Section 23.0

Knoxville, Tennessee March 2013

## TECHNICAL SPECIFICATIONS FOR ADJUSTING STORM SEWER FRAMES

### 1. <u>Description</u>

This item shall consist of adjusting storm sewer frames and furnishing all labor, materials, and other items necessary to bring them to the grades as shown on the Plans or as specified by the Engineer.

The adjustment of frames includes only storm sewer frames, such as storm sewer manholes, and catch basins. All other frames such as water, electric, gas, etc. shall be adjusted by the Knoxville Utilities Board or other companies and are not included as a part of this Contract unless otherwise noted.

### 2. <u>Materials</u>

- (a) Concrete or mortar shall be Class A. Mortar shall be one part Portland cement and two parts sand. Concrete materials shall comply with the Specifications for Concrete.
- (b) Brick shall conform to AASHTO M91, Grade SM. Sand for mortar shall conform to AASHTO M45. Hydrated lime shall conform to ASTM C 206.
- (c) Backfill material shall conform to the Specifications for Mineral Aggregate Base.

#### 3. Construction Requirements

- (a) All Sewer frames shall be reset as follows:
  - 1) Manholes that are more than 1/4 inch over or under the specified grade.
  - 2) Catch basins that are specified on the Plans or determined necessary by the Engineer.
- (b) The sewer frames shall be accurately set to line and grade by one of the following methods:
  - 1) Removing the frame and cover grating and raising or lowering the masonry top of the structure and resetting on a cushion of cement mortar and brick.
  - 2) Use of an adjustment ring fitted to the manhole frame.
- (c) Excavation shall be performed whenever necessary to bring the frames to grade on the Plans and as designated by the Engineer. Backfill material and compaction shall conform to the Specifications for Mineral Aggregate Base.
- (d) All frames shall be thoroughly cleaned of all excess mortar and accumulations of silt, clay, debris or foreign matter of any kind and shall be free from such at the time pavement is to be laid.
- (e) Flat metal manhole covers shall be temporarily placed immediately ahead of the paver so that the paver shall never pass over crowned manholes. A sufficient

number of flat covers shall be available on the job site to allow the paving operation to progress smoothly.

### 4. <u>Measurement</u>

The number of storm sewer frames adjusted and accepted will be measured for payment per each.

# 5. Payment

Payment will be made at the Contract unit price per each frame adjusted and shall be full compensation for all work, materials, labor, and incidentals required to complete the work in accordance with the Plans and Specifications.