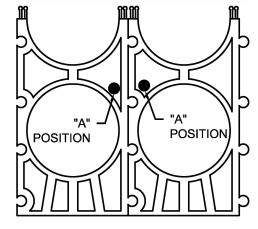


NOTES:

- 1. THE #2 BARE COPPER WIRE SHOULD BE INSTALLED IN THE CONCRETE OF THE DUCT BANK INSTALLATION FOR THE PURPOSES OF LOWER THE GROUND RESISTANCES IN THE TRANSFORMER VAULTS AND MANHOLES. THIS EMBEDDING CONCRETE METHOD WILL OBTAIN LOWER GROUND RESISTANCES THAN WIRE DIRECTLY BURIED IN THE SOIL OR A LARGE NUMBER OF GROUND RODS. THE #2 BARE COPPER WIRE IS USED FOR THE PURPOSE OF GROUNDING, NOT SUBSTITUTE FOR THE SYSTEM.
- 2. DRAWING NOT TO SCALE.
- REFER TO DUKE POWER CO. STANDARD DETAIL UD-42a " DUCT BANK INSTALLATION (GROUNDING)" DATED 07/25/1988.

CONSTRUCTION GUIDELINES:

- 1. INSTALL THE CONDUIT SPACERS AND THE BOTTOM ROW OF PVC CONDUIT IN THE TRENCH.
- 2. INSTALL THE #2 BARE COPPER WIRE ALTERNATING THE WIRE FROM POSITION "A" TO POSITION "B" IN THE CONDUIT SPACERS. THE #2 BARE COPPER WIRE SHOULD BE SAGGED WITH A 2" CLEARANCE FROM THE BOTTOM OF THE CONCRETE DUCT BANK. NOTE: THE #2 BARE COPPER WIRE WILL HAVE THE MOST CONTACT WITH THE CONCRETE IN THIS ALTERNATING METHOD AND THE 2" CLEARANCE.
- 3. INSTALL THE REMAINING CONDUITS, CONDUIT SPACERS AND CONCRETE IN THE RECOMMENDED MANNER.
- 4. CONNECT THE #2 BARE COPPER WIRE TO THE SYSTEM NEUTRAL IN THE VAULTS AND MANHOLES. ALSO, A DRILLED 1/2" HOLE IS REQUIRED IN THE VAULT WALL FOR THE #2 BARE COPPER WIRE. THE 1/2" HOLE AND WIRE SHOULD BE WATERPROOFED WITH SEALING TAPE a(I.D. #0521-0204). THE #2 COPPER WIRE CAN BE SPLICED IN THE VAULTS AND MANHOLES.



CONDUIT SPACE (END VIEW)



TOWN OF CHAPEL HILL
STANDARD DETAIL

REVISIONS

DUCT BANK
INSTALLATION
(GROUNDING)

DATE: 02/2017

SS-3.00