

FHWA REG. NO.	STATE	KDOT PROJECT NUMBER	YEAR	SHEET NO.	TOTAL SHEETS
7	KS	87 U-0407-01	2016-2017	4	15

## SCOPE OF WORK

Work on Project: Asphalt mill and overlay, concrete base repair and pavement markings.

Temperature Restrictions: Work on this project shall not begin until the air temperature as measured in the shade reaches a minimum of 50°F for a minimum of three (3) consecutive days or the Engineer has given prior permission to begin work. Working days will not be charged until the outside air temperature allows work on the project by meeting the 50°F temperature requirements as stated previously.

The Mill and Overlay work on this project consists of cold milling a nominal 2 inches (unless otherwise noted) of asphalt street surface. All milled surfaces will have 2 inches of BM2 (PG 70-28) asphalt overlaid. Any milling on the turn lanes shall be considered as part of the regular mill and overlay work.

Concrete Base Repairs includes the removal and replacement of base pavement, as directed by the Engineer. The quantity bid for base repair is on estimate based upon current conditions. The Inspector will mark repairs after milling. It will consist of complete removal and replacement of the concrete base to a level flush with any milled surface. Concrete base shall be tied in all sides to existing base using No. 4 bars 2'-0" in length, spaced 2' on centers. Dowels must be set with epoxy and shall not be hammered into a smaller diameter hole. Joint spacing shall be no greater than 12 feet, nor less than 6 feet. Base repair shall conform to Section 500 of the City's Standard Specifications. All base repairs, regardless of location, require full-depth saw cuts. All saw cutting will be considered subsidiary to the other bid items.

Thermo-Plastic pavement markings are to be placed as part of this project. All thermo-plastic pavement markings shall be placed within 5 working days of placement of asphalt surface course. The Contractor shall be liable to the City of Wichita liquidated damages of \$250 per day for each working day pavement markings remain incomplete.

To prevent delays in construction and more quickly resolve traffic issues, work shall commence within two (2) working days of traffic control being set up, unless operations are delayed due to weather or any other unforeseen circumstances and must be approved by the Engineer. Overlay operations are to commence the day after the base repair concrete cures, unless operations are delayed due to weather or any other unforeseen circumstances and must be approved by the Engineer. The Contractor will reimburse to the City liquidated damages of \$250 per day for each calendar day that work has not started beyond the 2 working day grace period.

To protect underlying pavement layers and limit disruption of traffic, it is imperative that all milled asphalt surfaces be overlaid with asphalt as soon as possible. Therefore, unless the overlaying operations are delayed due to cure time of concrete base patches, or otherwise approved by the Engineer, all milled surfaces shall be covered with new asphalt within three (3) working days of the initiation of milling operations on a particular location. The Contractor will reimburse to the City liquidated damages of \$250 per day for each calendar day that milled surfaces remain unfinished beyond the three (3) working day grace period.

All attempts shall be made to keep traffic off of milled surfaces prior to being overlaid with new asphalt. Transition tapers will be provided at the start and finish of each milled area if traffic is allowed on the milled surface. All manholes, water valves, gas valves, and any other utility manholes or ducts shall also have tapers provided. Tapers shall be maintained while traffic is allowed on any milled surface and shall be cleaned up prior to being overlaid. All tapers shall be incidental to the various bid items of work.

Traffic Control shall be set up and maintained according to latest MUTCD Standards. All traffic devices not adhering to this shall be removed and replaced within 4 hours of notification. The Contractor will reimburse to the City liquidated damages of \$250 per day for each calendar day that traffic devices are not replaced within 4 hours of notification. A traffic control contact person must be available on a 24-hour a day basis. On residential streets each home in the neighborhood needs to be notified of the approximate dates of construction and scope of the project and there should be traffic signs warning drivers of construction and slow down signs while construction takes place. All traffic control items are incidental to the bid item "Traffic Control".


ELECTRONIC MESSAGE BOARDS will be used with this project. Message boards will be placed one week (7 days) in advance of placing traffic control to notify of lane closures. Message boards will remain up during construction notifying which lane is closed ahead.

## ESTIMATE OF QUANTITIES (ASPHALT REPAIRS), PARTICIPATING

Line No.	KDOT Code	Bid Item Description	Quantity	UM
<b>MEASURED QUANTITY BID ITEMS (707115) (Participating)</b>				
<b>K-42, Hoover to K-42 limits</b>				
1		A.C. Surf. Course, 2" (BM2)(PG 70-28)	2,100	tn
2		Cold Milling Asphalt Surface (2" Nom.)	19,300	sy
3		Reinf Conc. Base Repair (9")	2,500	sy
4		Aggregate for Shoulders	80	tn
<b>MEASURED QUANTITY ITEMS (707115) - Traffic (Participating)</b>				
5		Traffic Control	1	LS
6		6" White or Yellow Pvmt. Mrkgs (Thermopl.)	13,268	lf
7		12" White Pavement Markings (Thermopl.)	150	lf
8		Pavement Markings, Turn Arrow (Thermopl.)	16	ea
9		Signing, Elec. Portable Message (each per day)	80	day

## ESTIMATE OF QUANTITIES (ASPHALT REPAIRS), NON-PARTICIPATING

Line No.	KDOT Code	Bid Item Description	Quantity	UM
<b>MEASURED QUANTITY BID ITEMS (707115) (Non-Participating)</b>				
<b>Southwest Blvd, K-42 Limits to West Street</b>				
1		A.C. Surf. Course, 2" (BM2)(PG 70-28)	1,620	tn
2		Cold Milling Asphalt Surface (2" Nom.)	14,920	sy
3		Reinf Conc. Base Repair (9")	1,500	sy
4		Aggregate for Shoulders	70	tn
<b>MEASURED QUANTITY ITEMS (707115) - Traffic (Non-Participating)</b>				
5		Traffic Control	1	LS
6		6" White or Yellow Pvmt. Mrkgs (Thermopl.)	10,980	lf
7		Pavement Markings, Turn Arrow (Thermopl.)	7	ea
<b>LUMP SUM ITEMS (707115) (Non-Participating)</b>				
8		2-Year Warranty (non-participating)	1	LS

 <b>CITY OF WICHITA</b> PUBLIC WORKS & UTILITIES ENGINEERING DIVISION	<b>K-42</b> <b>FROM HOOVER RD TO WEST STREET (EB &amp; WB)</b>		
	CITY ENGINEER <b>GARY JANZEN, P.E.</b>		
	PROJECT NUMBER 472-85315	OCA NUMBER 707115	DATE 12/20/2016
	CITY ENGINEER'S OFFICE CITY HALL, 7TH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		SCOPE OF WORK & ESTIMATE OF QUANTITIES SHEET 4 OF 15