855 - CONCRETE PAVER STONES

855.1 DESCRIPTION

Solid concrete paver stones shall be used in the medians or as shown on the plans.

a. Work Included

Supply and place sand laying course.

Supply and install interlocking concrete paver stones in quality, shape, thickness and color as specified.

Supply and place all accessory items as required by the contract.

b. Product Handling

Paver stones shall be delivered and unloaded at jobsite on pallets and bound in such manner that no damage occurs to the product during handling, hauling and unloading.

855.2 MATERIALS

a. Interlocking Concrete Paver Stones

Paver stones shall be red, cobblestone style, in accordance with ASTM C936. The layer should consist of full stones, (4 5/8" X 7" X 2 3/8"); two thirds stones, (4 5/8" X 4 5/8" X 2 3/8"); and one third stones, (4 5/8" X 2 5/16" X 2 3/8"), or as approved by the City Engineer. The mix of stones sizes shall be approximately 28% full size, 57% two thirds size and 15% one third size.

b. Concrete Base Course

The concrete base course shall be KCMMB 4K concrete. The concrete base course shall be the responsibility of the paver stone installer.

c. Sand Laying Course

The sand laying course shall be a well graded, clean washed, sharp sand with 100% passing a 3/8" sieve size and a maximum of 3% passing a No. 200 sieve size. This is commonly known as manufactured concrete sand, limestone screening, or similar. Mason Sand will not be permitted. The sand laying course should be the responsibility of the paver stone installer.

855.3 CONSTRUCTION REQUIREMENTS

Prior to commencing placement of the concrete paver stones, submit to the City Engineer a sample stone for each color. No stones shall be installed prior to approval by the City Engineer.

a. Installer

The paver stone installer/contractor must have related experience in the installation of interlocking concrete paver stones.

b. Concrete Base Course

The concrete base course shall be shaped to the grade and cross section as shown on the plans with an allowable tolerance of 1/4". The base course shall be 3-3/8" below finish grade for 2-3/8" pavers.

c. Construction of the Sand Laying Course

The finished base course shall be approved before the placement of the sand laying course. The uncompacted sand laying course shall be spread evenly over the area to be paved and then screened to a level that will produce 1" thickness when the paver stones have been placed and vibrated. Once screened and leveled to the desired elevation, the sand laying course shall not be disturbed in any way.

d. Laying of Concrete Paver Stones

The paver stones shall be installed in rows perpendicular to the major axis of the median being paved. Within each row the stone sizes shall be randomly mixed so that joints between stones are not normally aligned with joints between stones in adjacent rows. No joints shall be aligned for more than three consecutive rows. The paver stones shall be laid in such a manner that the desired pattern is maintained and the joints between the stones are as tight as possible. For maximum interlock it is

recommended that joints between stones do not exceed 1/8". String lines should be used to hold all pattern lines true.

All edges of the installed paver stone shall be restrained by the concrete curb, concrete sidewalk, or suitable method of preventing movement of edge stones.

The gaps at the edge of the paver surface shall be filled with standard edge stones or with stones cut to fit. Curing shall be accomplished to leave a clean edge to the traffic surface using a double-headed breaker or a masonry saw. However, when cutting precision designed areas, a masonry saw is recommended. Whenever possible, no cuts should result with a paver less than 1/3 of original dimension.

Paver stones shall be vibrated to their final level in the sand laying course by two or three passed of a vibrating compactor capable of 3,000 to 5,000 pounds compaction force with the surface clean and joints open. After vibration, clean concrete sand containing at least 30% of 1/8" particles shall be spread over the paver stone surface, allowed to dry, and vibrated into the joints with additional passes of the plate vibrator so as to completely fill the joints.

Surplus material shall then be swept from the surface. Upon completion of work covered in this Section, the Contractor shall clean up all work areas by removing all debris, surplus material and equipment from the site.

After final vibrating, the surface shall be true to grade and shall not vary by more than 1/4" when tested with a 10' board at any location on the surface.

855.4 MEASUREMENT AND PAYMENT

The Engineer will measure the concrete paver stones by square foot of exposed surface. Payment for "Concrete Paver Stones" at the contract unit price bid is full compensation for the specified work.