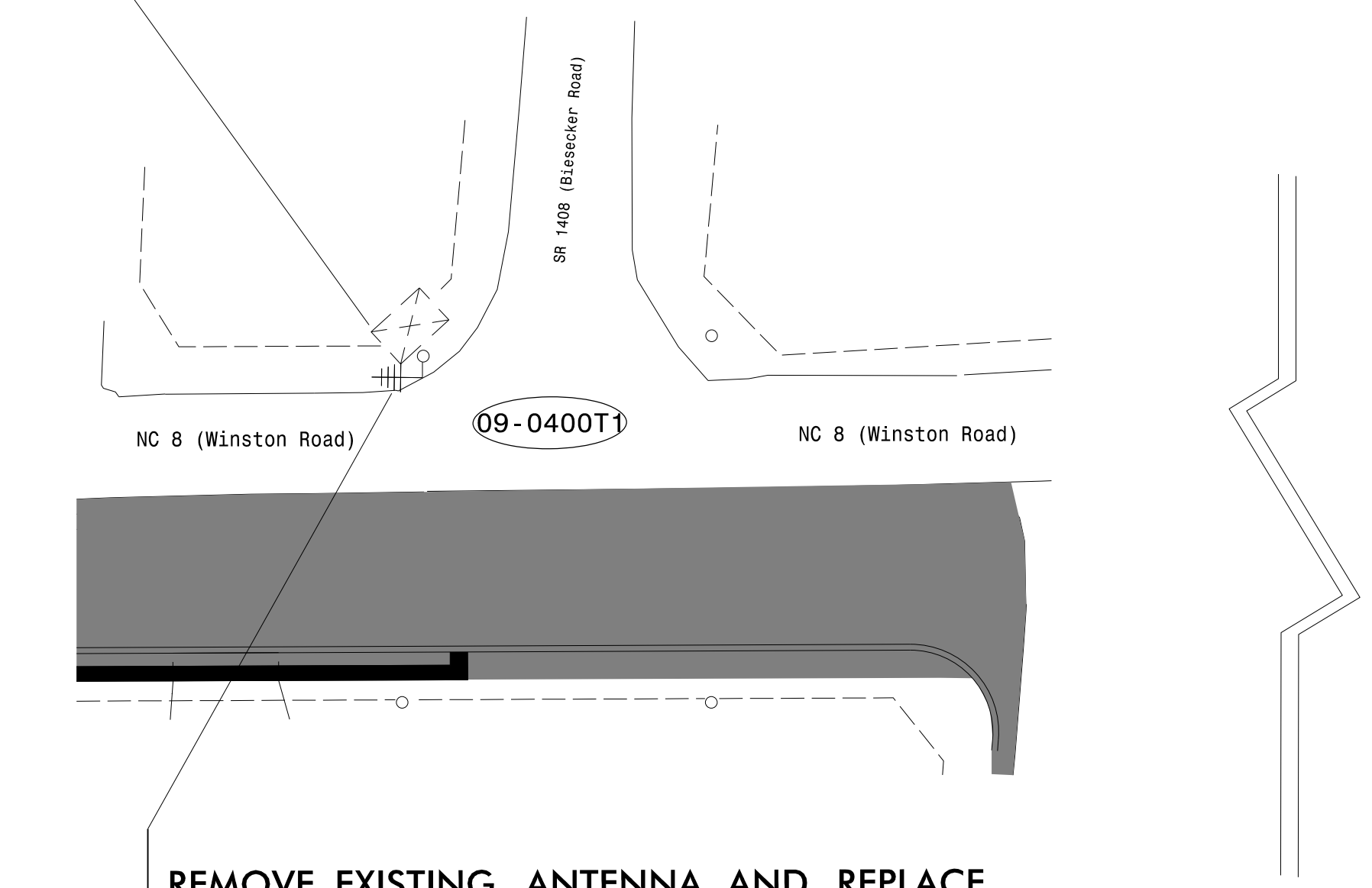


INSTALL ETHERNET EDGE SWITCH
IN EXISTING CABINET

REMOVE EXISTING RADIO AND
REPLACE WITH NEW 900MHZ
ETHERNET RADIO

