

PART B GRANULAR BASES & SURFACING

SECTION 260 GRANULAR BASES AND SURFACING

260.1 DESCRIPTION

This work consists of providing one or more courses of aggregate on a prepared surface.

260.2 MATERIALS

- A. **Subbase, Base Course, Gravel Cushion, and Gravel Surfacing** shall conform to Section 882. Granular additives (sand, rock, etc.) may be necessary to produce material of the type specified.
- B. **Clay Binder**, when required for Gravel Surfacing, shall conform to Section 883.

260.3 CONSTRUCTION REQUIREMENTS

- A. **Subbase and Base Course:** Roadway shaping shall be performed in accordance with Section 210 prior to placement of the material.

The material shall be processed by either road mix or plant mix methods. When road mix methods are used, granular additives shall be incorporated by an approved spreader box. Granular material which is dumped on the prepared surface shall be windrowed prior to incorporating additives. When plant mix methods are used, the component materials, including water shall be fed uniformly into the mixer at a predetermined rate. The plant shall be equipped with positive proportioning devices and shall thoroughly mix the individual materials.

When the material is laid by a spreader, it shall have been previously processed by a central plant. When material is laid by other means, the material in the windrow will be limited to the quantity necessary to construct a compacted layer 4 inches (100 mm) thick.

When the material is placed on shoulders adjacent to asphalt concrete or Portland cement concrete pavement, the component parts shall be mixed with water by a central plant and placed on the shoulder by a spreader.

Each layer shall be compacted to the specified density before the next lift is placed. Base Course shall be compacted to 97 percent of the maximum dry density. Subbase shall be compacted to 95 percent of the maximum dry density. The maximum dry density will be determined by SD 104, Method 4 and SD 105 or SD 114.

The final rolling of the top surface of the granular materials shall embed as many loose stones as possible. The finished surface shall be smooth and free from waves and **the Contractor shall finish the surfacing materials to within ± 0.5 percent of the typical**

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section cross slope. On newly graded projects and process in place the typical section shall be finished to within ± 0.2 percent.

The quarter crown within any 12 foot (3.6 m) transverse length (or actual lane width paved with a single paver pass) shall not exceed 0.04 feet (13 mm) when measured with a straight edge, stringline, or other suitable equipment.

- B. Gravel Cushion:** Gravel cushion shall be constructed in accordance with Section 260.3 A, except specified density is not required. Rolling shall continue until a uniform stable surface is obtained. Rollers shall be either pneumatic tired, with an effective roller weight of at least 250 pounds per inch (4.5 kilogram per mm or 4500 kg per meter) of roller width, or satisfactory vibratory compaction equipment.
- C. Gravel Surfacing:** Gravel Surfacing shall be constructed in accordance with Section 260.3 B except the material may be placed by any approved method. When clay binder is required and processing is by road mix methods, the clay shall be placed beside or upon a cut of the gravel windrow. Mixing shall continue until the clay and gravel are thoroughly mixed.

The Contractor shall spread the gravel surfacing evenly to the specified width. Watering shall be accomplished during the spreading operation. Rolling shall proceed simultaneously with the spreading and watering and continue in overlapping strips until the entire area has been rolled twice.

260.4 METHOD OF MEASUREMENT

Subbase, Base Course, Gravel Cushion, and Gravel Surfacing (including Clay Binder) will be measured to the nearest 0.1 ton (0.1 metric ton). Water and materials which are paid for under separate items will not be measured under these items.

260.5 BASIS OF PAYMENT

Subbase, Base Course, Gravel Cushion, and Gravel Surfacing, (including Clay Binder) will be paid for at the contract unit price per ton (metric ton).

If roadway shaping is required, and a bid item is not provided, payment for the granular material items will be full compensation for necessary shaping work.