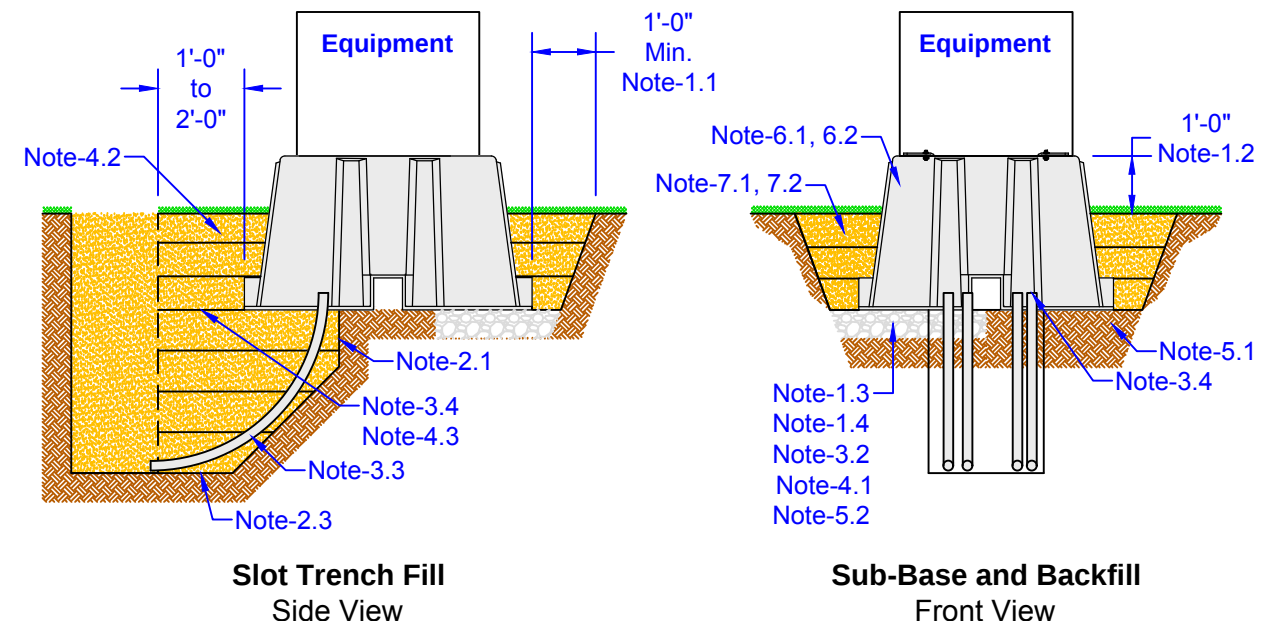
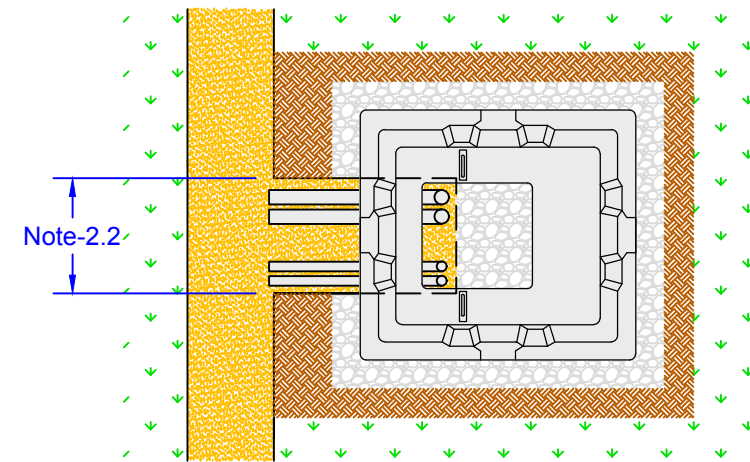


