**USP857 (05-14-21)**

***(Follow all instructions. If there are no instructions above a subsection, paragraph, sentence or bullet, then include them in the project but make necessary modifications to only include project specific specifications. Delete specifications that do not apply to the project. Remove all instructions before preparing the final document.)***

## **SECTION 00857 - RUMBLE STRIPS**

Section 00857, which is not a standard specification, is included in this project by special provision.

**Description**

00857.00 **Scope** - This work consists of milling rumble strips by constructing indentations in asphalt concrete surfaces as shown or directed.

**Equipment**

00857.20 **Equipment:**

**(a) Longitudinal Rumble Strips** – Construct continuous or gap pattern longitudinal shoulder, edge line, and centerline rumble strips as shown in the Contract Documents using a rotary type cutting head with a maximum outside diameter of 24 inches. Provide a cutting head length that matches the rumble strip width as shown in the Contract Documents. Arrange the cutting head cutting tips in a pattern that provides a relatively smooth cut with approximately 1/16-inch between peaks and valleys. Attach the cutting heads to the power unit in a manner that allows the tool to self-align with the slopes of the pavement and shoulder and any irregularities in the pavement and shoulder surfaces. The cutting equipment shall be capable of cutting rumble strips of the required width in a single pass while moving in the same direction as the flow of traffic.

**(b) Transverse Rumble Strips** - Form transverse rumble strips using a rotary type cutting head 5 1/2 inches long. Arrange the cutting head cutting tips in a pattern that provides a relatively smooth cut (approximately 1/16-inch between peaks and valleys). Attach the cutting heads to the power unit in a manner that allows the tool to self-align with the slope of the travel lane and any irregularities in the travel lane surface. The cutting equipment shall be capable of cutting rumble strips perpendicular to the travel lane.

**Construction**

00857.40 **Construction** - Where rumble strips will be constructed at the same locations where permanent pavement markings will be installed, construct rumble strips within 3 weeks after temporary pavement markings have been placed for the final roadway configuration, but before installing permanent pavement markings.

After constructing the rumble strips, clean the pavement by sweeping to remove dust and other foreign matter. Dispose of all materials according to 00290.20.

**Measurement**

00857.80 **Measurement** - The quantities of longitudinal rumble strips will be measured on the length basis, at least to the nearest 0.01 mile. Measurement will be made along each rumble strip run, regardless of location or width of strip with no deductions made for gaps in gap pattern rumble strips. Breaks in the rumble strips at intersections, interchange ramps, or other locations shown will not be measured for payment.

The quantities of transverse rumble strips will be measured on the unit basis, by actual count of rumble strip clusters.

**Payment**

00857.90 **Payment** - The accepted quantities of rumble strips will be paid for at the Contract unit price, per unit of measurement, for the following items:

***(Modify this list of pay items to only include project specific pay items. Delete those that are not required on the project. Re-alphabetize the list starting with (a), then (b), etc. Obtain information from the Traffic Designer.)***

**Pay Item** **Unit of Measurement**

(a) Continuous Rumble Strips …………………………………..Mile

(b) Gap Pattern Rumble Strips …………………………..…...…Mile

(c) Transverse Rumble Strips ……………………..………...…Each

(d) Continuous Sinusoidal Rumble Strips…………………………. Mile

(e) Gap Pattern Sinusoidal Rumble Strips…………………..……. Mile

Payment will be payment in full for furnishing all materials, equipment, labor, and incidentals necessary to complete the work as specified.