

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

Delete SECTION 837 and replace with the following:
SECTION 837

PAVEMENT WIDENING, SHOULDERING AND PAVEMENT EDGE WEDGE

837.1 DESCRIPTION

Widen the existing pavement, construct shoulders or construct the transition from the pavement edge to the ditch as shown in the Contract Documents.

BID ITEMS

UNITS

Shoulders (Earth) (HMA Widening)	Station
Shoulders (Aggregate) (HMA Widening)	Station
Pavement Edge Wedge (Earth)	Station
Pavement Edge Wedge (Rock)	Ton
Aggregate for Shoulders (AS-1)	Ton
Common Excavation (Contractor-Furnished)	Cubic Yard
Water for Earthwork Compaction (Set Price)	M Gallon
Water for Aggregate Shoulders (Set Price)	M Gallon

837.2 MATERIALS

a. Material for Earth Shoulders and Pavement Edge Wedge (Earth). Use earthen material obtained from the locations shown in the Contract Documents. Do not use material containing roots, sod and other perishable and deleterious matter.

When required, provide Contractor-Furnished earthen material that complies with Contractor-Furnished Common Excavation, **SECTION 205**.

Earthen material will be accepted by the Engineer on the basis of visual inspection at the point of usage.

b. Material for Aggregate Shoulders and Pavement Edge Wedge (Aggregate). Use existing aggregate that is free of roots, sod and other perishable and deleterious matter.

If the project does not have existing aggregate for reuse, or if additional material is required, provide aggregate that complies with aggregate for shoulder construction (AS-1), **DIVISION 1100**.

A maximum of 50% Reclaimed Asphalt Pavement (RAP) by weight may be blended with the aggregate. Provide RAP that is reasonably free of contamination. The Engineer will accept the RAP source based on a visual inspection. The RAP shall meet the following gradation.

% Retained - Square Mesh Sieves	
2 inch	# 4 Sieve
0	35, minimum

If RAP is used in the mixture, then control the rate of feed of each product to a continuous mixer (pugmill), to allow complete mixing of all the materials. Mix the materials to produce a homogeneous mixture.

The Engineer will accept this material on the basis of visual inspection at the point of usage.

c. Water for Earthwork Compaction and Aggregate Shoulders. Provide water that complies with **DIVISION 2400**.

d. HMA Materials. Provide the designated HMA that complies with **DIVISION 600**.

837.3 CONSTRUCTION REQUIREMENTS

a. Excavation for HMA Pavement Widening. Excavate along the edge of the existing pavement to the depth and width shown in the Contract Documents. Compact the bottom of the trench according to Type B (MR-90) compaction, **SECTION 205**. If material unsuitable for proper compaction is encountered in the bottom of the trench, remove the unsuitable material and replace it with suitable earthen material. Dispose of the unsuitable material by scattering it at locations on the right-of-way as directed by the Engineer.

Before placing any HMA material in the trench, clean the trench of all loose material.
Provide for drainage of the trench, as necessary.

b. Placing the Asphalt Material Pavement Widening.

(1) Plant Mix HMA Construction. Clean the edge of the existing pavement. Paint or spray a thin coat of asphalt tack on the pavement edge. Place the HMA in the trench in 2 or more lifts. Place and compact the HMA by the method that produces the best results. Place the top lift of the HMA widening concurrently with the roadway surfacing. Compact the top lift of HMA to comply with the density requirements of HMA Overlay, **SECTION 602**.

(2) Cold Recycled Asphalt Construction. Place the cold recycled asphalt material in 1 lift. Place the material in the widening concurrently with the roadway material. Place and compact the cold recycled asphalt material by the method that produces the best results. Compact the mixture to comply with the density requirements specified for the Cold Recycled Asphalt Construction, **DIVISION 600**.

c. Shouldering the Asphalt or Concrete Pavement Widening. After the surface course is in place, construct the shoulders as shown in the Contract Documents. Do not damage the pavement surfaces. Do not dump or mix material on the pavement surfaces.

(1) Earth Shoulders. Use material obtained from the widening trench excavation, or Contractor-furnished material, if required, to construct the earthen shoulders.

Dispose of excess earthen material (obtained from the widening trench excavation), if any, at locations on the right-of way as directed by the Engineer.

Construct the earth shoulders according to **SECTION 205**.

(2) Aggregate Shoulders. Use existing aggregate obtained from the project, or aggregate provided by the Contractor, when required, to construct the aggregate shoulders.

Stockpile any excess aggregate (obtained from the widening trench excavation at locations shown in the Contract Documents or locations on the project as directed by the Engineer.

Construct the aggregate shoulders according to **SECTION 305**, except:

- Use a central mix plant (pugmill) for mixing, when the original contract quantity of aggregate for shoulders (AS-1) is greater than 4500 tons.
- the compaction shall comply with Type A compaction and MR-0-5 Moisture Content, **SECTION 205**.

d. Earthen and Aggregate Pavement Edge Wedge. After the surface course is in place, construct edge wedges as shown in the Contract Documents. Do not damage the pavement surfaces. Do not dump or mix material on the pavement surfaces.

Use the type of material indicated in the Contract Documents to construct the wedges.

Placement and compaction methods for the earthen or aggregate pavement edge wedge shall be approved by the Engineer.

Compact the wedges to comply with Type B (MR-90) Compaction, **SECTION 205**.

837.4 MEASUREMENT AND PAYMENT

The Engineer will measure shoulder for asphalt widenings on each side of the roadway by the station.

The excavation for the asphalt widenings is not measured for separate payment. The HMA quantities for the HMA widenings are included in the roadway surfacing quantities.

The Engineer will measure earth pavement edge wedge on each side of the roadway by the station.

The Engineer will measure the aggregate pavement edge wedge by the ton.

The Engineer will measure the aggregate for shoulders by the ton.

The Engineer will measure Contractor-furnished common excavation according to **SECTION 205**.

The Engineer will measure water for earthwork compaction by the M Gallon by means of calibrated tanks or water meters.

The Engineer will measure the water for aggregate shoulders used in the mixture and used on the finished surface during the curing period by the M Gallon using calibrated tanks or distributors. The Engineer will not measure water in the mixture in excess of 5% above the optimum moisture. The Engineer will not measure water used for subgrade preparation or construction of earthen shoulders, entrances and side roads.

The Engineer will not measure water used for dust control, water wasted through the Contractor's negligence or water in excess of the quantity required to obtain the proper moisture content.

Payment for "Shoulders (Earth) (HMA Widening)", "Shoulders (Aggregate) (HMA Widening)", "Pavement Edge Wedge (Earth)", "Pavement Edge Wedge (Rock)", "Aggregate for Shoulders (AS-1)" and "Common Excavation (Contractor-Furnished)" at the contract unit prices, and for "Water for Earthwork Compaction" and "Water for Aggregate Shoulders" at the contract unit set prices is full compensation for the specified work.

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