

## MILLER PIPELINE PNEUMATIC HOLE-HOGGING BEST PRACTICES

### 1. General

Prior to any excavating or hole-hogging, the appropriate One Call agency shall be notified in advance to locate all underground structures and utilities.

All underground structures and utilities that have been located within the construction limits, which crosses or runs parallel to the proposed work, **shall be exposed to the required limits through the use of hand-digging or vacuum/hydro excavating methods.** Adequate clearances shall be verified in all situations. All spot holes shall be excavated in a manner to prevent damage.

If our contract requires us to locate customer owned lines (specifically gas mains and services), the locating will be performed by the OQ qualified crew foreman. The foreman is required to obtain prints from the owner prior to locating. The prints should be large enough to clearly see all potential conflicts. If the owner is unable to provide adequate drawings, the foreman must notify the local superintendent.

If the crew foreman elects to delegate locating to a crewmember. The foreman shall ensure the delegated crewmember is responsible, understands customer related prints, and OQ qualified to locate gas mains and services.

*(Locating is a task that can be performed under Span of Control for most utility customers. Know your customer standards as it pertains to locating and the use of Span of Control).*

Prior to installation activities, the crew foreman and personnel designated to operate the hole-hog will walk the job and identify all potential conflicts. Any HCUs that will be crossed shall be spotted to prevent damage and ensure adequate clearance between the HCU and the hole-hog is achieved.

This site walk by the foreman and the person designated to operate the hole-hog will include a review of all sewer locate cards for accuracy and to ensure that there are no UTPs (unable to push) within the intended path of the hole-hog. If any UTPs are identified, use of the hole-hog on that property is prohibited until a positive locate of that lateral is performed. *(The foreman can choose to open cut when confronted with a UTP)*

**All UTPs will have their locations clearly marked/identified on construction drawings/prints and on sewer locate cards.**

### 2. Perpendicular Hole-Hogging (Gas & Other)

Prior to hole-hogging across existing utility lines or buried structures of any type, physical verification is required by either hand digging or vacuum/hydro excavation, in accordance with state laws. When crossing **High Consequence Utility Lines** (see examples below), spot holes will extend at least 24" on either side of the actual utility line or structure and at a minimum, to the proposed depth of the bore.

- High Consequence Utility Lines (HCUs) include but are not limited to: Gas Lines (mains & services), Electric Lines, Water Mains, Telephone Duct Runs, Toll Cables, & Fiber-Optic Lines.

**3. Sewer Laterals** shall also be treated as high consequence utilities, with the following exceptions:

- 1) If electronic locates have been completed and it is determined that there will be more than 24" of clearance between the outside edge of the lateral and the hole-hog, then no further excavation is required.

**Note:** This requires knowing the size of the sewer lateral; if unknown assume the lateral is 6 inches in diameter.

- 2) If the lateral is inspected with CCTV units after the hole-hog process, and before the new main/service is energized, no excavation is required.
- 3) If through a thorough, physical inspection of the property has determined that the lateral will not conflict with the bore path, no excavation is required.
  - a. Example- the sewer enters the property from the rear in the basement and is 8-10 feet deep and the bore path is in the front of the property at 36"-40" deep there would be no conflict.

**4. Hole-Hogging Operation**

- Always operate the hole-hog per manufacturer's recommendations.
- Always wear the required PPE when operating the hole-hog (Safety Glasses, Hearing Protection, cut-resistant gloves)
- Design the hole-hog shot to shoot away from the HCU whenever possible. For example, start the hole-hog so that it is travelling away from the gas main. If multiple HCUs are to be crossed, ensure spot holes are large enough to see the hole-hog prior to it crossing or contacting the HCU.
- Connect the hole-hog to the hose and stretch it out from the entry hole to the exit hole and clearly mark the hose with tape at the point where the nose of the hole-hog should reach the exit pit. If crossing multiple utilities, mark the hose at the necessary intervals to avoid damage. Once the hole-hog is in operation, at least one employee shall watch the hole-hog's progress to ensure the hole-hog does not stop, slip into reverse, and to monitor proximity of the mark on the hose to the spot hole or exit pit. (Even when not crossing or travelling towards a utility, the hose shall be marked and monitored for the reasons stated above).

- Do not leave the hole-hog unattended while it is in operation.
- Dig the start pit and exit pits large enough to manipulate the hole-hog into position and “walk” it out whenever possible. This helps prevent an errant shot, saves time, and eliminates the risk of backing over the hose or having the bore hole collapse during reversal of the hole-hog. (If you must back the hole-hog out of the bore hole maintain hold of the hose to prevent the tool from backing over the hose and getting stuck in the bore path.)

## 5. Parallel Hole-hogging

**For all parallel use of the hole-hog, crews shall defer to Miller Pipeline’s internal Directional Drilling Procedure for minimum clearances and shall spot the utility at a minimum of 50’ (typical hose length for most pneumatic hole-hog piercing tools) to prevent utility damage.**

**Note: These are Miller Pipeline’s minimum standards. Minimum clearance allowed by state law must be maintained at all times. If the standards of the customer or state law exceed those of Miller Pipeline, the customer or state requirements shall apply.**

Key Terms:

HCU- High Consequence Utility

UTP- Unable to Push (could not locate the full length of the sewer lateral)

CATV- Cable Television

State Law- Reference State One-Call laws

OQ- Operator Qualification

Span of Control- A person not holding specific OQ may perform a task under direct observation of a person holding OQ for that specific task. The person holding OQ must be close enough to respond in the event of an emergency or Abnormal Operating Condition (AOC). There are certain tasks that do not allow Span of Control; plastic fusion/joining, welding, & tapping. Some customers have added to the list of tasks not allowed to be performed under Span of Control and it is important to understand and know your specific customer standards/requirements.

Rev Level	Rev Date	Description of Change