BOX PAD FOUNDATION APPLICATION

- A box pad foundation is preferred for all padmount equipment installations.
 - Box pad use improves cable training and operation of loadbreak terminations, while reducing mechanical stress on bushings induced by yearly freeze/thaw cycles.
- 1. Excavation:**
 - 1.1. Excavation shall be a minimum of 12" wider than box pad dimensions.
 - 1.2. Minimum excavation depth shall be such that approximately 12" of the box pad be above finished grade.
 - 1.3. Additional 6" excavation depth may be required for stone sub-base.
 - 1.4. Stone sub-base is required for all padmount equipment weighing over 2,000 pounds.
 - 2. Slot Trench:**
 - 2.1. Minimize soil disturbance under the box pad.
 - 2.2. Slot trench shall be as narrow as possible with a max width of 24".
 - 2.3. Depth shall be to the bottom of main trench.
 - 3. Conduit/Cable Installation:**
 - 3.1. All conduit or direct-bury primary and secondary cables shall be installed before the installation of box pad foundation.
 - 3.1. Direct bury cable shall not be installed where stone backfill is used.
 - 3.2. 36" radius non-metallic conduit sweep or flexible conduit may be used for primary and secondary cables.
 - 3.3. Cut and chamfer conduit to approximately 3" above sub-base.
 - 3.4. Once cables or conduit are installed and properly positioned, slot trench shall be backfilled to depth of box pad excavation sub-base.
 - 4. Slot Trench Backfill:**
 - 4.1. Sand or clean native soil may be used. Where box pad sits over slot trench excavation, INDoT #63 stone (3/4" to dust) shall be used for final fill lift for equipment over 2,000 pounds.
 - 4.1. Place in 8" loose lifts and then mechanically compact.
 - 4.2. Compacted slot trench backfill shall be brought to same elevation as box pad sub-base.
 - 5. Sub-Base:**
 - 5.1. Box pad foundations shall be placed upon mechanically compacted native soil.
 - 5.2. If padmount equipment weighs greater than 2,000 pounds, then properly compacted INDoT #63 stone (3/4" to dust) shall be used.
 - 6. Box Pad Installation:**
 - 6.1. Occurs once all excavation, conduit installation, direct-bury cable installation, slot trench backfill to sub-base, and sub-base preparation is complete.
 - 6.1. Level in all directions, both length and width.
 - 7. Foundation Backfill:**
 - 7.1. Sand or clean native soil may be used.
 - 7.2. Placed in 8" loose lifts and then mechanically compacted.

PEDESTAL EQUIPMENT FOUNDATION

- Pedestal equipment has a box pad integrated into the body of the pedestal.
- Pedestal equipment shall follow all requirements for box pad foundations under 2,000 pounds.
- Pedestal equipment setting depth shall be determined by the specific piece of equipment and be called-out in the specific construction standard.



FLAT PAD FOUNDATION APPLICATION

- A floating flat pad foundation shall only be consider only where a box pad foundation is impracticable.
- A floating flat pad shall be installed only on flat, undisturbed earth. If these conditions are not met, then a poured concrete pad shall be used following the sub-base fill guidelines.
- For poured flat pad foundation dimensions and requirements, see Nipsco material standard [M 32-550](#).
- Equipment weighing more than 2,000 pounds shall use a poured pad foundation.

1. Excavation:

- 1.1. Clear all vegetative soil layers, including root systems.
- 1.2. Do not disturb additional earth below the flat pad.

2. Slot Trench:

- 2.1. Minimize soil disturbance under the flat pad.
- 2.2. Slot trench width shall be as narrow as possible and no more than 24".
- 2.3. Depth shall be to bottom of main trench.

3. Conduit/Cable Installation:

- 3.1. All cable must enter/exit a flat pad foundation through a conduit.
- 3.2. All conduit shall be installed before installation or pouring of flat pad foundation.
- 3.3. Additional conduits should not be installed after flat pad installation.
- 3.4. 36" radius non-metallic elbow or flexible conduit must be used for primary and secondary cables.
- 3.5. Conduit shall extend minimum of 24" from edge of pad.
- 3.6. Cut and chamfer conduit approximately 3" above top of flat pad.
- 3.7. Once all conduit are installed and properly positioned, then slot trench shall be backfilled.

4. Slot Trench Backfill:

- 4.1. Sand or clean native soil may be used. If supported equipment exceeds 2,000 pounds, then INDoT #63 stone (3/4" to dust) shall be used for final lift where the pad sits over the slot trench.
- 4.2. Place in 8" loose lifts and then mechanically tamp.