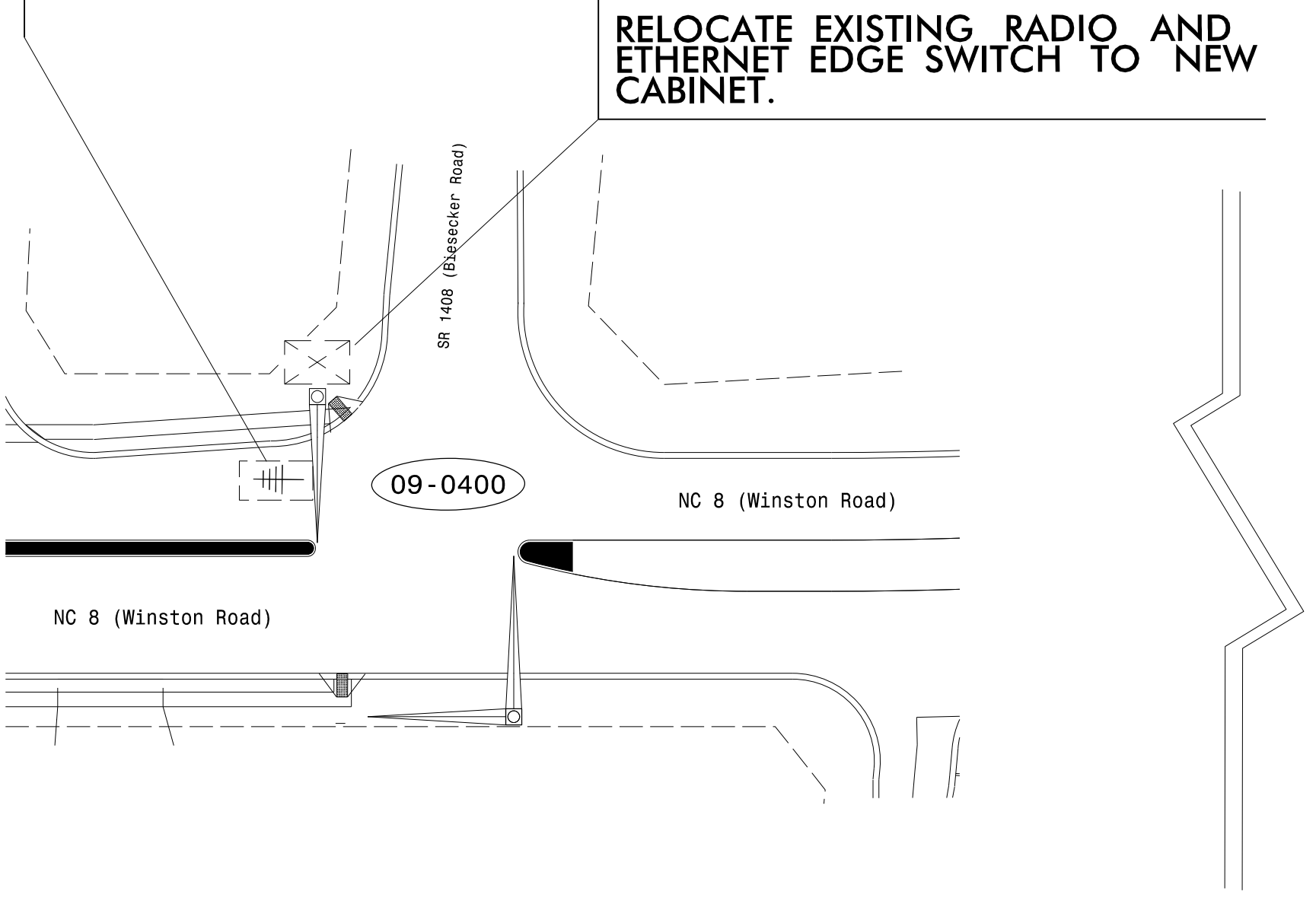


REMOVE EXISTING ANTENNA AND REPLACE
WITH NEW 8.5 DB GAIN YAGI ANTENNA
AND ATTACH TO NEW TEMPORARY WOOD POLE.
SEE NOTES 1A AND 1D.

