

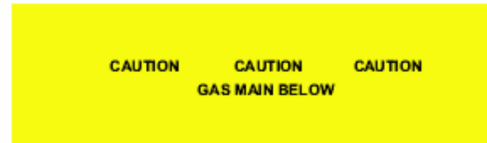
Trenching Details

Use of Marker Tape

When open cut techniques are employed, suitable marker tape with an appropriately marked legend shall be laid above mains of all sizes, to minimise the risk of interference damage. This should be placed at a convenient depth between the backfill and sub-base layers in road or footpath constructions, or 250mm above the crown of the main in open ground, see examples below.



Detectable marker Tape



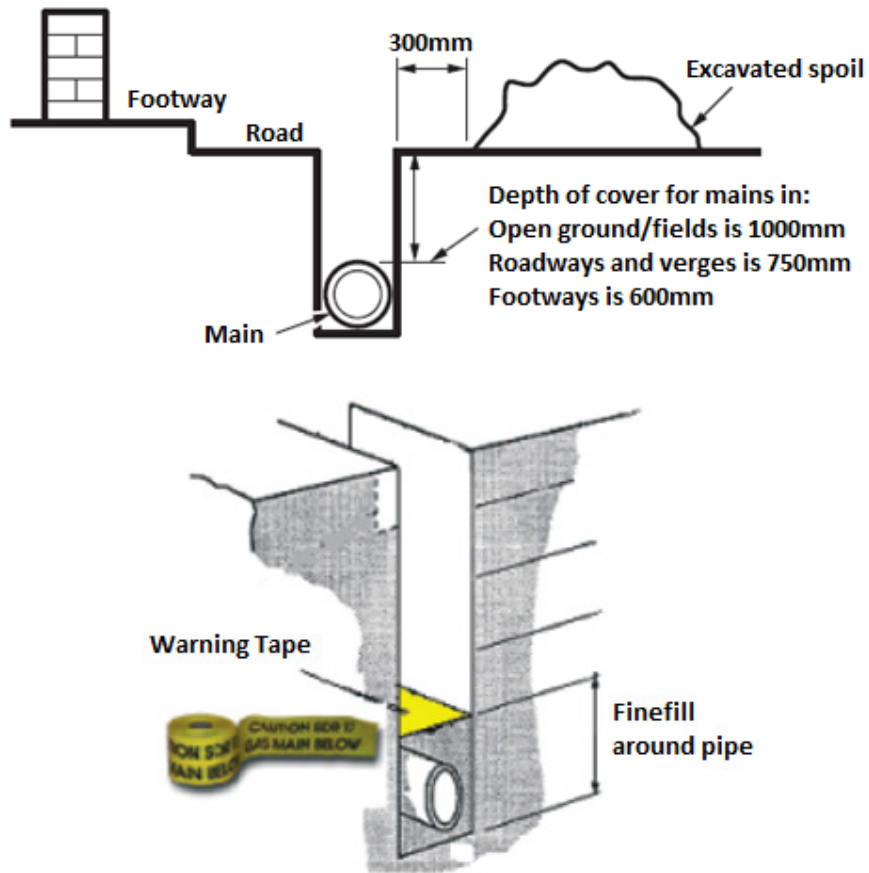
Non-Detectable Marker Tape

Factors to Be Taken Into Account by Operational Managers

The following need to be taken into account when engaged in a project involving open cut main laying:

- The connection point(s) to the existing system need to be established and confirmed by excavation, prior to laying mains to the provisional location.
- Ensure that excavated material is correctly positioned above the trench, see Typical Trench Layout.
- The method of spoil separation or removal and importing of materials needs to be established.
- To avoid damage to PE pipes or the protective coating on other pipe materials/fittings, it may be necessary to import a suitable backfill for pipes which are laid in ground that are potentially hazardous to ensure they are free from hardspots, sharp stones, etc. Under such circumstances the bottom of the trench should be excavated to 75mm below the required depth and a fine fill material should be laid to provide a firm, level and compacted bed for the pipe. Backfill around and over the pipe should be similar, see Typical Trench Layout.
- Trial holing of the route should be undertaken to ensure that a satisfactory route can be found.
- Responsibility for trench inspections, especially where shoring of the excavation is necessary.

- Ensure that the maximum amount of pipe possible is backfilled prior to pressure testing.
- Ensure that the as-laid route is accurately recorded.



Typical Trench Layout

Example Trench for 180mm PE in Open Ground/Fields