5. Sub-Base:

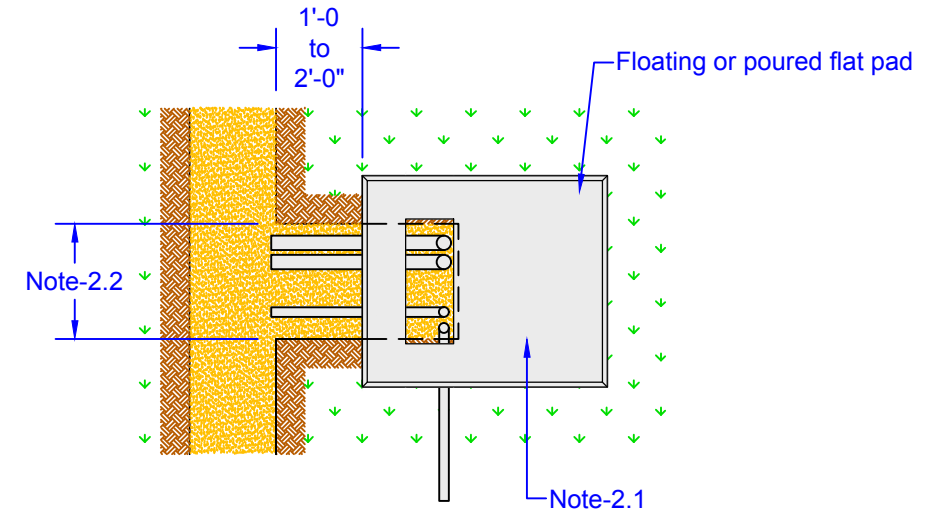
- 5.1. Earth shall not be used as backfill material under flat pads.
- 5.2. INDoT #63 stone (3/4" to dust) shall be leveled and mechanically compacted.
- 5.3. Sand or clean native soil may be used and shall be mechanically compacted.
- 5.4. Additional sand may be required if soft soil is encountered down to a maximum depth of 36".

6. Flat Pad Installation:

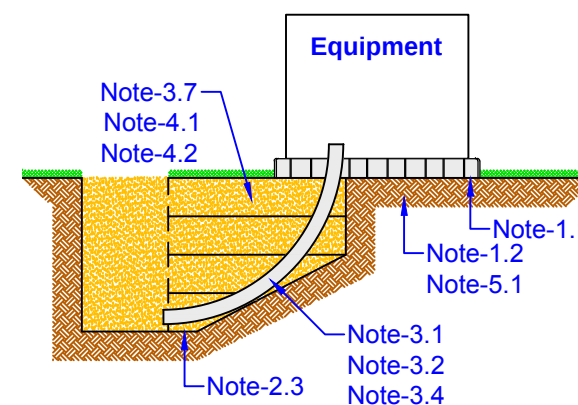
- 6.1. Installation shall leave approximately 3" of flat pad exposed above final grade.

7. Final Backfill:

- 7.1. Final grade shall slope away from flat pad at approximately 1:36 pitch.

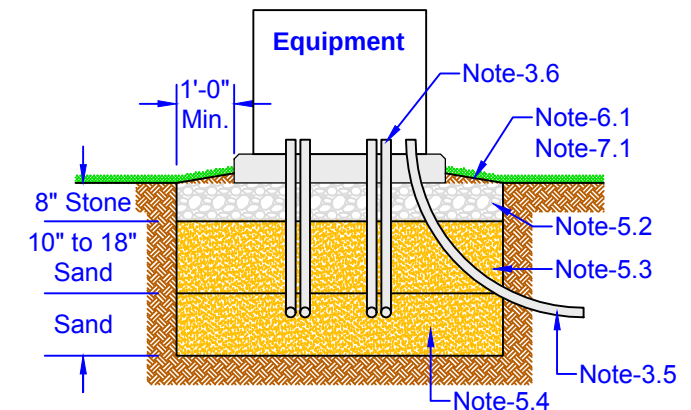


Top View



**Slot Trench Fill
Side View**

(Floating Pad Shown)
(For single phase transformer only)



**Sub-Base Fill
Front View**

(Poured Pad Shown)