

SPECIAL PROVISION

Direction Boring Under Interstate and Limited Access Highways

Company Name:

Date:

Permit No.:

The permit applicant shall furnish, for the Engineer's review and approval, a bore plan showing the proposed methods for the installation of Interstate or *Limited Access Crossing* directional bores. No directional boring work will be allowed until the applicant's submitted plan is approved by the Engineer. This plan shall include, but not be limited to, the following:

1. Boring Machine type and model.
2. Proposed alignment of bore both horizontal and vertical. Boring will not be allowed in select backfill areas such as at mechanically stabilized wall locations and within 100 feet of Bridges and other Structures.
3. Location of all proposed boring entry and exit pits. (On Plans)
4. Cross Sections of the existing ground. (Attached to Sheet)
5. Entry Angle (%) with respect to horizon.
6. Plan shall show the rod cover (inches).
7. Rod selection:
 - a. Diameter (inches)
 - b. Rod length (feet)
 - c. Bend (feet radius) limit
8. Tooling:
 - a. Final pilot bit diameters (inches)
 - b. Reamer diameters (inches) in no case shall the diameter of the back reamer exceed 1.5 times the diameter of the product bundle installation.
 - c. Identify soil type/mud factor-sand, gravel, cobble rock or same mixed with clay of reactive shale.

9. Product bundle:
 - a. Diameters (inches)
 - b. Quantity
 - c. Bend (foot radius)
10. Sonde:
 - a. Ascending limit
 - b. Descending limit
11. The minimum depth of cover under travel lanes or otherwise outside of the paved shoulder shall be 10 feet.
12. This installation shall include a locatable conduit system, with identification markers on each DOT right-of-way fence line.
13. The applicant shall continuously monitor the location and alignment of the pilot drill progress to ensure compliance with the proposed installation alignment and to verify depth of the bore. Monitoring shall be accomplished by computer generated bore logs which map the bore path based on information provided by the locating/tracking system. Readings or plots shall be obtained on every drill rod and shall be provided to the Inspector daily. Upon completion of the bore applicant will furnish an As-built drawing along with a report of the monitoring of the drilling fluids during the pilot hole and back reamed hole.
14. Excess drilling fluids shall be contained at the entry and exit points until recycled or removed from the site. The applicant shall ensure that all drilling fluids are disposed of in a manner acceptable to the appropriate local, state and federal regulations. The applicant's work will be immediately suspended by the inspector whenever drilling fluids seep to the surface other than in the boring entrance or exit pit, or when a paved surface is displaced. The applicant shall then propose a method to prevent further seepage and/or displacement, and shall remove and dispose of any drilling fluid, slurry, and soil from the paved surface prior to resuming the boring operation.
15. Any surfaces damaged by the work shall be restored to the preconstruction conditions at no additional cost to the Department, and with no increase in contract time.
16. Written confirmation from adjacent property owners shall be necessary when additional Right of Way is required.