Rev. 3/17

TECHNICAL SPECIFICATION 270
BRICK PAVERS, RESET BRICK AND VARIOUS PAVERS

270.1 SCOPE OF WORK

This technical specification covers the furnishing of all labor, materials, testing, submittals, tools, and equipment necessary to construct brick paving, or reset brick and other paving materials such as stone, slate, etc., as shown on the plans or as directed by the Engineer. Prior to installation of the bricks, all work within the brick paver limits shall be complete and shall include, but not be limited to, the adjustments of all public and private frames, grates, covers and utility boxes.

270.2 MATERIALS

A. Bricks:

Paving bricks shall conform to ANSI/ASTM C 902-79a Standard Specification for Pedestrian and Light Traffic Paving Brick, Class SX, Type II (Referred to as Glen-Gary Paver) or equivalent as approved by the Engineer.

B. Filter Fabric:

Filter fabric conforming to Form 817, Section M.08.01.19 shall be used when dry setting brick.

C. Base Material:

The processed aggregate base under the concrete shall be medium gradation conforming to Technical Specification 210 – "Processed Aggregate Base".

D. Leveling Course:

The leveling course for dry set bricks shall be commercial grade crushed stone dust.

E. Joints:

The paver joints shall be filled with either commercial grade crushed stone dust, masonry sand, or commercial grade polymeric stabilizing sand, as shown on the plans or as directed by the Engineer.

F. Mortar:

The base material leveling course for mortar set brick shall be Portland Cement Concrete which shall conform to all provisions of Technical Specification 265 – "Portland Cement Concrete Sidewalks and Ramps".

G. Joint Material:

Transverse expansion joint material shall be asphalt impregnated fiber material, Kork Pak, Proflex Reflex, or approved equivalent.

The expansion joint between the curb and concrete/brick shall be Harris Strip-Off closed cell foam with peel-off top or approved equivalent. The joint using closed cell foam material shall be sealed with Sikaflex polyurethane joint sealant, or approved equivalent.

H. Dowels:

Dowels shall be 5/8 inch diameter x 24 inch long intermediate grade steel conforming to AASHTO M-38 and shall be smooth. Plastic sleeves covering one end of the dowel shall be 5/8 inch diameter x 12 inches long, Speed Dowel, or approved equivalent.

I. Edge Restraints:

Edge restraints shall be snap-edge Pave Tech – Pave Edge, or approved equivalent.

270.3 SUBMITTALS

The following submittals shall be submitted to the Engineer for review and approval prior to installation:

- Two bricks shall be submitted; replacement brick shall match the existing brick as closely as possible
- Manufacturer's cut sheet for filter fabric
- Gradation test results for processed aggregate
- Material certification for commercial grade stone dust
- Material certification for polymeric stabilizing sand
- Material certification for masonry sand
- Concrete specifications from supplier
- Manufacturer's cut sheet for joint materials
- Manufacturer's cut sheet for dowels
- Manufacturer's cut sheet for edge restraints

270.4 CONSTRUCTION METHODS

The construction of the processed aggregate and concrete base material supporting the brick pavers shall be in accordance with Technical Specifications 265.2 and 265.4 for 5 inch concrete sidewalks.

The area of the mortar set brick pavers shall be excavated to a depth of approximately 16 inches.

Where the plans specify mortar set brick, the bricks shall be installed on 8 inches of compacted processed aggregate base and 5 inches of Portland Cement Concrete installed monolithically with the adjacent sidewalk as shown in the plans and details. All mortar set bricks shall be set on a bed of mortar. All joints shall be mortared, being careful not to get mortar on exposed faces of brick.

There shall be no expansion joint between the concrete sidewalks and the brick pavers. Transverse expansion joints in the concrete sidewalks shall be carried through the concrete base and the brick pavers. The transverse expansion joints shall also be carried through the brick pavers. Transverse dummy joints in the concrete sidewalk shall not be carried through the concrete base under the brick pavers. An expansion joint shall be made between the granite curb and concrete/brick face.

Where the plans specify dry set brick, they shall be installed on 8 inches of compacted processed aggregate with filter fabric placed on top of the aggregate. The leveling course on top of the filter fabric shall consist of a minimum ¾ inches (maximum 1 inch) of compacted crushed stone dust. When placed, the bricks shall tightly abut each other. Exposed edges of bricks shall be set on a plastic angle edge restraint. Final setting of brick shall be with a plate compactor taking care to have sufficient material so as to not damage the brick. After compacting with masonry sand, the area shall be flushed with water to ensure that joints have been filled. Any area that shows gaps in the joints shall be recompacted and appropriately swept, misted, or flushed.. All joints shall be filled with commercial grade crushed stone dust, masonry sand, or commercial grade polymeric stabilizing sand as shown on the plans or as directed by the Engineer.

If the polymeric sand manufacturer specifies a water mist for setting the joints, all the brick and adjacent areas shall be swept clear of all polymeric sand residue.

270.5 MEASUREMENT

Measurement for this item will be based on the number of square feet of bricks or pavers, completed and accepted in place including excavation and materials.

270.6 PAYMENT

Payment for this item will be based on the unit price per Square Foot of brick paving constructed and accepted, including all labor, materials, testing, submittals, tools, and equipment necessary to complete the work as specified.

PAY ITEM	**PAY UNIT**
Mortar Set Brick	S.F.
Dry Set Brick	S.F.
Reset Brick/Stone/Slate	S.F.