

CONDUIT AND FITTING INSTALLATION				
● EXAMINE ALL CONDUIT AND CONDUIT ACCESSORIES BEFORE THEY ARE INSTALLED FOR SHARP EDGES, OUT-OF-ROUND SHAPE, CRACKS, CHIPS, BURRS, AND INSIDE PROTRUSIONS THAT WOULD DAMAGE THE CABLE WHEN IT IS PULLED INTO POSITION. SUCH PIECES SHALL NOT BE INSTALLED. ● REMOVE ANY SHARP EDGES THAT ARE CREATED ON THE INSIDE OR OUTSIDE OF CONDUIT WHEN IT IS CUT. ● ALL SECTIONS OF PVC CONDUIT AND ALL FITTINGS MUST BE CEMENTED TOGETHER USING A PVC CONDUIT SOLVENT CEMENT RATED FOR USE WITH ELECTRICAL PVC CONDUIT THAT CHEMICALLY BONDS THE TWO PVC PARTS TOGETHER. DO NOT USE CEMENT DESIGNED FOR USE WITH PLUMBING PVC PIPE. THE MATING SURFACES MUST BE 1) PROPERLY CLEANED; 2) A THIN, UNIFORM COATING OF CEMENT APPLIED OVER THE ENTIRE MATING SURFACES (THE OUTER SURFACE OF A PLAIN END AND THE INNER SURFACE OF A BELL END); 3) FULLY SEAT BOTH PIECES; AND 4) TWIST THE PIECES ONE QUARTER TURN TO THEIR REQUIRED POSITION. ● CONDUIT MUST LIE FLAT ON THE BOTTOM OF THE TRENCH. ● A CONTINUOUS PULL STRING, WITH NO KNOTS OR SPLICED, MUST BE PROVIDED THROUGHOUT THE LENGTH OF EACH INDIVIDUAL CONDUIT SEGMENT AND EXTEND AT LEAST THREE FEET OUTSIDE OF EACH STUB-UP. FOR EXAMPLE, A SINGLE PULL STRING MUST EXTEND FROM A TRANSFORMER, PASS THROUGH ALL BENDS AND CONDUIT PIECES, AND THEN EXIT AT A PEDESTAL. ● PULL STRINGS MUST BE TESTED TO VERIFY THEY WERE NOT INADVERTENTLY GLUED TO A PIECE OF CONDUIT OR A FITTING. THE CUSTOMER WILL BE REQUIRED TO INSTALL NEW PULL STRINGS IN ANY CONDUIT SEGMENT WHERE THE INITIAL PULL STRINGS ARE NOT USABLE. ● EACH CONDUIT SEGMENT (TRANSFORMER TO TRANSFORMER, TRANSFORMER TO PEDESTAL, PEDESTAL TO SERVICE RISER, ETC.) MUST BE COLOR CODED ON EACH END WITH THE SAME COLOR OF VINYL TAPE OR SPRAY PAINT OR, WEATHER-RESISTANT, NON-FADABLE ADHESIVE LABELS MAY BE APPLIED. WHEN MULTIPLE BAGS OR CONDUITS ARE BANNED TOGETHER, SUCH AS IN A TRANSFORMER, THE COLOR CODING OR LABELS ON EACH BEND OR CONDUIT MUST BE READILY VISIBLE. ● CUSTOMER SHALL PULL A SOLID MANDREL, NO MORE THAN 1/2 INCH SMALLER THAN THE INSIDE DIAMETER OF THE CONDUIT, THROUGH ALL CONDUIT SEGMENTS TO VERIFY THEY ARE IN GOOD CONDITION AND FREE OF OBSTACLES. ● CONDUITS MUST BE PLUGGED TO PREVENT DEBRIS, RAIN, ETC. FROM ENTERING THE CONDUIT. TAPE OR BAGS ARE NOT SUFFICIENT. THESE PLUGS MUST NOT BE CEMENTED ONTO THE CONDUIT OR FITTING. ● NO WIRES, CABLES, CONDUITS, INNER-DUCTS, OR ANY OTHER ITEMS MAY BE INSTALLED IN THE CONDUITS INSTALLED FOR DUKE ENERGY. THIS INCLUDES FACILITIES FOR LIGHTING, SECURITY, LANDSCAPING, COMMUNICATION, OTHER UTILITIES OR THE CUSTOMER. ● WHEN MULTIPLE DEVELOPERS ARE INSTALLING CONDUIT FOR DUKE ENERGY