

## Traditional Line Crossing Technique VS. LINE ALERT® Panel

### Scenario – New pipeline going over existing deep line

#### Traditional Line Crossing

Step 1: Excavator digs to approximate stop zone using locate stake marking & lead hand with tape measure. If the trench is over 4' deep the hoe must slope the bank to allow ingress/egress. Lead hand enters ditch & manually exposes the line using shovel or obtains depth reading using probe. Final step uses a tape measure to estimate depth from surface to the line.

*Lead Hand is in the ditch during this process*

*Hoe is stopped during this process*

*Existing line encounters additional stress by being re-exposed or hit by probe*

Step 2: Excavator digs the remaining allowable depth to the final stop zone. If the trench is over 4' deep the hoe must slope the bank to allow ingress/egress. Lead hand enters ditch & manually exposes the line using shovel or obtains final depth reading using probe and confirms they are at the stop zone. **If not repeat this step.**

*Lead Hand is in the ditch during this process*

*Hoe is stopped during this process*

*Existing line encounters additional stress by being re-exposed or hit by probe*

Step 3: Now that clearance depth over the line has been determined, the line is filled back in at the bottom of the trench. The excavator then cleans the trench at the determined depth and moves on.

#### LINE ALERT Crossing

Step 1: Excavator digs to exact stop zone using LINE ALERT as guide.

Step 2: Now that clearance depth over the line has been determined, the line is filled back in at the bottom of the trench. The excavator then cleans the trench at the determined depth and moves on. No sloping is required as labourer doesn't have to enter the trench.

### SUMMARY OF EFFICIENCY AND CONSISTENCY

#### Traditional Line Crossing

# of Times Excavator has to stop and be idle: 1 – 2 times  
# of Times Labourer must enter ditch and dig: 1 – 2 times  
# of Times Existing Line is Stressed: 1 – 2 times  
Sloping Required – YES if trench over 4' deep

Consistency of Crossing:

Varies with labourer experience

Varies with ground type and soil conditions

Varies with vachole

Estimated Depth

#### LINE ALERT Crossing

# of Times Excavator has to stop and be idle: ZERO times  
# of Times Labourer must enter ditch and dig: ZERO times  
# of Times Existing Line is Stressed: ZERO times  
Sloping Required – NO

Consistency of Crossing:

Performs consistently and accurately regardless of experience, ground type, soil conditions or vachole

Accurate Depth to one inch

**LINE ALERT provides a CONSISTENT and CONTROLLED Excavation environment for line crossings, improving EFFICIENCY and SAFETY.**