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

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

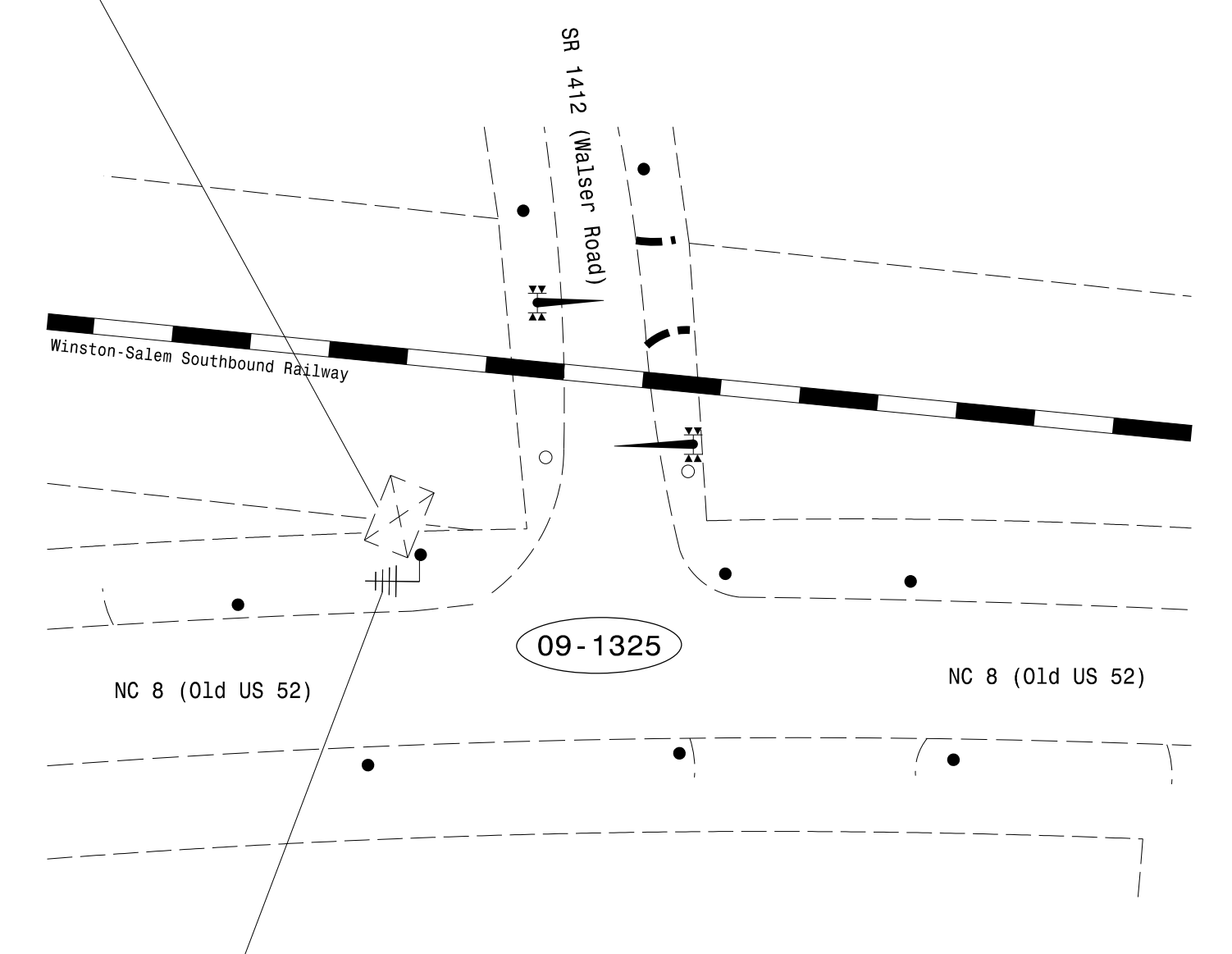
MOUNT THE ANTENNA IN A
VERTICALLY POLARIZED
ORIENTATION AND AIM TOWARD
INTERSECTION 09-0734.



RELOCATE EXISTING RADIO AND
ETHERNET EDGE SWITCH TO NEW
CABINET.

INSTALL ETHERNET EDGE SWITCH
IN EXISTING CABINET

REMOVE EXISTING RADIO AND
REPLACE WITH NEW 900MHZ
ETHERNET RADIO



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

INSTALL NEW COAXIAL CABLE IN
EXISTING 2" RISER. IN THE CASE A
NEW IS REQUIRED, SEE NOTES 1A 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

1 Glenwood Avenue
Raleigh, NC 27603
Tel: 919.789.9977
Fax: 919.789.9591
License: F-0453

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		
	DIVISION 9 DAVIDSON CO. LEXINGTON		
PLAN DATE: MAY 2024	REVIEWED BY: G.G. MURR, JR.	PREPARED BY: B.E. WYNN	DocuSigned by: <i>Gene G. Murr, Jr.</i> 1445866100458 SIGNATURE DATE
SCALE: N/A	REVISIONS	INIT. DATE	CADD Filename: U-5757 SCP