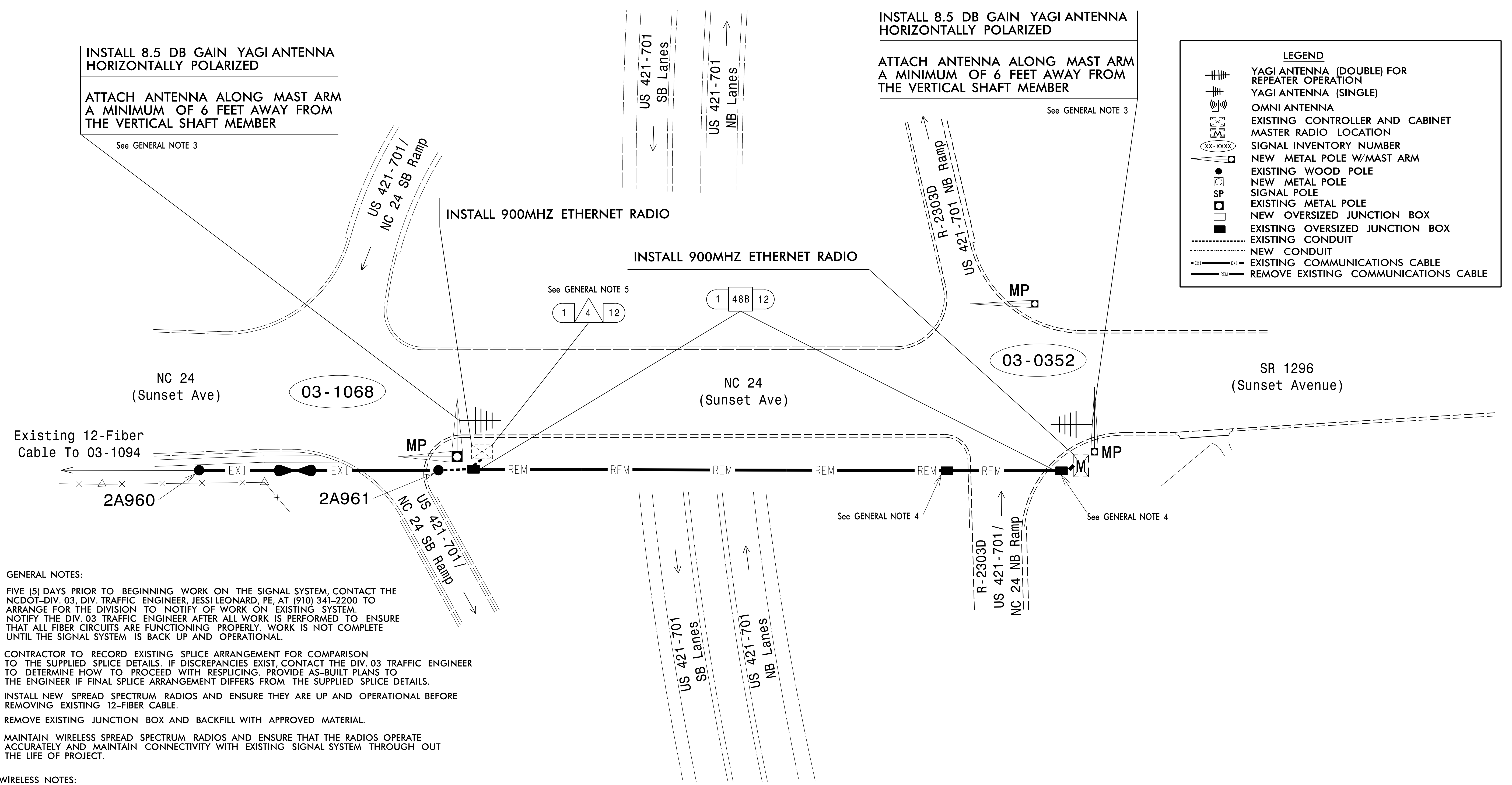


INSTALL 8.5 DB GAIN YAGI ANTENNA HORIZONTALLY POLARIZED
ATTACH ANTENNA ALONG MAST ARM A MINIMUM OF 6 FEET AWAY FROM THE VERTICAL SHAFT MEMBER
See GENERAL NOTE 3

INSTALL 8.5 DB GAIN YAGI ANTENNA HORIZONTALLY POLARIZED
ATTACH ANTENNA ALONG MAST ARM A MINIMUM OF 6 FEET AWAY FROM THE VERTICAL SHAFT MEMBER
See GENERAL NOTE 3

LEGEND

- YAGI ANTENNA (DOUBLE) FOR REPEATER OPERATION
- YAGI ANTENNA (SINGLE)
- OMNI ANTENNA
- EXISTING CONTROLLER AND CABINET
- MASTER RADIO LOCATION
- SIGNAL INVENTORY NUMBER
- NEW METAL POLE W/MAST ARM
- EXISTING WOOD POLE
- NEW METAL POLE
- SIGNAL POLE
- EXISTING METAL POLE
- NEW OVERSIZED JUNCTION BOX
- EXISTING OVERSIZED JUNCTION BOX
- EXISTING CONDUIT
- NEW CONDUIT
- EXISTING COMMUNICATIONS CABLE
- REMOVE EXISTING COMMUNICATIONS CABLE



