26 05 45 Directional Boring – High Density Polyethylene (HDPE) Conduit

1. **General:**
   
   A. The use of directional boring shall be considered to avoid disturbing paved areas and to avoid damage to tree root systems.

2. **Boring Requirements:**

   A. Listed HDPE conduit shall be utilized.

   B. Drilling fluids and additives shall be non-toxic.

   C. A vacuum truck shall be employed for all bores. Drilling fluids shall not be allowed to collect on the ground.

   D. Careful attention shall be given to the proposed phasing of bores and staging of equipment to avoid interference with trees and landscaping, and to minimize the disruption of vehicle and pedestrian traffic. Note that 25'-30' of staging area is needed at the end of the proposed bore for the boring rig.

   E. Based on site conditions and routing of the bore, receiving pits shall typically be utilized. Pit sizes shall be kept to a minimum.

   F. Length of all bores shall be limited to 300’ where possible to avoid excessive pressures and thereby reduce the risk of uncontrolled broaching of drilling fluids to the surface. In-ground composite concrete boxes shall be used at junction points of bores.

   G. Efforts shall be made to maintain bores 5’ minimum below grade beneath roads and trees.

   H. Efforts shall be made to bring termination points up to approximately 3’ below grade in locations where bored conduits is to be intercepted.

   I. Transitions from HDPE to conduits of other materials shall be made using approved methods. Connections between HDPE and PVC conduit shall be made with BONDUIT adhesive or prior approved equal, installed per the manufacturer’s instructions.

   J. Refer to “Excavation and Backfill” section of these standards for all excavation. Unapproved excavation within the drip line of trees is prohibited.

   K. The University shall be notified immediately of stuck pipe, fluid broaching, or other problems, and they shall be kept fully informed of all efforts to mitigate the effects of these situations.