

465 Asphaltic Surface

465.1 Description

- (1) This section describes constructing asphaltic surface for new construction including pavement, safety islands, curb, rumble strip, and flumes. This section also describes using asphaltic surface for patching, detours, and temporary construction. The department designates work under the bid items in this section only if QMP provisions specified for HMA pavements under [460](#) are not required.

465.2 Materials

- (1) Under the Asphaltic Surface, Asphaltic Surface Detours, and Asphaltic Surface Patching bid items; submit a mixture design. Furnish asphaltic mixture meeting the requirements specified for either type LT or MT mix under [460.2](#); except the engineer will not require the contractor to conform to the quality management program specified under [460.2.8](#). Use tack coat as required under [450.3.2.7](#).
- (2) Under the other 465 bid items, the contractor need not submit a mixture design. Furnish aggregates mixed with an asphaltic binder. Use coarse and fine mineral aggregates uniformly coated and mixed with the asphaltic binder in an engineer-approved mixing plant. The contractor may include reclaimed asphaltic pavement materials in the mixture.

465.3 Construction

465.3.1 General

- (1) Prepare the foundation as specified for asphaltic surfacing in [211](#).
- (2) Place using engineer-approved machine methods wherever practicable. Except for the surfacing bid items, the contractor may place material by engineer-approved hand methods. Regardless of the placement technique, spread and shape the material to the required contour without segregation.
- (3) Immediately after placement, compact the mixture to produce a dense smooth surface using ordinary compaction procedures as specified in [450.3.2.6](#) except as follows:
 - Compact safety islands as the engineer directs.
 - Compact flumes using compactors, tampers, or rollers.
 - Compact curb as specified in [465.3.2](#).
- (4) Ensure that the finished surface is smooth and contoured as the plans show or engineer directs.
- (5) Under the Asphaltic Surface, Surface Detours, and Surface Temporary bid items; straightedge the surface. Provide a finished surface with no variation greater than 1/4 inch in 10 feet. Remove and replace out-of-tolerance material or correct the surface using engineer-approved methods.

465.3.2 Asphaltic Curb

- (1) Construct asphaltic curb in one layer on a prepared asphaltic pavement or base foundation. Clean the pavement surface area the curb will occupy to ensure a good bond. Apply a tack coat to the area as the engineer directs.
- (2) The contractor may place the curb by one of the following methods:
 - With an engineer-approved curb laying machine that places and compacts the mixture and finishes the curb to the required shape, grade, and dimensions.
 - In forms fabricated to the curb shape. Place and thoroughly compact the mixture with vibratory compactors or mechanical tampers and screed to a smooth finish.
 - For small quantities, by hand placing and shaping. Form the back of the curb. Place, tamp, and shape with hand tools. Provide a smooth-finished surface on the curb face and top.

465.3.3 Rumble Strips

- (1) Construct asphaltic rumble strips by milling the asphaltic surface. Use a rotary head milling machine with a cutting tip pattern that will produce a relatively smooth cut of the size, shape, spacing, and smoothness the plans show. Cutting heads must be on a suspension independent from the power unit to allow the heads to self-align with slopes and irregularities. The machine must have a guidance system that consistently provides the plan alignment of the rumble strips.
- (2) Before beginning the work, demonstrate to the engineer that the operation achieves the desired surface inside each depression or along the continuous milling without tearing or snagging the asphaltic pavement or surfacing. Place rumble strips in the location, pattern, and shape the plans show. For shoulders carrying temporary traffic during construction, do not install rumble strips until after routing traffic back to the mainline.
- (3) At the end of each work day, move equipment and material out of the clear zone and sweep or vacuum the traveled way pavement and shoulder areas. Sweep away or vacuum up milling debris.

before opening adjacent lanes to traffic. Dispose of waste material as specified in [203.3.5](#); do not place on the finished shoulder surface.

465.3.4 Maintenance

- (1) Maintain work done under the Asphaltic Surface Temporary bid item for the time the contract specifies.

465.4 Measurement

- (1) The department will measure the Asphaltic Surface bid items by the ton acceptably completed using the methods specified in [450.4](#).
- (2) The department will measure Asphaltic Curb by the linear foot acceptably completed, measured along the base of the curb face.
- (3) The department will measure Asphaltic Flumes and Asphaltic Rumble Strips, Transverse by the square yard acceptably completed.
- (4) The department will measure the Asphaltic Rumble Strips, Shoulder Divided Roadway, Asphaltic Rumble Strips, Shoulder, Asphaltic Rumble Strips, Shoulder Sinusoidal, and Asphaltic Rumble Strips, Edge Line bid items by the linear foot acceptably completed, measured as the length along each side of the traveled way, from the first groove in a segment to the last groove in that segment.

The department will measure Asphaltic Rumble Strip, Centerline and Asphaltic Rumble Strips, Centerline Sinusoidal by the linear foot acceptably completed, measured as the length along the centerline from the from the first groove in a segment to the last groove in that segment.

A segment is a series of grooves or continuous milled surface including 50-foot and shorter gaps as well as skips the plans show. Gaps greater than 50 feet define a new segment. The department will deduct for skips greater than the plans show.

465.5 Payment

- (1) The department will pay for measured quantities at the contract unit price under the following bid items:

<u>ITEM NUMBER</u>	<u>DESCRIPTION</u>	<u>UNIT</u>
465.0105	Asphaltic Surface	TON
465.0110	Asphaltic Surface Patching	TON
465.0115	Asphaltic Surface Detours	TON
465.0120	Asphaltic Surface Driveways and Field Entrances	TON
465.0125	Asphaltic Surface Temporary	TON
465.0305	Asphaltic Surface Safety Islands	TON
465.0310	Asphaltic Curb	LF
465.0315	Asphaltic Flumes	SY
465.0510	Asphaltic Rumble Strips, Shoulder Divided Roadway	LF
465.0520	Asphaltic Rumble Strips, Shoulder	LF
465.0525	Asphaltic Rumble Strips, Shoulder Sinusoidal	LF
465.0540	Asphaltic Rumble Strips, Edge Line	LF
465.0560	Asphaltic Rumble Strips, Centerline	LF
465.0565	Asphaltic Rumble Strips, Centerline Sinusoidal	LF
465.0580	Asphaltic Rumble Strips, Transverse	SY

- (2) Payment for the Asphaltic Surface bid items is full compensation for submitting an asphaltic mixture design; for preparing the foundation; for providing the surface, including asphaltic binder and reclaimed asphaltic pavement; and for compacting the mixture. The department will pay separately for tack coat under the Tack Coat bid item as specified in [455.5](#).
- (3) Payment for Asphaltic Surface Temporary is also full compensation for maintenance during the time the contract specifies.
- (4) Payment for Asphaltic Curb is full compensation for providing asphaltic curbs, including asphaltic binder and reclaimed asphaltic pavement; for compacting the mixture; and for forming the curb.
- (5) Payment for Asphaltic Flumes is full compensation for preparing the foundation; for providing flumes, including asphaltic binder and reclaimed asphaltic pavement; and for compacting the mixture.
- (6) Payment for the Asphaltic Rumble Strips bid items, and Asphaltic Rumble Strips Transverse is full compensation for milling; for sweeping or vacuuming; and for disposing of waste.