

**ASPHALT CONCRETE PAVEMENT****401-3.14 JOINTS.** *Delete the last paragraph and substitute the following:*

Construct the minimum number of joints to ensure a continuous bond, texture, and smoothness between adjacent sections of the pavement. The minimum specification limit for longitudinal joint density will be 91% of the MSG of the panel completing the joint. Cut one 150 mm diameter core centered on the longitudinal joint at each location the mat is cored for acceptance density testing in the panel completing the joint. Density will be determined in accordance with WAQTC FOP for AASHTO T 166/T 275. The MSG will be determined in accordance with WAQTC FOP for AASHTO T 209.

If the average joint density for any lot is less than 91% MSG, immediately change and improve the method used for joint construction.

If the average joint density of a lot is less than 91% MSG, seal all of the joints constructed in that lot with a joint sealing method approved by the engineer. Joint sealing to occur while asphalt is clean and free of moisture, dirt or debris.

No additional cost or contract time will be paid to repair or seal joints. Seal or repair joints prior to paint striping.

**401-4.01 METHOD OF MEASUREMENT.** *Add the following.*

Joint Density. By the meter of longitudinal asphalt joints in the top pavement surface and the calculated joint density.

**401-4.05 EVALUATION OF JOINTS FOR ACCEPTANCE.** *Add the following:*

The Engineer will calculate an average of the required joint densities taken on the project. Apply an incentive or disincentive price adjustment as part of bid item 401(6) Asphalt Price Adjustment.

1. If less than 91% MSG apply the following disincentives:
  - a. The Contractor shall repair all of the asphalt joints on a project at the Contractor's expense with an approved asphalt joint sealing method as per 401-3.14.
  - b. Deduct = (\$3.00 per meter) x (meters of paved joint for the entire project) x (Project Average Joint Density% – 91%) x 100
2. If greater than 91% MSG apply the following incentive:
  - a. Add = (\$0.75 per meter) x (meters of paved joint for the entire project) x (Project Average Joint Density% – 91%) x 100

**SPECIAL PROVISION**  
**ES 03 (2004 English)**

**07/03/03**

**SECTION 401****ASPHALT CONCRETE PAVEMENT****401-3.15 SURFACE TOLERANCE.** *Add the following as the last paragraphs:*

The Engineer will measure the surface smoothness of the top lift of the asphalt in all of the driving lanes with an inertial profiler before final acceptance of the project. The Contractor shall remove and replace, or grind any portion of final pavement surface having a smoothness Profile Index (Prl) greater than 15.0 inches/mile in a 0.10 mile segment. Prl will be calculated using a 0.2 inch/mile blanking band.

After completion of corrective work, the Engineer will measure the pavement surface with an inertial profiler for a smoothness price adjustment. No measurements will be taken in turn lanes, lane transitions, within 25 feet of bridge abutments, or within 25 feet of existing pavement that requires difficult matching.

*Add the following Subsection:*

**401-4.04 EVALUATION OF PAVEMENT FOR SMOOTHNESS.** The Engineer will calculate and apply a separate asphalt Smoothness Price Adjustment as measured in accordance with subsection 401-3.15. Calculate the smoothness price adjustment as follows;

1. Smoothness Price Adjustment (\$) = SF x PAB x PQ

If PQ is less than 1500 tons, SF = 0  
 If PQ is 1500 to 5000 tons, SF = 0.1333 – 0.01666 x (Prl)  
 If PQ is 5000+ tons, SF = 0.0666 – 0.0083 x (Prl)

SF= smoothness factor  
 Prl = final measured pavement smoothness (inches/mile)  
 PAB = Price Adjustment Base, see Subsection 401-4.03  
 PQ = final pay quantity of 401(1) in tons

Apply the smoothness price adjustment as an incentive/disincentive under Bid item 401(6) Asphalt Price Adjustment.

**SPECIAL PROVISION**  
**S 91 (1998 Metric)**

**07/03/03**

**SECTION 401**

**ASPHALT CONCRETE PAVEMENT**

**401-3.15 SURFACE TOLERANCE.** *Add the following as the last paragraphs:*

The Engineer will measure the surface smoothness of the top lift of the asphalt in all of the driving lanes with an inertial profiler before final acceptance of the project. The Contractor shall remove and replace, or grind any portion of final pavement surface having a smoothness Profile Index (Prl) greater than 230 mm/km in a 160 meters segment. Prl will be calculated using a 3.16 mm/km blanking band.

After completion of corrective work, the Engineer will measure the pavement surface with an inertial profiler for a smoothness price adjustment. No measurements will be taken in turn lanes, lane transitions, within 8 meters of bridge abutments, or within 8 meters of existing pavement that requires difficult matching.

*Add the following Subsection:*

**401-4.04 EVALUATION OF PAVEMENT FOR SMOOTHNESS.** The Engineer will calculate and apply a separate asphalt Smoothness Price Adjustment as measured in accordance with subsection 401-3.15. Calculate the smoothness price adjustment as follows;

1. Smoothness Price Adjustment (\$) = SF x PAB x PQ

If PQ is less than 1350 Mg, SF = 0  
 If PQ is 1350 to 4500 Mg, SF = 0.1333 – 0.00106 (Prl)  
 If PQ is 4500+ Mg, SF = 0.0666 – 0.000532 (Prl)

SF= smoothness factor  
 Prl = final measured pavement smoothness (millimeters/kilometer)  
 PAB = Price Adjustment Base, 401-4.03  
 PQ = final pay quantity of 401(1) in Mg

Apply the smoothness price adjustment as an incentive/disincentive under Bid item 401(6) Asphalt Price Adjustment.

**SPECIAL PROVISION**  
**S 93 (ALL)**

**07/03/03**

**SECTION 401**

**ASPHALT CONCRETE PAVEMENT**

**401-4.03 EVALUATION OF MATERIALS FOR ACCEPTANCE.** *Delete second to last paragraph and replace with:* PAB = Price Adjustment Base = Engineer's Estimate of asphalt price \$\_\_\_\_ per ton(Mg).

**SPECIAL PROVISION**  
**ES 02 (2004 English)**

**2/20/03**

**SECTION 406**

**RUMBLE STRIPS**

*Delete this Section in its entirety and replace with the following:*

**406-1.01 DESCRIPTION.** Form a series of indentations into both shoulders of the pavement, and clean up debris, where indicated on the Plans.

**406-2.01 MATERIALS.** None.

**CONSTRUCTION REQUIREMENTS.**

**406-3.01 MILLING.** Construct rumble strips with a milling machine. The pavement should be compacted and be at a temperature below 80°F. Make the edges of the indentation straight, smooth and free of spalling.

Keep the travel lanes free of milling debris. Clean milling debris off pavement. Do not allow debris to impede road drainage or enter any waterways. Collect and dispose of milling debris outside the project limits, or dispose as directed by the Engineer.

**406-4.01 METHOD OF MEASUREMENT.** Section 109 and as follows:

Lump Sum. A single lump sum price for all rumble strips installed as shown on the plans.

Station. Includes a single lineal payment for rumble strips on both shoulders of the highway, with measurement by station on the centerline of the highway. Measurement will be taken where there is only rumble strip on one shoulder, but will not be taken where there is no rumble strip on the shoulders.

Linear Foot. Includes every measured linear foot of rumble strip that is installed. Measurement is to be made parallel to the centerline of the highway.

**406-5.01 BASIS OF PAYMENT.** Payment will be made under:

| Pay Item | Pay Unit |
|----------|----------|
|----------|----------|