

**KANSAS DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION TO THE
STANDARD SPECIFICATIONS, 2015 EDITION**

Delete SECTION 813 and replace with the following:

SECTION 813

RUMBLE STRIPS (MILLED)

813.1 DESCRIPTION

Construct rumble strips in the existing hot mix asphalt (HMA) surface by milling concave depressions into the surfaces as shown in the Contract Documents.

Construct rumble strips in the existing portland cement concrete pavement (PCCP) surface by diamond grinding concave depressions into the surfaces as shown in the Contract Documents.

BID ITEMS

Rumble Strips (Milled) (*)
Rumble Strips (Milled) (*) (Centerline)
*Asphalt or Concrete

UNITS

Station
Station

813.2 MATERIALS - None specified.

813.3 CONSTRUCTION REQUIREMENTS

a. General.

(1) HMA. Use equipment capable of milling the concave depressions with a smooth cut to the dimensions shown in the Contract Documents. Use equipment with the milling head suspended independently from the machine, and that will self-align (parallel to the shoulder surface) with the surface of the paved shoulder regardless of the shoulder slope. Mill the concave depression to obtain a relatively smooth surface, with a maximum tolerance of 1/8 inch between peaks and valleys.

(2) PCCP. Use equipment capable of diamond grinding the concave depressions with a smooth cut in PCCP to the dimensions shown in the Contract Documents. Grind the concave depression to obtain a relatively smooth surface, with a maximum tolerance of 1/8 inch between peaks and valleys.

(3) Before beginning work on the project, demonstrate to the Engineer, the ability to achieve the specified rumble strip depressions with regard to dimensions, alignment, smoothness and consistency. Construct a test strip approximately 75 feet longitudinally, at a site mutually agreed upon between the Engineer and Contractor, to demonstrate compliance with the requirements.

(4) Provide adequate guide marks (approximately 2 inches by 12 inches at approximately 30 to 50-foot intervals) for constructing the rumble strips.

(5) Do not use equipment that causes excessive ravel, aggregate fractures or spalls.

b. Rumble Strips (Milled).

(1) HMA. Clean the shoulders before constructing the rumble strips. Mill the concave depression to the dimension shown in the Contract Documents. Align the concave depressions as shown in the Contract Documents.

(2) PCCP. Clean the shoulders before constructing the rumble strips. Diamond grind the concave depression to the dimension shown in the Contract Documents. Align the concave depressions as shown in the Contract Documents.

c. Rumble Strips (Milled) (Centerline).

(1) HMA. Clean the centerlines before constructing the rumble strips. Mill the concave depression to the dimension shown in the Contract Documents. Align the concave depressions as shown in the Contract Documents.

(2) PCCP. Clean the centerlines before constructing the rumble strips. Diamond grind the concave depression to the dimension shown in the Contract Documents. Align the concave depressions as shown in the Contract Documents.

d. Clean Up.

(1) HMA. After the concave depressions are milled into the surface, use a power broom or sweeper/vacuum to collect the waste material resulting from the milling operations. Unless specified otherwise in the Contract Documents, uniformly spread the waste material just off the edge of the paved surface.

(2) PCCP. Use vacuum equipment or other continuous methods to remove grinding slurry and residue. Remove from the project and properly dispose of the material. Do not allow the grinding slurry to flow across lanes being used by traffic, onto shoulder slopes, into streams, lakes, ponds or other bodies of water, or gutters or other drainage facilities. Do not place grinding slurry on foreslopes.

813.4 MEASUREMENT AND PAYMENT

The Engineer will measure rumble strips by the station for each shoulder longitudinally along the edge of the pavement.

The Engineer will measure centerline rumble strips by the station longitudinally along the centerline of the pavement.

The Engineer will not measure bridge decks, acceleration/deceleration lanes and other sections where rumble strips are not constructed.

Payment for "Rumble Strips (Milled)", and "Rumble Strips (Milled) (Centerline)" at the contract unit price is full compensation for the specified work.

03-03-21 TST (SB)
Jun-2021 Letting