

SECTION 8 - TRENCHING

A. GENERAL TRENCHING REQUIREMENTS

1. This work shall include:
 - a. Excavating trenches for all utilities except Electrical Service utility work.
 - b. Compacted bedding under utilities and fill to sub-grade elevations. This Contract will be responsible for the individual utilities shown on the Drawings.
 - c. Backfilling and compaction over all utilities.

2. Field Measurements

Verify that survey benchmark and intended elevations for the work are as shown on Drawings.

B. EXECUTION

1. Examination

Excavated materials may be reused as fill if approved by the Engineer's Representative.

2. Preparation

- a. Identify required lines, levels, contours, and datum.
- b. Protect benchmarks, sidewalks, paving and curbs from excavation equipment and vehicular traffic.
- c. Protect above and below grade utilities which are to remain.

3. Excavation

- a. Excavate subsoil required for storm sewer, sanitary sewer, water, and gas piping to municipal utilities.
- b. Unless otherwise shown or specified, the depth of trenches at the exterior of the building shall provide not less than 48 inches of cover over water lines and not less than 30 inches of cover over sanitary and storm sewers.
- c. Cut trenches sufficiently wide to enable installation of utilities and allow inspection.
- d. Excavation shall not interfere with the normal 45 degree bearing splay of foundations.

- e. Hand trim excavation. Hand trim for bell and spigot pipe joints. Remove loose matter.
- f. Correct unauthorized excavation at no cost to Owner.
- g. Stockpile excavated material in area designated on site and remove excess material not being used, from site.
- h. Install magnetic locating tape.

4. Bedding

Support pipe during placement and compaction of bedding fill with select backfill as approved by the Engineer's Representative.

5. Backfilling

- a. Backfill trenches to the contours and elevations indicated on the Contract Drawings with unfrozen materials. Use stone as specified under all paving and parking areas.
- b. Systematically backfill to allow maximum time for natural settlement. Do not backfill over porous, wet, frozen or spongy subgrade surfaces.
- c. Granular Fill
Place and compact materials in continuous layers not exceeding 6".
- d. Soil Fill
Place and compact material in continuous layers not exceeding 6" compacted depth.
- e. Maintain optimum moisture content of backfill materials to attain required compaction density.

6. Tolerances

- a. Top Surface of Backfilling - Under Paved Areas: Plus or minus one inch from required elevations.
- b. Top Surface of General Backfilling - Plus or minus one inch from required elevations.

7. Protection of Finished Work

- a. Protect finished work under the Standard Contract Provisions.
- b. Re-compact fills subjected to vehicular traffic.

END OF SECTION