

Construction Notes
Utility Work in Right-of-Way

City of Knoxville
Civil Engineering Division

Any area in which excavation or tree cutting/trimming is required for utility maintenance or improvement should be repaired such that it is left in equal or better condition than prior to the work. Repairs should match color, texture, and joint pattern of the areas being replaced. The removal of trees will in some cases require the planting of new trees. The Director of Engineering may require deteriorated areas adjacent to the construction be nominally improved during the repair of utility related cuts. The following are additional construction notes:

1. Any construction which occurs under the roadway, curbs, gutters, sidewalks or less than 3 feet from the outside edge of the roadway shall be backfilled with Mineral Aggregate Base as detailed on the Standard Detail for Trench Cut Repairs. Stone classified as No. 57 or 67 by the Tennessee Department of Transportation Standard Specifications shall not be used for trench backfilling without prior approval by the Engineering Department.
2. Any construction which occurs more than 3 feet from the outside edge of the roadway, but within the right-of-way, shall be backfilled with fine compactable soil which is free of sod, brush, roots, and other perishable material, and which is free of stones having a maximum dimension of more than 6 inches. Also, this material shall be compacted in layers of not more than 6 inches to 95% of the Standard Proctor Density at the optimum moisture content, as determined by AASHTO T99, Method D. These areas shall be repaired such that it is left in equal or better condition than prior to the work. This includes matching existing materials such as rip rap, concrete ditch, etc. The utility company shall furnish the Engineering Department with the Standard Proctor compaction curve for any soil used as trench backfill material.
3. All utility cuts must be repaired immediately after backfilling and in accordance with COK-12, Standard Detail for Trench Cut Repairs.
4. All references to materials are described in detail in the City of Knoxville Technical Specifications.
5. All concrete cuts shall occur at contraction or expansion joints only. Where existing construction and expansion joints are encountered in concrete pavement cuts, the City of Knoxville shall designate location, size and materials to construct joints in the new concrete surface.
6. All asphalt and concrete cuts shall be saw-cut to provide a smooth edge. Jackhammering the edges of the cut is not acceptable.
7. Remove and replace full concrete sidewalk and concrete street panels. Do not cut trenches or form new joints in the concrete sidewalk or concrete street. In the case of an extremely wide area, the Director of Engineering may approve creating limited new joints to accommodate replacing only part of the area.
8. The subsurface shall be compacted according to the Technical Specifications for Mineral Aggregate Base, Section 5.0.

Construction Notes (continued)

9. Existing concrete streets that have been overlaid with asphalt shall be repaired with asphalt. The depth of asphalt replacing the concrete shall be increased by 50% (plus any overlay). Thus, the total asphalt depth shall be 1.5 times the concrete thickness, plus the asphalt overlay thickness.
10. Surface textures and colors shall match, as close as possible, the existing surface.
11. Brick, or other specialty paving, shall be repaired using identical materials (e.g., brick or paver color and size, mortar color) and reconstructed to match existing line and grade.
12. Replace painted surface 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 Traffic Engineering Division shall be notified at 215-6100 to allow for timely replacement of thermoplastic markings destroyed by the utility company.