

About Horizontal Directional Drilling



This image gives an idea of how the forcemain would be installed using the Horizontal Direction Drilling (HDD) technique. This conduit was installed using HDD and runs an entire City block, going under trees, carriage walks, and threading through other utilities. It pops out of the ground like this at the other end. (There are two conduits in this segment, Woodcrest would typically have only one).

Here's how it works. A drilling machine sits at one end of the run. It drills down into the ground at a low angle until it reaches the desired depth. The "mini-tunnel" is leveled at that point with the machine's steerable drilling head and the tunnel is continued to the other end of the run where it then points back up to reach the surface. Drilling mud is pumped in the whole time to keep the hole open and lubricate the drilling and pull-back. One end of a big spool of conduit is hooked on to the protruding drilling rods, and the rods and conduit is pulled back through. The conduit is disconnected from the rods and cut off at the spool end – leaving what you see in this picture. Another crew will come later, dig down at the exposed ends, and make needed connections, leaving only small areas at each end of the run to restore.

This run of about six hundred feet, with a few others in the neighborhood, was done in one day.