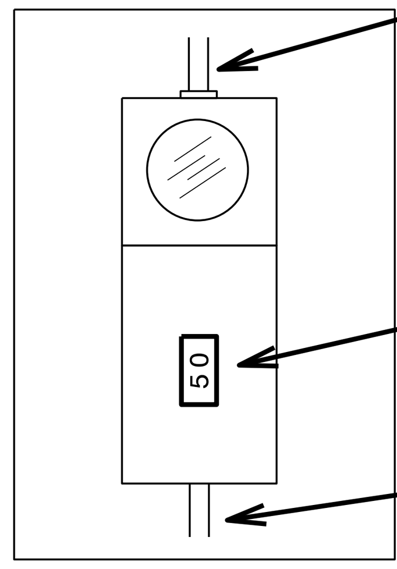
SEAL
NORTH CAROLINA PROFESSIONAL SEAL 050152 ENGINEER ANDREW J. SKUCE
DocuSigned by: Andrew J. Skuce 10/21/2022
SIGNATURE DATE
CADD Filename:

DMS GPS COORDINATES

35° 40.278 N
77° 46.929 W

NEW ELECTRICAL SERVICE EQUIPMENT

NEW METER BASE/ DISCONNECT COMBO PANEL



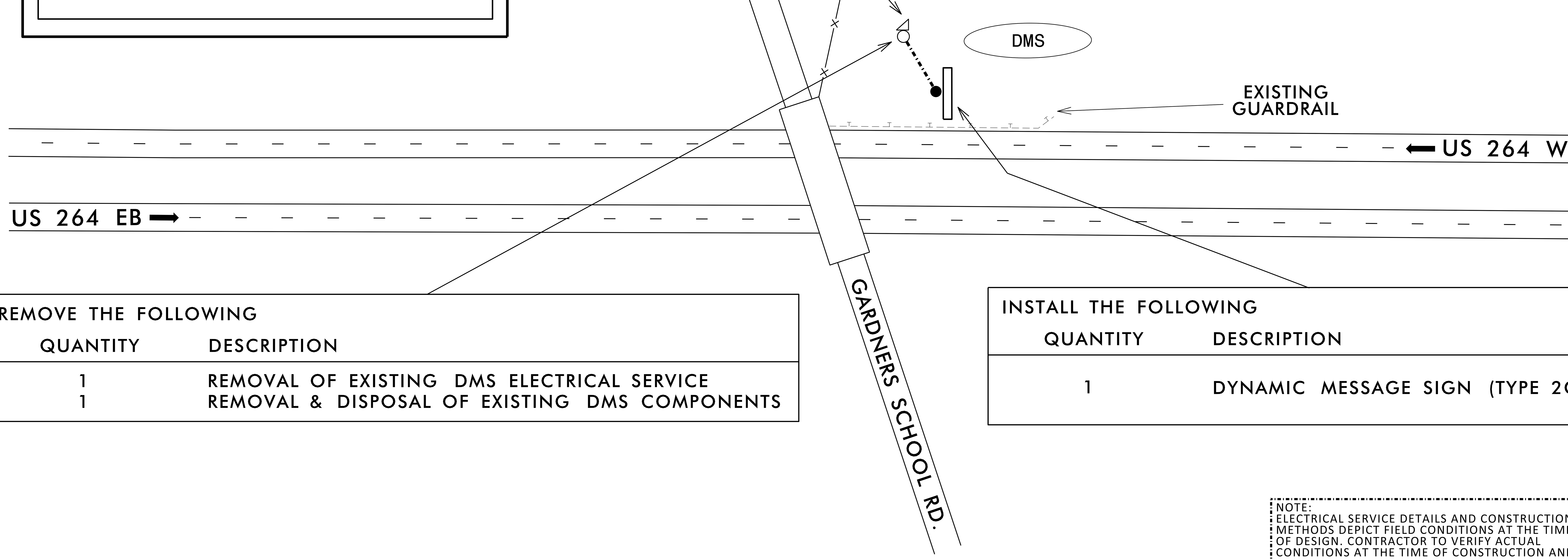
INSTALL 3-WIRE #3 COPPER SERVICE ENTRANCE CONDUCTORS IN NEW 1-1/2" RIGID GALVANIZED RISER WITH WEATHERHEAD. INSTALL 1-1/2" RAINPROOF CONDUIT HUB ON TOP OF NEW SERVICE METER/DISCONNECT COMBO PANEL.

