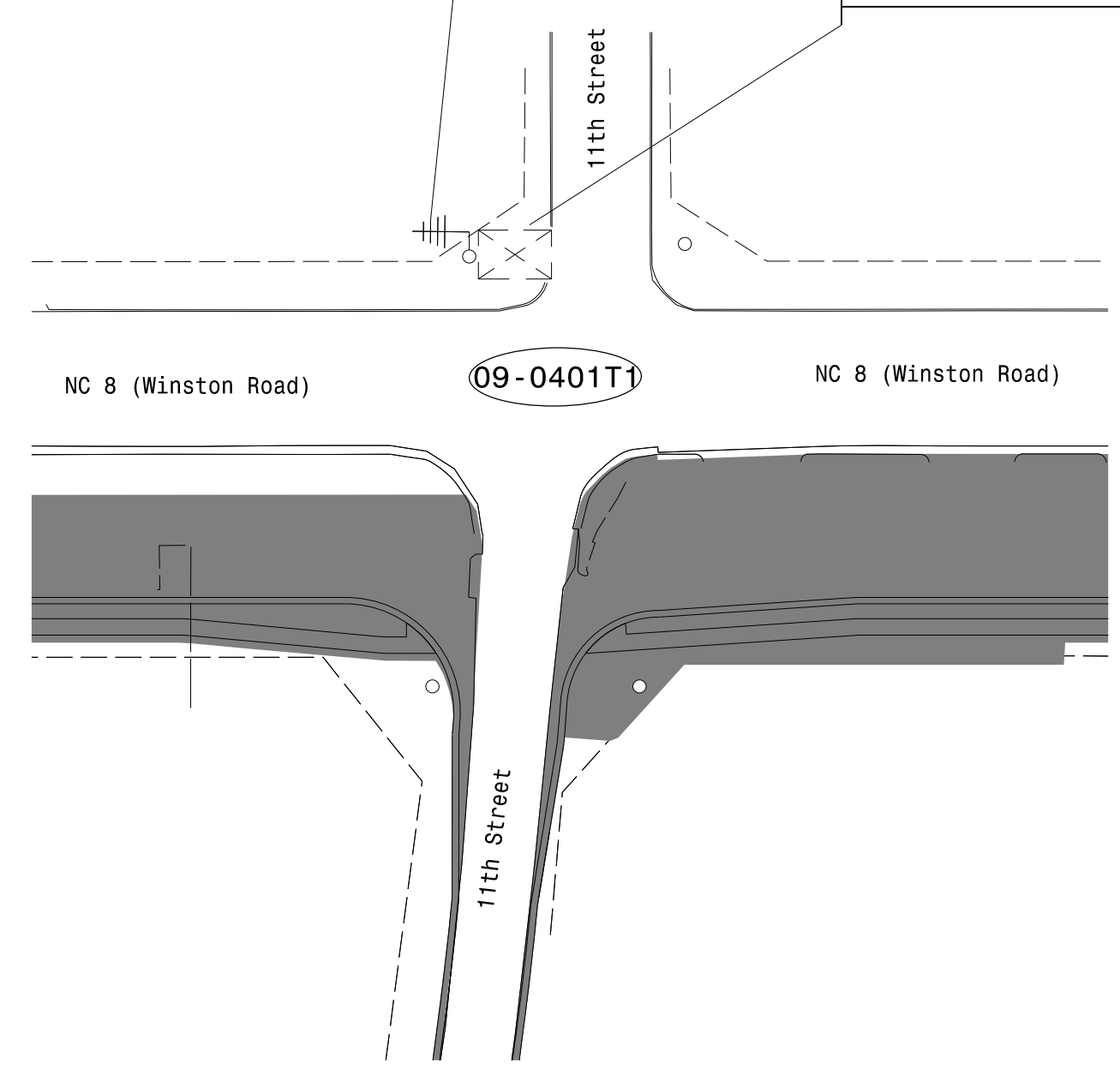


REMOVE EXISTING ANTENNA AND REPLACE WITH NEW 8.5 DB GAIN YAGI ANTENNA AND ATTACH TO NEW WOOD POLE. SEE NOTES 1A AND 1D.

MOUNT THE ANTENNA IN A VERTICALLY POLARIZED ORIENTATION AND AIM TOWARD INTERSECTION 09-0734.