- GENERAL NOTES:**
- FIVE (5) DAYS PRIOR TO BEGINNING WORK ON THE SIGNAL SYSTEM, CONTACT THE NCDOT-DIV. 03, DIV. TRAFFIC ENGINEER, JESSI LEONARD, PE, AT (910) 341-2200 TO ARRANGE FOR THE DIVISION TO NOTIFY OF WORK ON EXISTING SYSTEM. NOTIFY THE DIV. 03 TRAFFIC ENGINEER AFTER ALL WORK IS PERFORMED TO ENSURE THAT ALL FIBER CIRCUITS ARE FUNCTIONING PROPERLY. WORK IS NOT COMPLETE UNTIL THE SIGNAL SYSTEM IS BACK UP AND OPERATIONAL.
 - CONTRACTOR TO RECORD EXISTING SPLICE ARRANGEMENT FOR COMPARISON TO THE SUPPLIED SPLICE DETAILS. IF DISCREPANCIES EXIST, CONTACT THE DIV. 03 TRAFFIC ENGINEER TO DETERMINE HOW TO PROCEED WITH RESPLICING. PROVIDE AS-BUILT PLANS TO THE ENGINEER IF FINAL SPLICE ARRANGEMENT DIFFERS FROM THE SUPPLIED SPLICE DETAILS.
 - INSTALL NEW SPREAD SPECTRUM RADIOS AND ENSURE THEY ARE UP AND OPERATIONAL BEFORE REMOVING EXISTING 12-FIBER CABLE.
 - REMOVE EXISTING JUNCTION BOX AND BACKFILL WITH APPROVED MATERIAL.
 - MAINTAIN WIRELESS SPREAD SPECTRUM RADIOS AND ENSURE THAT THE RADIOS OPERATE ACCURATELY AND MAINTAIN CONNECTIVITY WITH EXISTING SIGNAL SYSTEM THROUGH OUT THE LIFE OF PROJECT.

- WIRELESS NOTES:**
- NOTES FOR WIRELESS COMMUNICATIONS:**
- INSTALL COAXIAL CABLE:
 - ON WOOD POLES, REQUIRING A NEW RIGID GALVANIZED STEEL RISER, INSTALL A 2" RISER WITH WEATHERHEAD AND ROUTE THE COAXIAL CABLE TO THE ANTENNA.
 - ON METAL POLES WITH MAST ARMS, RUN COAXIAL CABLE UP THROUGH THE POLE AND OUT THE MAST ARM; FIELD DRILL A 1/2" HOLE UP THROUGH THE BOTTOM OF MAST ARM FOR INSTALLATION OF THE COAXIAL CABLE TO THE ANTENNA.
 - ON METAL STRAIN POLES, RUN COAXIAL CABLE UP THROUGH THE POLE AND OUT THE WEATHERHEAD AND ROUTE THE COAXIAL CABLE TO THE ANTENNA.
 - BETWEEN THE POINT OF EXITING THE RISER, METAL POLE OR MAST ARM AND THE ANTENNA, SECURE THE COAXIAL CABLE TO THE STRUCTURE USING 3/4" STAINLESS STEEL STRAPS EVERY 12".
 - IF AN EXISTING 2" SPARE RIGID GALVANIZED STEEL RISER IS AVAILABLE, INSTALL THE COAXIAL CABLE IN THE SPARE RISER AND SEAL RISER WITH HEAT SHRINK TUBING RETROFIT KIT.
 - INSTALL WIRELESS ANTENNA ON POLE WITH RF WARNING SIGN.
(NOTE: RF WARNING SIGN NOT REQUIRED WHEN ANTENNA IS INSTALLED ON AN NCDOT-OWNED POLE.)
 - MAINTAIN PROPER CLEARANCE FROM ALL UTILITIES PER THE NATIONAL ELECTRICAL SAFETY CODE.
 - INSTALL WIRELESS RADIO MODEM WITH EXTERIOR DISCONNECT SWITCH LOCATED ON CABINET.
(NOTE: RF ANTENNA DISCONNECT SWITCH AND DECAL ARE NOT REQUIRED WHEN THE ANTENNA IS INSTALLED ON AN NCDOT-OWNED POLE.)
 - REFERENCE "WIRELESS RADIO ANTENNA TYPICAL DETAILS."

moftatt & nichol
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NCFE LICENSE NO. F-01019

SCP Upgrade - Temporary Signal Communication Plan

Prepared for the Offices of:
STATE OF NORTH CAROLINA
Department of Transportation
750 N. Greenfield Pkwy., Garner, NC 27529

FIBER OPTIC COMMUNICATION PLAN
R-2303E
NC 24 (Sunset Avenue)

Division 3 Sampson County Clinton

PLAN DATE: Sep 2019 REVIEWED BY: D.J. Darity
PREPARED BY: D.J. Darity MAN PROJECT NO: 8522-07

REVISIONS: INIT. DATE

DocuSigned by:
Don Darity
9/12/2019
9896643841C6424
CADD FILE NAME: R2303E SCP

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL
NORTH CAROLINA PROFESSIONAL ENGINEER
DONALD J. DARTY
19713