ALONG A SINGLE CONDUIT SEGMENT (ONE TRANSFORMER TO ANOTHER TRANSFORMER, A TRANSFORMER TO A PEDESTAL, ETC.), THE DEVELOPERS ARE REQUIRED TO JOIN THEIR CONDUIT TOGETHER, INSTALL A SINGLE PULL STRING FROM ONE END OF THE CONDUIT SEGMENT (THE TRANSFORMER, PEDESTAL, ETC.) TO THE OTHER END OF THE CONDUIT SEGMENT, AND TO PROPERLY LABEL BOTH ENDS OF THE CONDUIT SEGMENT. ● MULTIPLE BENDS/CONDUITS MUST BE FIRMLY BANNED TOGETHER IN THE PROPER CONFIGURATION AND WITHIN THE REQUIRED DIMENSIONS PROVIDED IN THIS DOCUMENT WHEN INSTALLED IN TRANSFORMERS, SWITCHGEAR, PEDESTALS, ETC. ● ALL CONDUITS MUST BE FREE OF WATER, MUD, DIRT OR ANY OTHER FOREIGN MATTER. THE CUSTOMER MUST INSPECT, CLEAN AND REPAIR ANY CONDUITS THAT CONTAIN FOREIGN MATTER. ● PLACE TWO, FORTY (40) POUND BAGS OF CONCRETE AGAINST EACH 90° BEND CONTAINING STANDARD SERVICE CABLE AND THREE, FORTY (40) POUND BAGS AGAINST BENDS CONTAINING PRIMARY CABLE TO PREVENT MOVEMENT DURING CABLE PULLING. DO NOT OPEN THE BAGS, JUST MAKE THREE CUTS ACROSS THE FRONT OF THE BAG TO ALLOW MOISTURE TO ENTER, AND PLACE THEM AGAINST THE BEND. ● IT IS NOT NECESSARY TO DOUBLE THE REQUIRED NUMBER OF CONCRETE BAGS WHEN TWO BENDS ARE INSTALLED SIDE-BY-SIDE. USE THE NUMBER OF BAGS REQUIRED FOR A SINGLE BEND AND POSITION THE BAGS SO THEY WILL COVER BOTH BENDS. ● BAGS OF CONCRETE ARE NOT REQUIRED ON 90 DEGREE BENDS WHEN THE TOTAL LENGTH OF THE CONDUIT SECTION IS 100 FEET OR LESS.				
▶ BAGS OF CONCRETE ARE NOT REQUIRED FOR RESIDENTIAL SERVICES THAT WILL NOT UTILIZE MECHANICAL PULLING EQUIPMENT FOR INSTALLING THE CABLE INTO THE CONDUIT.				
SECURING BENDS WITH BAGS OF CONCRETE				
3	10/18/18	AMANA	AMER	GRANWAY
2	10/18/18	REDFORD	ENES	GRANWAY
1	10/18/18	REDFORD	ENES	GRANWAY
0	10/18/18	REDFORD	ENES	GRANWAY
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<u>CUSTOMER RESPONSIBILITIES</u>				
•	THE CONDUIT DESIGN WILL BE PROVIDED BY THE DUKE ENERGY DESIGNER. THE DESIGN WILL SHOW THE LOCATION WHERE ALL FACILITIES (CONDUIT, PULL BOXES/MANHOLES, PEDESTALS, TRANSFORMERS, SWITCHGEAR, POLES, ETC.) WILL BE INSTALLED, ANY PROPOSED CHANGES IN THE CONDUIT DESIGN MUST BE REVIEWED AND APPROVED BY THE DUKE ENERGY DESIGNER PRIOR TO INSTALLATION.			
•	PROVIDE ALL MATERIAL RELATED TO THE CONDUIT SYSTEM AND THE LABOR TO INSTALL THIS MATERIAL.			
•	COMPLY WITH ALL REQUIREMENTS LISTED IN THIS DOCUMENT.			
•	INSPECT THE CONDUIT SYSTEM AND CORRECT ALL INSTANCES OF NON-COMPLIANCE WITH THE REQUIREMENTS LISTED IN THIS DOCUMENT.			
•	CUSTOMER IS RESPONSIBLE FOR INSTALLING CONDUIT AND CABLE UP TO THE POINT OF DELIVERY AS DEFINED IN THE SERVICE REQUIREMENTS MANUAL.			
<u>DUKE ENERGY RESPONSIBILITIES</u>				
