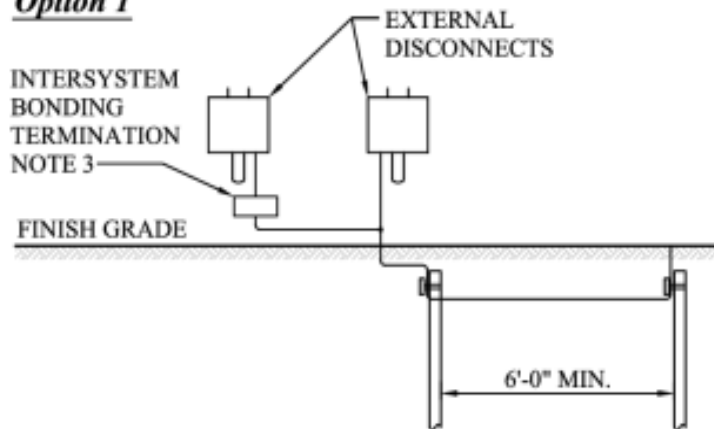
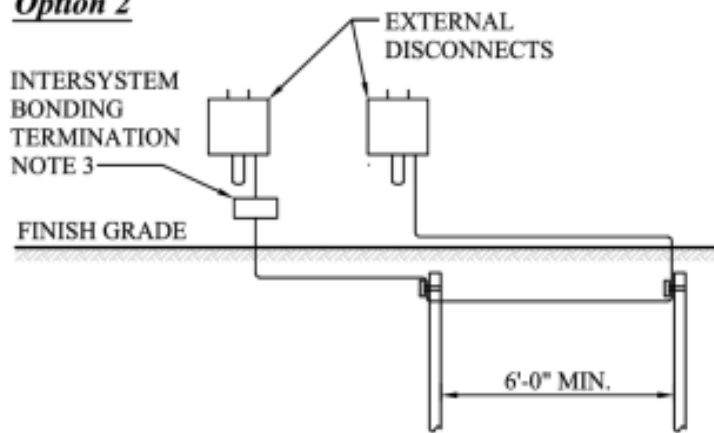


Typical Grounding Details for Multiple Disconnects

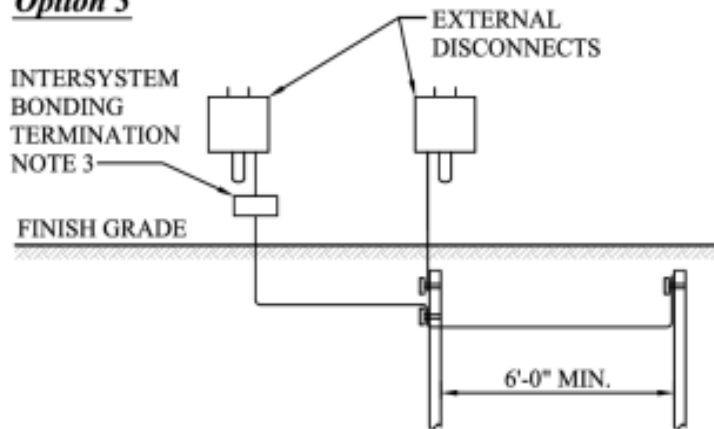
Option 1



Option 2



Option 3



NOTES:

1. In lieu of the grounding methods shown, APCo permits the use of a Ufer ground (NEC 250.52 (3) Concrete-encased electrode) with no smaller than a #4 copper conductor connected to a rebar that is bent up out of the footing. This rebar shall be connected to one or more bars tied together within the footing and a minimum of 2-foot overlap to provide a minimum of 20 feet of continuous direct contact with the earth.
2. For installations with more than two (2) disconnects, Option 1 with a common grounding conductor and properly connected taps shall be utilized.
3. On new installations, the ground conductor shall be continuous from the service panel or disconnect through the first ground rod and to the second ground rod. On new installations and existing installations where alterations are made, an intersystem bonding termination shall be provided externally to enclosures at the service equipment. The grounding conductor shall be continuous through the intersystem bonding termination. A meter box ground clamp is not permitted.
4. For existing services, the second ground rod can be added without replacing the original ground conductor as long as it is properly connected and bonded to the first ground rod.
5. A total of two (2) 5/8 inch X 8 foot copper clad grounds and UL approved clamps shall be utilized. Ground rods and ground clamps shall be 6 inches below final grade. There shall be a minimum distance of 6 feet between ground rods and #4 copper is the minimum wire size.
6. The ground wire conductor shall not pass through or be connected within the meter base.
7. Only one conductor per clamp is permitted unless clamp is specifically designed for multiple conductors.

These guidelines are for informational purposes only. Appalachian Power does not warrant that the information is in every respect accurate and makes no warranties regarding results from the usage of these guidelines. APCO shall have neither liability nor responsibility to any person or entity with respect to any loss or damage caused, or alleged to be caused, directly or indirectly by the information contained herein.