INSTALL NEW SERVICE DISCONNECT WITH 1 DOUBLE POLE, 50 AMP CIRCUIT BREAKER

INSTALL ONE 1-1/4" CONDUIT WITH FOUR #8 COPPER FEEDER CONDUCTORS TO POLE MOUNTED DMS CABINET

INSTALL THE FOLLOWING

QUANTITY	DESCRIPTION
1	WOOD POLE
1	METER BASE/DISCONNECT COMBINATION PANEL
1	1 1/2" RISER WITH WEATHERHEAD
3	5/8" x 10' GROUNDING ELECTRODE
30'	#4 SOLID BARE COPPER GROUNDING CONDUCTOR
45'	UNPAVED TRENCHING (1, 2")
55'	4-WIRE COPPER FEEDER CONDUCTORS
1	EQUIPMENT CABINET DISCONNECT



REMOVE THE FOLLOWING

QUANTITY	DESCRIPTION
1	REMOVAL OF EXISTING DMS ELECTRICAL SERVICE
1	REMOVAL & DISPOSAL OF EXISTING DMS COMPONENTS

INSTALL THE FOLLOWING

QUANTITY	DESCRIPTION
1	DYNAMIC MESSAGE SIGN (TYPE 2C)

NOTE:
ELECTRICAL SERVICE DETAILS AND CONSTRUCTION METHODS DEPICT FIELD CONDITIONS AT THE TIME OF DESIGN. CONTRACTOR TO VERIFY ACTUAL CONDITIONS AT THE TIME OF CONSTRUCTION AND OBTAIN APPROVAL FROM ENGINEER PRIOR TO MAKING ANY CHANGES.

NEAR MM 52 EAST OF US 264 BUS.

NOTES

1. INSTALL NEW DMS ON EXISTING DMS PEDESTAL STRUCTURE.
2. INSTALL NEW DMS POLE MOUNTED CABINET ON EXISTING DMS PEDESTAL STRUCTURE.
3. INSTALL NEW GROUNDING SYSTEM AS SHOWN ON SHEET ITS-4 AND AS DESCRIBED IN THE PROJECT SPECIAL PROVISIONS.

Prepared in the Offices of:
Transportation Mobility and Safety Division
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
Intelligent Transportation Systems Section
750 N. Greenfield Pkwy., Garner, NC 27529