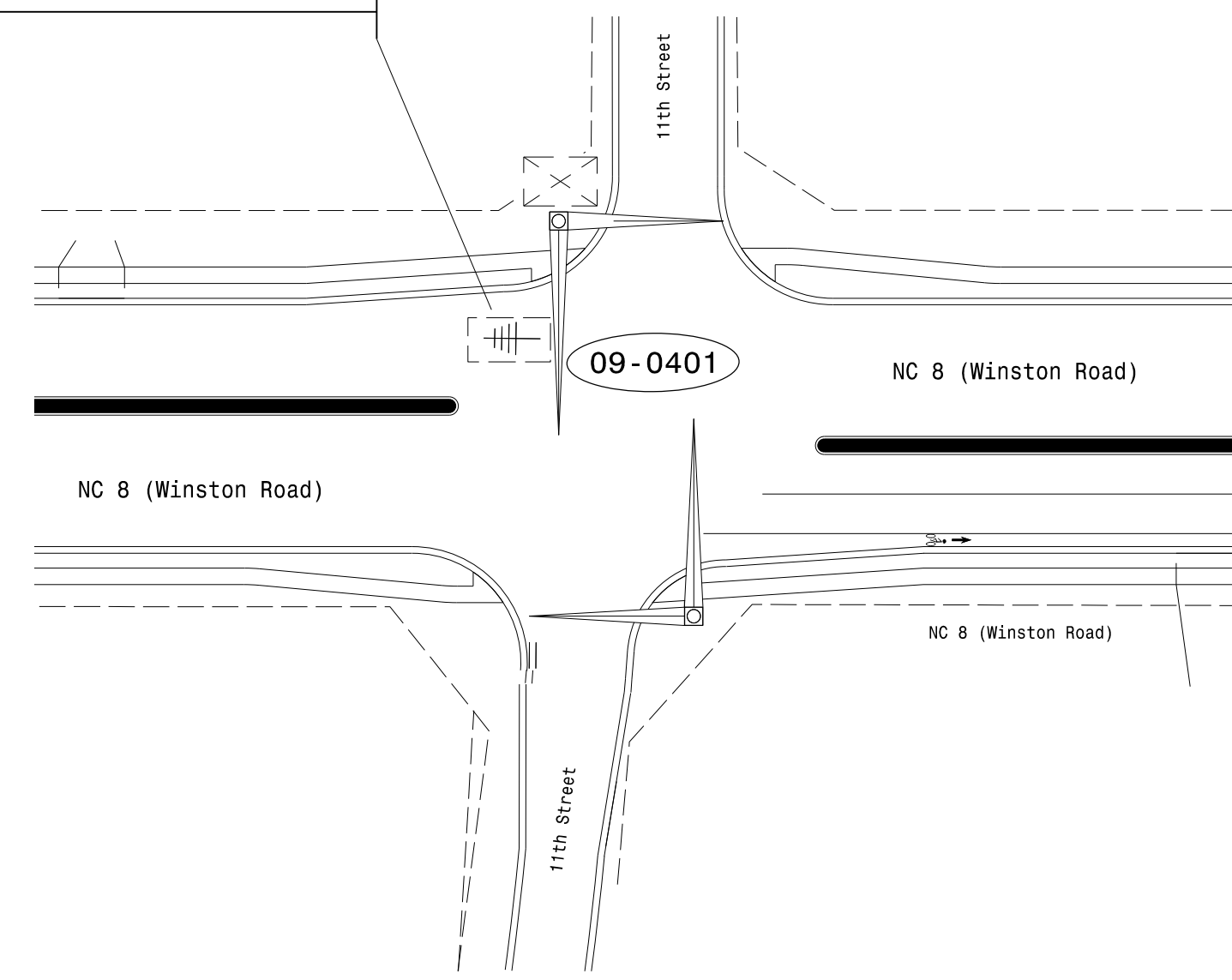
INSTALL ETHERNET EDGE SWITCH IN NEW TRAFFIC SIGNAL CABINET.

INSTALL NEW 900MHZ ETHERNET RADIO



RELOCATE THE EXISTING ANTENNA AND ATTACH TO MP#2 MAST ARM "A" A MINIMUM OF 6 FEET AWAY FROM THE VERTICAL SHAFT MEMBER. SEE NOTE 1B AND 1D.

MOUNT THE ANTENNA IN A VERTICALLY POLARIZED ORIENTATION AND AIM TOWARD INTERSECTION 09-0734.



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. SEE "METAL POLE SUPPORTS" IN THE PSP'S FOR MORE INFORMATION.
 - 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". SEE "METAL POLE SUPPORTS" IN THE PSP'S FOR MORE INFORMATION.
- IF AN EXISTING 2" SPARE RIGID GALVANIZED STEEL RISER IS AVAILABLE, INSTALL THE COAXIAL CABLE IN THE SPARE RISER WITH A 2" WEATHERHEAD
- 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 THE 2024 ROADWAY STANDARD DRAWINGS, SECTION 1736.01.

LEGEND

	YAGI ANTENNA (DOUBLE) FOR REPEATER OPERATION
	NEW YAGI ANTENNA (SINGLE)
	EXISTING YAGI ANTENNA (SINGLE)
	OMNI ANTENNA
	EXISTING CONTROLLER AND CABINET GATEWAY RADIO LOCATION
	SIGNAL INVENTORY NUMBER
	NEW METAL POLE W/MAST ARM
	EXISTING 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

TRANSYSTEMS

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Raleigh, NC 27603
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Signal System #: D09-19_Lexington **DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED**

 Prepared for the Offices of: 750 N. Greenfield Pkwy., Garner, NC 27529	WIRELESS COMMUNICATION PLAN		SEAL NORTH CAROLINA PROFESSIONAL ENGINEER GENE G. MURR, JR. 14543 1445886E1CDD45B SIGNATURE DATE CADD Filename: U-5757_SCP_	
	DIVISION 9	DAVIDSON CO.		LEXINGTON
	PLAN DATE: MAY 2024	REVIEWED BY: G.G. MURR, JR.		
	PREPARED BY: B.E. WYNN			
SCALE: N/A	REVISIONS:	INIT.	DATE	