•	THE CONDUIT DESIGN WILL BE PROVIDED BY THE DUKE ENERGY DESIGNER. THE DESIGN WILL SHOW THE LOCATION WHERE ALL FACILITIES (CONDUIT, PULL BOXES/MANHOLES, PEDESTALS, TRANSFORMERS, SWITCHGEAR, POLES, ETC.) WILL BE INSTALLED, ANY PROPOSED CHANGES IN THE CONDUIT DESIGN MUST BE REVIEWED AND APPROVED BY THE DUKE ENERGY DESIGNER PRIOR TO INSTALLATION.			
•	PROVIDE ALL CABLE AND ASSOCIATED MATERIALS ALONG WITH THE LABOR TO INSTALL THESE MATERIALS UP TO THE POINT OF DELIVERY.			
•	COORDINATE WITH THE CUSTOMER TO DETERMINE THE BEST METHOD OF MARKING THE ROUTE OF ALL APPLICABLE PRIMARY AND SECONDARY CABLE, AND THE LOCATION OF ALL EQUIPMENT (TRANSFORMERS, SWITCHGEAR, ETC.). PEDESTALS, PULL BOXES, RISERS AND STREET LIGHT POLES. EQUIPMENT WILL NORMALLY BE PLACED DIRECTLY ON TOP OF THE CABLE ROUTE TO REDUCE THE NUMBER OF 90-DEGREE BENDS.			
•	SPECIFY THE SIZE, NUMBER AND POSITION OF CONDUITS THAT WILL BE INSTALLED IN EACH PIECE OF EQUIPMENT (TRANSFORMER, PEDESTAL, ETC.).			
•	INSPECT THE CONDUIT SYSTEM PRIOR TO THE INSTALLATION OF CABLE.			
•	DUKE ENERGY RESERVES THE RIGHT TO REFUSE ACCEPTANCE OF ANY PORTION OF A CONDUIT SYSTEM THAT DOES NOT MEET ALL THE REQUIREMENTS LISTED IN THIS DOCUMENT. IT WILL BE THE CUSTOMER'S RESPONSIBILITY TO CORRECT ALL INSTANCES OF NON-COMPLIANCE.			
➤	ONCE THE CONDUIT SYSTEM HAS BEEN INSPECTED BY DUKE ENERGY AND ALL CABLE AND EQUIPMENT HAVE BEEN INSTALLED, DUKE ENERGY WILL MAKE ANY NECESSARY FUTURE REPAIRS OR ALTERATIONS TO THE CONDUIT SYSTEM AT ITS EXPENSE.			
<u>TRENCH REQUIREMENTS</u>				
•	THE UNDERGROUND TRENCH CONTAINING ELECTRIC CABLE IS FOR THE SOLE USE OF DUKE ENERGY. NO OTHER UTILITIES OR FACILITIES FOR IRRIGATION, LIGHTING, SECURITY, PLUMBING, OR ANY OTHER PURPOSE MAY BE INSTALLED IN THE TRENCH WITHOUT THE EXPRESS PERMISSION OF DUKE ENERGY.			
•	THE BOTTOM OF THE TRENCH MUST BE SMOOTH AND FREE OF ROCKS, ROOTS, CONSTRUCTION DEBRIS OR ANY OTHER HARD OR SHARP OBJECT. IF NECESSARY, INSTALL A FEW INCHES OF CLEAN BACKFILL TO COVER ANY OF THESE ITEMS THAT CANNOT BE REMOVED.			
•	ALL CONDUIT MUST BE INSTALLED AT THE PROPER DEPTH AND WITH PROPER SEPARATION AS SHOWN ON THE TABLES ON DWG. 22-08-101D.			
•	THE MAXIMUM TRENCH DEPTH MUST NOT EXCEED FOUR (4) FEET, EXCEPT WHERE REQUIRED AT ENTRANCE POINTS FOR CONDUIT BENDS INTO PIT PADS OR PULL BOXES.			
•	THE CUSTOMER MUST BACKFILL ALL TRENCHES WHERE CUSTOMER-INSTALLED CONDUIT WAS PROVIDED.			
•	ALL BACKFILL MUST BE FREE OF ROCKS, CONSTRUCTION DEBRIS, OR ANY OTHER HARD OBJECTS.			
•	ALL BACKFILL MUST BE COMPACTED TO THE FIRMNESS OF UNDISTURBED SOIL.			
•	THE CUSTOMER WILL BE RESPONSIBLE FOR ANY SETTLING OR WASHOUT OF THE TRENCH.			

