UTILITY CONSTRUCTION IN THE RIGHT-OF-WAY

References to materials are described in detail in the City of Knoxville's Standard Specifications.

Excavation or tree cutting/trimming

- Repair such that it is left in equal or better condition than prior to the work.
- May require new trees, if trees are removed.
- May require deteriorated areas adjacent to the construction to be nominally improved during the repair of utility related cuts.

Construction under roadway, curbs, gutters, sidewalks, or less than 3 feet from the outside edge of the roadway section

- Backfill with Mineral Aggregate Base as detailed on the "Standard Detail for Trench Cut Repairs".
- 57 or 67 stone shall not be used for trench backfilling.

Construction occurring 3 feet from the outside edge of the roadway section

- Backfill with:
  - Fine, compactable, soil free of sod, brush, roots, and other perishable material and
  - Stones having a maximum dimension of more than six (6) inches.
  - Material compacted in layers six (6) inches or less to 95% of the Standard Proctor Density at the optimum moisture content as determined by AASHTO T99, Method D.
- Repair in equal or better condition than prior to the work, including matching existing materials such as rip rap, concrete ditch, etc.
- Furnish the Engineering Department with the Standard Proctor Compaction curve for soil used for trench backfill material.

Utility cuts

- Must be repaired immediately after backfilling.
- Must be repaired in accordance with the "Standard Detail for Trench Cut Repairs".

Concrete cuts

- Shall occur at contraction or expansion joints only.
- Where existing construction and expansion joints are encountered in concrete pavement cuts, the Engineering Department shall designate the location, size, and materials to construct joints in the new concrete surface.

Asphalt and concrete cuts

- Saw-cut to provide a smooth edge.
- Do not jackhammer the edges of the cut.

Concrete sidewalk and street panels (Removing and replacing)

- The full concrete sidewalk and concrete street panels should be removed and replaced.
- Do not cut trenches or form new joints in the concrete sidewalk or concrete street.
- In extremely wide areas, the Engineering Department may approve creating limited new joints to accommodate replacing only part of the area.

Accessible ramps

- Meet the City of Knoxville's Standard Detail, COK-13 "Standard Detail for Curb Cuts and Tactile Warning Systems".

Subsurface

- Compact according to the Standard Specification for Mineral Aggregate Base, Section 5.0.

Concrete streets that previously overlaid with asphalt

- Repair with asphalt.
- Increase the depth of the asphalt replacing the concrete by 50% plus any overlay.
- Increase the total asphalt depth by 1.5 times the concrete thickness plus the asphalt overlay thickness.

Surface textures and colors

- Match the existing surface, as closely as possible.

Sidewalks in historical areas

- Replace with concrete meeting the requirements of Technical Specification 15.0, Concrete.
- The concrete mix design shall contain natural brown silica sand and no fly ash.

Brick and specialty paving

- Repair using identical materials, i.e., brick, paver, and mortar color and size.
- Reconstruct to match existing line and grade.

Painted surface markings

- Replace markings such as lane lines by carefully matching the existing markings.
- Thermoplastic markings such as crosswalks, turn arrows, and STOP lines shall be replaced by the Engineering Department at the utility's expense.
- Upon completion of construction, the Engineering Department's Traffic Section shall be notified at (865) 215-6100 to allow for the replacement of Thermoplastic markings damaged or removed by the utility company.

Utility installations resulting in obstructions in the ROW

- Provide a clear zone of 10 feet from the edge of pavement or face of concrete curb to the obstruction.
- Any encroachment upon the clear zone must be approved by the Engineering Department.
- Obstructions shall not be placed within an existing sidewalk without prior approval from the Engineering Department.