

Transmission & Distribution
Material & Installation Specification

Concrete Pad for Three Phase Padmount Transformers 75 KVA through 500 KVA

I. Quantity

The base bid shall include the indicated number of Concrete Pads for Three Phase Padmount Transformers 75 KVA through 500 KVA as hereinafter specified.

II. Material

- A. The material shall be equal in quality, design, performance and appearance to the items specified on drawing TDMIS-1005.
- B. Concrete shall be City of Columbus class C, 3500 pounds minimum with 6% to 10% air. Pad shall be broom finish.
- C. Wire reinforcing mesh shall be 5"x5" square web #4 grade 60 steel.
- D. Compacted structural fill shall be placed under pad to provide level firm base from the underside of concrete pad to undisturbed soil below.
- E. Each pad shall be provided with openings sized as shown to allow access of primary and secondary cables and/or conduits, and ground rod.

III. Installation

- A. The installation shall be as shown on drawing TDMIS-1005.
- B. The installation shall include removal of top soil and any organic materials down to subgrade. Subgrade shall be compacted with a motorized compactor to provide a solid level base. Add controlled density fill as required to establish proper pad elevation.

- C. Finished pad shall be installed with the rear (tank side) ½ bubble higher than the front (cable/conduit side) to provide for settlement. When installed over a trench, the front side only shall be over the trench. The heavier rear side shall be over undisturbed soil to one side of the trench. Careful placement and positioning is required to accomplish this and remain within the available right of way or easement.
- D. When installed over concrete encased duct banks, the duct bank concrete shall extend vertically to and be tied in with bottom of concrete pad. Ties shall be 4 minimum, #6 rebar.

IV. Method of measurement

Shall include a pad and accessories, structural fill, labor, equipment, tools, supervision, and miscellaneous required for a complete and operational assembly.

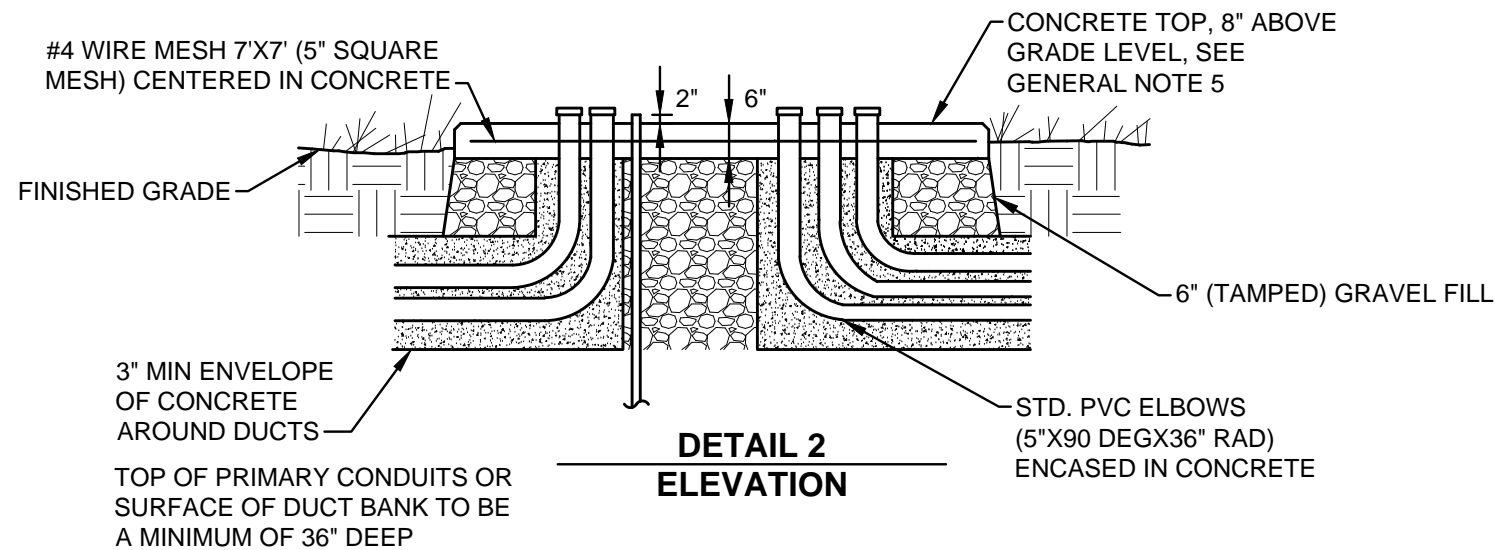
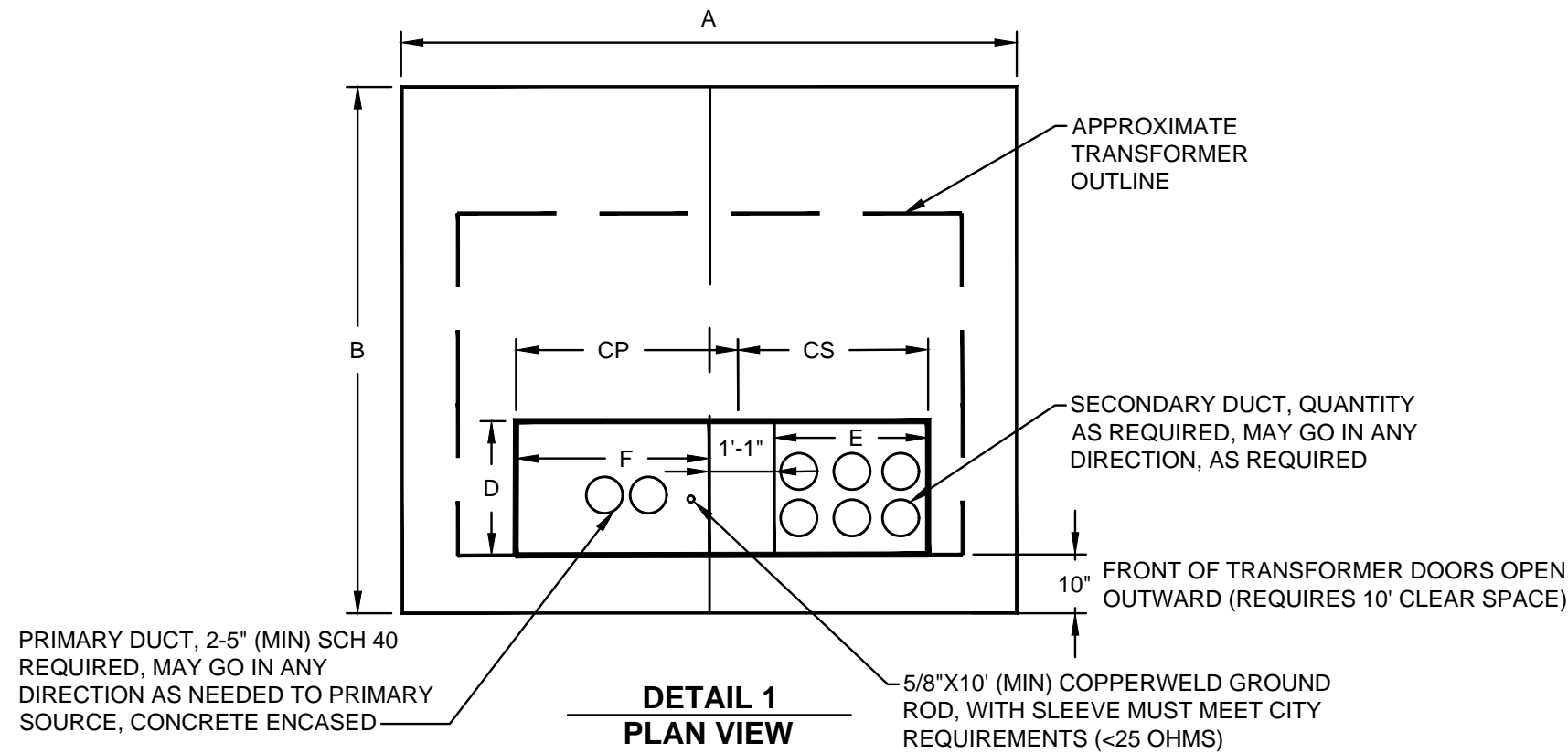
V. Basis of payment

Items	Unit	Description
TDMIS-1005	Each	Concrete pad for three phase padmount transformer 75 kVA through 500 kVA

CITY OF COLUMBUS DEPT. OF PUBLIC UTILITIES – DIVISION OF POWER CONCRETE PAD FOR THREE PHASE PADMOUNT TRANSFORMERS 75 KVA THROUGH 500 KVA		
DRAWN BY: AEC	DATE: 01/01/2018	TDMIS-1005
APPROVED: <i>Karl Spruill</i>		
	SHEET 1 of 2	

GENERAL NOTES:

1. CONCRETE TO BE CITY OF COLUMBUS CLASS C WITH 6-10% AIR ENTRAINMENT.
2. MINIMUM DISTANCE FROM FOUNDATION TO BUILDING TO BE 3FT.
3. THE DIVISION OF POWER REQUIRES 10FT, MINIMUM, OF CLEAR SPACE IN FRONT OF THE TRANSFORMER DOORS.
4. TOP OF CONCRETE DUCT BANK TO BE A MINIMUM OF 36" DEEP.
5. CONCRETE TOP TO BE BROOM FINISH AND SHALL HAVE 1/2 BUBBLE SLOPE TOWARDS THE TRANSFORMER FRONT DOORS & A 1"-45 DEG CHAMFER ALONG THE EDGES.
6. WHEN FRAMING WINDOW AROUND CONDUITS, WINDOW OPENING NEEDS TO BE REDUCED FROM DIMENSIONS D, E & F.
7. PRIMARY CONDUITS ARE REQUIRED TO HAVE A MINIMUM 1 FT & 1 INCH SEPARATION AWAY FROM THE SECONDARY CONDUITS.
8. PAD INSPECTION IS REQUIRED PRIOR TO POURING PAD. NOTIFY DOP PROJECT ENGINEER FOR INSPECTION.
9. PAD SHALL ACCOMMODATE A MAXIMUM OF 6 CONDUITS. IF ADDITIONAL CABLES ARE NEEDED, A TRANSCLOSURE CABINET WILL NEED TO BE INSTALLED.



TRANSFORMER PAD DIMENSION								
KVA	WT. #	A	B	CP	CS	D	E	F
75-500	2K-7K	8'-0"	8'-0"	26"	26"	15"	16"	23"

CITY OF COLUMBUS, OHIO DEPT. OF PUBLIC UTILITIES - DIVISION OF POWER		
CONCRETE PAD FOR 3 PHASE PADMOUNT TRANSFORMER 75 KVA THRU 500 KVA		
DRAWN BY: AEC	DATE: 01/01/2018	TDMIS-1005
APPROVED: <i>[Signature]</i>		
SCALE: NTS	SHEET: 2 OF 2	