



**NOTES FOR EXISTING COMMUNICATIONS CABLE:**

1. REMOVE THE EXISTING COMMUNICATIONS CABLE TO 03-0847 (NETHERLANDS DR) FROM THE SPLICE ENCLOSURE AND RISER AT THE SIGNAL CABINET AT 03-0390. MAINTAIN THE AERIAL EXISTING COMMUNICATIONS CABLE ALONG WITH THE MESSENGER CABLE BETWEEN 03-0390 AND THE LAST POLE FOR FUTURE LASHING PURPOSES ONLY. UTILIZE WIRELESS COMMUNICATIONS UNTIL THE FINAL FIBER INSTALLATION. MAINTAIN THE CONNECTIONS TO 03-0390 AND THE CCTV.

**NOTES FOR WIRELESS COMMUNICATIONS:**

1. INSTALL COAXIAL CABLE:
  - A. ON WOOD POLES, REQUIRING A NEW RIGID GALVANIZED STEEL RISER, INSTALL A 2" RISER WITH WEATHERHEAD AND ROUTE THE COAXIAL CABLE TO THE ANTENNA.
  - B. 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.
  - C. ON METAL STRAIN POLES, RUN COAXIAL CABLE UP THROUGH THE POLE AND OUT THE WEATHERHEAD AND ROUTE THE COAXIAL CABLE TO THE ANTENNA.
  - D. 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".
2. IF AN EXISTING 2" SPARE RIGID GALVANIZED STEEL RISER IS AVAILABLE, INSTALL THE COAXIAL CABLE IN THE SPARE RISER.
3. INSTALL WIRELESS ANTENNA ON POLE WITH RF WARNING SIGN. (NOTE: RF WARNING SIGN NOT REQUIRED WHEN ANTENNA IS INSTALLED ON AN NCDOT-OWNED POLE.)
4. MAINTAIN PROPER CLEARANCE FROM ALL UTILITIES PER THE NATIONAL ELECTRICAL SAFETY CODE.
5. REFERENCE "WIRELESS RADIO ANTENNA TYPICAL DETAILS" IN THE 2024 NCDOT ROADWAY STANDARD DRAWINGS.
6. RETURN EXISTING WIRELESS RADIO EQUIPMENT TO THE NCDOT DIVISION 3 SIGNAL SHOP. THE DIVISION 3 OFFICE CAN BE REACHED AT (910) 341-2200.
7. TWO (2) WEEKS PRIOR TO BEGINNING WORK ON THE SIGNAL SYSTEM, CONTACT THE CITY OF WILMINGTON SIGNAL SYSTEMS MANAGEMENT ENGINEER AT (910) 341-4676 TO ARRANGE FOR THE CITY TO PROGRAM THE NEW FIELD ETHERNET SWITCHES WITH THE NECESSARY NETWORK CONFIGURATION DATA, INCLUDING BUT NOT LIMITED TO: THE PROJECT IP ADDRESS, DEFAULT GATEWAY, SUBNET MASK AND VLAN ID INFORMATION. NOTIFY THE SIGNAL SYSTEMS MANAGEMENT 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 FUNCTIONAL.
8. CUT EXISTING 12-FIBER AT THE EXISTING JUNCTION BOX. ENSURE 50' STORAGE REMAINS. REMOVE EXISTING 12-FIBER CABLE AND JUNCTION BOXES WEST OF THIS JUNCTION BOX. FILL HOLES WITH APPROVED MATERIAL. ABANDON EXISTING CONDUITS.

INSTALL (2) NEW 8.5 dB GAIN YAGI ANTENNAS 12" ABOVE SIGNAL CABLE DURING CONSTRUCTION PHASE 1

MAINTAIN YAGI ANTENNAS DURING REMAINING CONSTRUCTION PHASES

INSTALL ETHERNET EDGE SWITCH AND 900 MHz ETHERNET RADIO

REMOVE EXISTING YAGI ANTENNA FROM EXISTING SIGNAL POLE

**LEGEND**

|  |                                |
|--|--------------------------------|
|  | NEW YAGI ANTENNA (DOUBLE)      |
|  | NEW YAGI ANTENNA (SINGLE)      |
|  | EXISTING YAGI ANTENNA (DOUBLE) |
|  | EXISTING YAGI ANTENNA (SINGLE) |
|  | NEW CONTROLLER AND CABINET     |
|  | EXISTING METAL POLE W/MAST ARM |
|  | SIGNAL INVENTORY NUMBER        |
|  | WOOD POLE FOR TEMPORARY SIGNAL |

Temp Phase 1

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

|   |  |   |                           |
|---|--|---|---------------------------|
|   | <b>CITY OF WILMINGTON SIGNAL SYSTEM COMMUNICATIONS CABLE AND CONDUIT ROUTING PLANS</b> |   |                           |
|   | Division 3 New Hanover County Wilmington   |   |                           |
| PLAN DATE: July 2023  | REVIEWED BY: J.A. Wagner   | PREPARED BY: G.D. Berry   | REVIEWED BY: N.R. Simmons |
| SCALE: N/A  | REVISIONS:   | INIT.:  | DATE:                     |
| HNTB NORTH CAROLINA, P.C.<br>343 E. Six Forks Road, Suite 200<br>Raleigh, North Carolina 27609<br>NC License No: C-1554<br>(919) 546-8997 |  | DocuSigned by:<br>Natasha R. Simmons 5/17/2024<br>PREPARED BY: SIGNATURE DATE<br>CADD File name: U6202_SCP-04.dgn |                           |