DMS REPLACEMENT

DIVISION 04 WILSON CO. WILSON

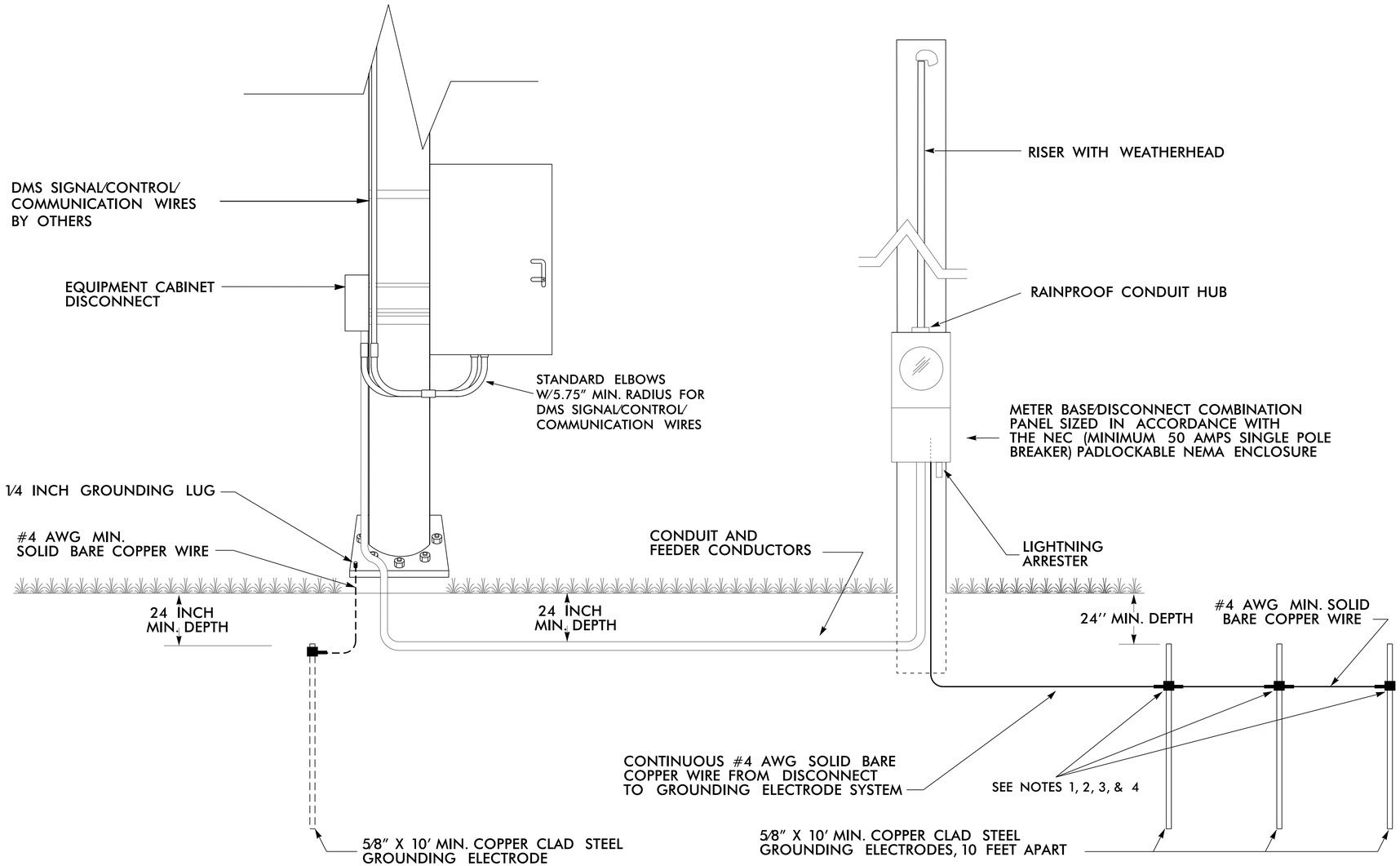
PLAN DATE: MAY 2022 REVIEWED BY: G.A. GREEN
PREPARED BY: L.E. NEAL REVIEWED BY:

SCALE 0 N/A

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 050152 ENGINEER ANDREW J. SKUCE
DocuSigned by: Andrew J. Skuce D262B8BC8B5C464
SIGNATURE 06/21/2022 DATE
CADD Filename:

PROJECT REFERENCE NO.	SHEET NO.
HI-0007	ITS-4



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.

Prepared in the Offices of:

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

750 N. Greenfield Pkwy. , Garner, NC 27529

DYNAMIC MESSAGE SIGN WITH AERIAL ELECTRICAL SERVICE TYPICAL DETAIL

DIVISION 04	WILSON COUNTY	WILSON
PLAN DATE: MAY 2022	REVIEWED BY: G.A. GREEN	
PREPARED BY: L.E. NEAL	REVIEWED BY:	

SCALE: 0 — N/A

REVISIONS	INIT.	DATE

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 050152 ENGINEER ANDREW J. SKUCE

Docusigned by: Andrew J. Skuce 05/09/2022

D262B8B SIGNATURE DATE

CADD Filename: