

MASTER COPY

BACK OF PAD

1/2" Rebar 6" O.C. each direction

3" typ.

2" typ.

See Note #7

Do not fill with concrete.

54"

Cable Openings

Primary

MIN 20"

Secondary

(8)(7)(6)(5)

(1)(2)(3)(4)

FRONT OF PAD

25"

25"

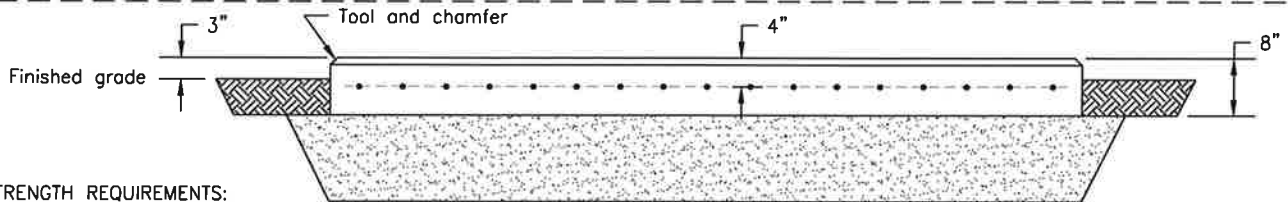
104"  
\*(Front side of pad must be clear and flat for a distance of 10 feet)

100"

16"

10"

See Note #8  
Position conduits on the right side near the front of the cable opening.



STRENGTH REQUIREMENTS:

1. Soil bearing capacity 2000 pounds per square foot.
2. Concrete testing 3500 pounds per square inch after 28 days. Maximum aggregate 3/4 inch.
3. Minimum concrete cover over reinforcing steel 2 inches unless noted.
4. Wood float finish, leaving no depression.
5. Reinforcing steel ASTM-A615 Grade 60 placed approximately 6 inches O.C. each direction and securely tied together.
6. Ground rods/grid installed by DEA.

CLEARANCE REQUIREMENTS:

- 9 Concrete pads shall be installed no less than 20 feet from doors, combustible materials, or windows which can be opened and no less than 10 feet from permanent (non-opening) windows.
10. A minimum distance of 3' is required between concrete pads and non-combustible walls (min 2hr fire rating).
11. A minimum of 3' of working space must be maintained from each side of the transformer and a minimum of 10' must be maintained on the front (door side) of the transformer. This is to allow for cooling, replacement, and operations.
12. When pad is located near a traffic area, 8 inch steel posts filled with concrete must be placed at corners of pad for protection.
13. For more information refer to the Transformer Location Requirements in the Electric Service Handbook.

CONDUIT REQUIREMENTS:

7. Conduits for the primary cable shall be 4" conduits with 90° long radius sweeps extending 5' from the pad at a depth of 42" below final grade.
8. Conduits for the secondary cable shall be placed on the RIGHT SIDE NEAR THE FRONT OF THE CABLE OPENING to accommodate secondary cable terminations and provide adequate clearance for the transformer oil drain valves. The 16 inches shown is finished dimension. The number of conduits shall be placed as shown on the diagram. A maximum of 8 conduits may be used for installations 500 KVA to 2000 KVA.

Pad must be poured on 12" sand base

DAKOTA ELECTRIC ASSOCIATION

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE

STATE OF MINNESOTA

NAME JEFF SCHOENECKER

SIGNATURE *[Signature]*

DATE 2/22/18 REGISTER NO. 46276

CONCRETE PAD SPECIFICATION FOR 3Ø PADMOUNT TRANSFORMER INSTALLATIONS 500 KVA - 2000 KVA

REVISED FEBRUARY 2018

SPEC. NO.

GUIDE-13