

## SPECIAL SPECIFICATION

### 5582

### Landscape Paver Repair

1. **Description.** Repair or replace damaged or missing landscape pavers.
2. **Materials.** Furnish materials in accordance with:
  - A. **Base.** Furnish base conforming to the original conditions.
  - B. **Pavers.** Furnish pavers meeting the requirements of ASTM C 936 and conforming to the original shape, color, laying pattern, and dimensions.
  - C. **Bedding Sand.** Furnish fine aggregate as specified in Item 421, "Hydraulic Cement Concrete," with the gradation given in Table 1.

**Table 1**  
**Bedding Sand Gradation**

Sieve Size	Percent Passing
3/8"	100
No. 4	85–100
No. 100	10–30

Spread the sand at a uniform moisture content of 3% to 7%. Protect the sand against rain if it is stockpiled on-site before spreading.

- D. **Joint-Filling Sand.** Meet the requirements for bedding sand, except with the gradation given in Table 2.

**Table 2**  
**Joint-filling Sand Gradation**

Sieve Size	Percent Passing
No. 4	100
No. 8	90–100
No. 16	60–100
No. 30	25–70
No. 50	10–30
No. 100	2–15
No. 200	Less than 10

### 3. Construction Methods.

- A. **Base Installation.** Place and compact the base to match the original conditions. Grade the base surface so that the finished grade of the pavers matches the original conditions or as directed by the Engineer.

- B. Bedding Sand Installation.** Screed a layer of uncompacted sand to a depth of 1 in. to 1-1/2 in. over the compacted base. Do not use bedding sand for leveling.

Maintain the spread sand in a loose condition and protect against precompaction before and after screeding. Protect screeded sand against accidental precompaction, including compaction by rain or dew. Loosen precompacted sand or screeded sand in advance of the laying face only to an extent to which paving will be completed that day. Lightly screed the sand in a loose condition to the predetermined depth slightly ahead of laying the paving units.

- C. Paver Installation.** Replace damaged or missing paving units on an uncompacted, screeded sand bed to the original required laying pattern or as directed by the Engineer. Align all joints and provide nominal 1/8-in. gaps between adjacent units. Place the first row to abut an edge restraint with a gap of 1/8 in. Place at a suitable angle to the edge restraint to achieve the required visual orientation of paving units in the completed pavement. In each row, lay full-size units first followed by closure units consisting of at least 25% of a full unit. Cut units using a power saw. To fill smaller edge spaces, use a grout mix matching the color of the pavers that consists of 1 part hydraulic cement to 2 parts concrete sand. Use cement and sand that meet Item 421, "Hydraulic Cement Concrete."

Do not allow construction traffic on pavers during installation and compaction.

- D. Paver Compaction.** Provide a high-frequency, low-amplitude mechanical flat plate vibrator compactor with a plate area large enough to cover at least 12 paving units and that can deliver a 3,500- to 5,000-lb. centrifugal compaction force. Compact paving units immediately after placement to achieve consolidation of the sand bedding before any traffic is allowed. Bring to original design levels and profiles by at least 2 passes of the plate compactor.

Do not compact within 3 ft. of the laying face. Continue compaction until lipping has been eliminated between the adjoining units. Compact all work to within 3 ft. of the laying face at the completion of each work day.

Spread joint-filling sand as soon as practical after compaction but in all cases before the termination of each work day, before acceptance of the day's work, and before permitting construction traffic. Allow joint-filling sand to dry, and then sweep to fill the joints. Compact the pavers and joint-filling sand with a single pass of the compactor.

- 4. Measurement.** This item will be measured by the square foot.
- 5. Payment.** The work performed and measured as provided under "Measurement" will be paid for at the unit price bid for "Landscape Paver Repair." This price is full compensation for furnishing, repairing, replacing, and compacting pavers; bedding and joint-filling sand; and equipment, labor, materials, tools, and incidentals. Paver units damaged during compaction will be replaced at the Contractor's expense.