<u>DUKE ENERGY</u>				
3	DEC	DEM	SEP	DEC
2	X		X	
1	X	X	X	X
0	X	X	X	X
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SUBMITTER'S GUIDE FOR INSTALLING CONDUIT

22.08-101C

[illegible]

ALL CONDUIT MUST BE INSTALLED AT THE DEPTH AND WITH PROPER TRENCHING

TABLE 1: MINIMUM CONDUIT COVER			
CABLE OR APPLICATION	MINIMUM COVER (X)	SPECIFIC NOTES	
SECONDARY / SERVICE	30"	SEE NOTE 2	
PRIMARY (10 OR 30)	36"	SEE NOTE 2	
ROAD CROSSINGS (ANY VOLTAGE)	36"		
PARKING LOT CROSSINGS (ANY VOLTAGE)	36"	SEE NOTE 2	

TABLE 2: REQUIRED MINIMUM HORIZONTAL SEPARATION BETWEEN CONDUITS.					
COLUMN 1	MINIMUM HORIZONTAL SEPARATION FROM CABLES IN COLUMN 1 (X)				
CABLE	SECONDARY / SERVICE	PRIMARY, 200A (10 OR 30)	PRIMARY, 200A (10 OR 30) WHEN BOTH CABLES ARE NOT PART OF THE SAME LOOP	PRIMARY, 200A (10 OR 30) WHEN BOTH CABLES ARE PART OF THE SAME LOOP	FEEDER (>200A)
SECONDARY / SERVICE	NO REQUIRED SEPARATION SEE FIGURE 1	NO REQUIRED SEPARATION SEE FIGURE 1	NO REQUIRED SEPARATION SEE FIGURE 1	36" SEE FIGURE 2	36" SEE FIGURE 3
PRIMARY, 200A (10 OR 30)	NO REQUIRED SEPARATION SEE FIGURE 1	NO REQUIRED SEPARATION SEE FIGURE 1	NO REQUIRED SEPARATION SEE FIGURE 1	36" SEE FIGURE 2	36" SEE FIGURE 3
FEEDER (>200A)	36" SEE FIGURE 3	36" SEE FIGURE 3			36" SEE FIGURE 3

FIGURE 1
NO SEPARATION BETWEEN CONDUITS

FIGURE 2
36" SPACING BETWEEN CONDUITS OF SAME PRIMARY LOOP

FIGURE 3
36" SPACING BETWEEN FEEDER CONDUITS AND THOSE CONTAINING ANY OTHER TYPE OF CABLE

NOTES:

- DISTANCES ARE MEASURED TO THE SURFACE OF THE CABLE OR CONDUIT.
- PRIMARY CABLES LESS THAN 30" DEEP OR SECONDARY CABLES LESS THAN 24" DEEP MUST BE INSTALLED IN MINIMUM SCHEDULE 40 CONDUIT WITH A MINIMUM OF TWO (2) INCHES OF CONCRETE ABOVE AND BESIDE THE CONDUIT AND A MINIMUM OF SIX (6) INCHES OF COVER.
- FEEDER (>200A) CONDUITS MUST BE SEPARATED HORIZONTALLY FROM CONDUITS CONTAINING ANY OTHER TYPE OF CABLE BY 36".
- EITHER ONE WIDE TRENCH OR TWO NARROW TRENCHES MAY BE USED, BASED ON ECONOMICS, TO OBTAIN REQUIRED HORIZONTAL SEPARATION.

3	2	1	0	REVISION	BY	CHK'D	APPR.	DEC	DEM	DEP	DE
								X			X

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• INSTALL EQUIPMENT ALONG THE TRENCH TO ELIMINATE THE NUMBER OF REQUIRED BENDS. TENSORS.

• A MAXIMUM OF EIGHT (8) SECONDARY/SERVICE CONDUITS, TWO (2) PRIMARY CABLE CONDUITS, AND ONE (1) LIGHTING CABLE CONDUIT CAN BE INSTALLED IN SINGLE-PHASE TRANSFORMERS; HOWEVER, QUITE OFTEN, FEWER CONDUITS WILL BE REQUIRED. WHEN FEWER THAN EIGHT (8) SECONDARY/SERVICE CONDUITS WILL BE INSTALLED, KEEP THE CONDUITS AS FAR TO THE LEFT SIDE OF THE 9" X 14" SECONDARY/SERVICE CONDUIT ENTRANCE ZONE AS POSSIBLE. NO PART OF ANY CONDUIT MAY EXTEND OUTSIDE OF THIS ZONE.

• BE CERTAIN TO LEAVE A SPACE BESIDE THE CONDUITS FOR THE INSTALLATION OF THE GROUND ROD.

• THE TRANSFORMER PAD MUST BE POSITIONED SO THE FRONT OF THE TRANSFORMER WILL FACE THE STREET IN DEC LOCATIONS AND BE TURNED TO THE RIGHT IN DEP LOCATIONS.

• THERE SHALL BE NO ABOVE-GROUND OBSTRUCTIONS WITHIN TEN (10) FEET OF THE FRONT OF THE TRANSFORMER OR WITHIN THREE (3) FEET OF THE SIDES AND BACK.

• THE GROUND UNDER THE PAD SHALL BE LEVEL AND THOROUGHLY COMPACTED.

• EXTEND CONDUITS THREE (3) INCHES ABOVE THE SOIL.

▶ PLACE TWO (2), FORTY (40) POUND BAGS OF CONCRETE AGAINST EACH BEND CONTAINING SECONDARY/SERVICE CABLE AND THREE (3), FORTY (40) POUND BAGS AGAINST BENDS CONTAINING PRIMARY CABLE AS SHOWN ON DWG. 22.08-101F TO PREVENT MOVEMENT DURING CABLE PULLING. DO NOT OPEN THE BAGS, JUST MAKE THREE CUTS ACROSS THE FRONT OF THE BAG TO ALLOW MOISTURE TO ENTER, AND PLACE THEM AGAINST THE BEND.

• INSTALL PLUGS IN EACH CONDUIT TO KEEP SAND, RAIN, ETC. OUT OF THE CONDUITS. DO **NOT** GLUE THE PLUGS INTO THE CONDUIT.

2. THREE-PHASE PAD-MOUNTED TRANSFORMERS 75KVA THROUGH 300KVA

• CONDUITS FOR PRIMARY AND SERVICE CABLES SHALL BE INSTALLED AS SHOWN IN THE DRAWING BELOW.

CONDUIT POSITIONS IN SMALL THREE-PHASE PAD-MOUNTED TRANSFORMER PADS

NO OTHER UTILITIES MAY BE INSTALLED UNDER A TRANSFORMER PAD.

SERVICE CONDUITS MUST BE INSTALLED IN THIS AREA

PLAN VIEW

SECTION A-A

MATERIAL REQUIREMENTS

- PVC CONDUIT AND CONDUIT FITTINGS MUST BE SCHEDULE 40 OR GREATER, RATED FOR USE WITH 90° C ELECTRICAL CABLE, UL LISTED AND GRAY IN COLOR. NO WATER, SEWER, GAS OR TELECOMMUNICATION PIPE MAY BE USED. EACH LENGTH OF CONDUIT AND EACH BEND MUST HAVE AN INTEGRAL BELL ON ONE END. THE CONDUIT MANUFACTURER'S NAME, CONDUIT SIZE, TYPE AND DATE CODE MUST BE PRINTED ON THE SURFACE OF THE CONDUIT.
- HDPE CONDUIT MUST BE SDR 13.5 OR GREATER, RATED FOR USE WITH 90° C ELECTRICAL CABLE, AND BLACK WITH EITHER 3 OR 4 RED STRIPES OR TOTALLY RED. THE CONDUIT MANUFACTURER'S NAME, CONDUIT SIZE, TYPE AND DATE CODE MUST BE PRINTED ON THE SURFACE OF THE CONDUIT.

CONDUIT SIZE WILL BE AS FOLLOWS.

APPLICATION	CONDUIT SIZE
SINGLE-PHASE 25KV 1/0 AWG PRIMARY	2"
SINGLE-PHASE 35KV 1/0 AWG PRIMARY	3"
THREE-PHASE 25KV 1/0 AWG PRIMARY	4"
THREE-PHASE 35KV 1/0 AWG PRIMARY	6"
THREE-PHASE PRIMARY (GREATER THAN 1/0 AWG)	6"
600V SECONDARY (TX TO PEDESTAL)	3"
600V SERVICES (RESIDENTIAL) (SEE NOTE 1)	2-1/2"
LIGHTING CABLE	2"

NOTE 1: DUKE ENERGY WILL PROVIDE THE REQUIRED CONDUIT FOR RESIDENTIAL BUILDINGS WHERE THE SERVICE CABLE WILL FEED GANGED METER PANELS.

NOTE 2: OTHER FACTORS SUCH AS LENGTH OF PULL, NUMBER OF BENDS, AVAILABILITY OF MATERIAL, ETC. MAY JUSTIFY OR REQUIRE LARGER SIZES THAN THOSE SHOWN IN THIS TABLE.

- WHEN HDPE CONDUIT IS USED, PVC BENDS MUST BE ATTACHED TO ALLOW THE CONDUIT SYSTEM TO ENTER TRANSFORMERS, SWITCHGEAR, PEDESTALS, ETC. THE FOLLOWING OPTIONS ARE THE ONLY APPROVED METHODS TO CONNECT HDPE CONDUIT TO PVC CONDUIT OR FITTINGS. THESE OPTIONS MAY ALSO BE USED TO JOIN TWO PIECES OF HDPE CONDUIT, EXCEPT WHEN ONE OF THE PIECES WILL BE USED TO PULL THE OTHER INTO POSITION THROUGH A DIRECTIONAL BORE.

A. SHUR LOCK II COUPLINGS: THESE ARE PLASTIC, SLIP-ON COUPLINGS, WITH STAINLESS STEEL BANDS MADE BY DURALINE.

B. BONDUIT ADHESIVE: THIS ADHESIVE IS FORMULATED TO BOND TO BOTH HDPE AND PVC.

C. MOR CLAMP COUPLINGS: THESE ARE BOLTED, STAINLESS STEEL, SLIP-ON COUPLINGS MADE BY DURALINE. THESE COUPLINGS ARE EXPENSIVE, SO THEY WILL TYPICALLY BE USED ONLY ON LARGE CONDUIT AND ONLY WHEN NECESSARY BECAUSE THE CONDUIT IS OUT-OF-ROUND.

THESE METHODS ALSO ALLOW HDPE CONDUIT PIECES TO BE JOINED TOGETHER OR FOR HDPE CONDUIT TO BE JOINED TO PVC CONDUIT.

- ALL PVC COUPLINGS MUST HAVE A CENTER STOP.
- ALL 6" BENDS MUST HAVE A 48" MINIMUM RADIUS AND ALL OTHER BENDS MUST HAVE A 36" MINIMUM RADIUS. ALL BENDS MUST HAVE AN INTEGRAL BELL ON ONE END.
- PULL STRINGS MUST BE MADE OF A MATERIAL THAT WILL NOT ROT, (I.E., NYLON).

DEC	DEM	SEP	DEF
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X		X	
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22.08-101E

CUSTOMER GUIDE FOR INSTALLING CONDUIT

3	375422	FLETCHER	DANES	GRANAM
2	470021	FLETCHER	DANES	GRANAM
1	617120	FLETCHER	DANES	GRANAM
0	375120	FLETCHER	DANES	GRANAM
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- THERE SHALL BE NO ABOVE-GROUND OBSTRUCTIONS WITHIN TEN (10) FEET OF THE FRONT OF THE TRANSFORMER OR WITHIN THREE (3) FEET OF THE SIDES AND BACK. IF A METER IS INSTALLED ON THE TRANSFORMER, NO OBSTRUCTIONS MAY BE WITHIN FOUR (4) FEET OF THAT SIDE.
- SIDE VENTILATION MAY BE REQUIRED IF A WALL IS TO BE CONSTRUCTED AROUND THE TRANSFORMER. CONTACT DUKE ENERGY TO OBTAIN THE REQUIRED SEPARATION BETWEEN THE TRANSFORMER AND A WALL.
- THE GROUND UNDER THE PAD SHALL BE LEVEL AND THOROUGHLY COMPACTED.
- INSTALL BENDS FOR THE PRIMARY CABLE IN THE CENTER OF THE DESIGNATED PRIMARY CABLE AREA AS SHOWN ON DWG. 22-08-101H.
- CONDUITS FOR SECONDARY/SERVICE CABLES ARE TO BE CENTERED IN THE AREA SHOWN ON DWG. 22-08-101H. NO PART OF ANY CONDUIT MAY EXTEND OUTSIDE OF THE DIMENSIONS SHOWN.
- PLACE THREE, FORTY (40) POUND BAGS OF CONCRETE AGAINST EACH 90° BEND CONTAINING PRIMARY CABLE AS SHOWN ON DWG. 22-08-101F TO PREVENT MOVEMENT DURING CABLE PULLING. DO NOT OPEN THE BAGS, JUST MAKE THREE CUTS ACROSS THE FRONT OF THE BAG TO ALLOW MOISTURE TO ENTER, AND PLACE THEM AGAINST THE BEND.
- ALL CONDUITS IN A PIT PAD SHALL EXTEND 6" ABOVE THE GRAVEL BED IN THE PIT.
- INSTALL PLUGS IN EACH CONDUIT TO KEEP SAND, RAIN, ETC. OUT OF THE CONDUITS. DO NOT GLUE THE PLUGS ONTO THE CONDUIT.

3. THREE-PHASE PAD-MOUNTED TRANSFORMERS 500KVA THROUGH 5000KVA

- CONDUITS FOR PRIMARY AND SERVICE CABLES SHALL BE INSTALLED AS SHOWN IN THE DRAWING BELOW.

CONDUIT POSITIONS IN LARGE THREE-PHASE PAD-MOUNTED TRANSFORMER PADS

SECTION A-A

HN-0040	
	28-5
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION JOHNSON COUNTY	
	
ROADWAY DESIGN UNIT	
ROADWAY DESIGN ENGINEER	
HYDRAULIC DESIGN ENGINEER	
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