

**ADDENDUM NO. 1**

Issued: February 22, 2017  
Project: SMSD 2017 Asphalt Improvements  
Project No. 17006  
SMSD BID NUMBER 17-012  
Owner: Shawnee Mission Unified School District No. 512,  
7235 Antioch, Shawnee Mission, Kansas 66204

Bidding Documents Issued: 2.10.2017

This Addendum includes this 1 pages and the following attachments:  
Pre-Bid Attendance Sheets (1 pages)  
SECTION 321216 ASPHALT PAVING (6 pages)

**GENERAL INFORMATION**

**G1 CONTRACTOR QUESTIONS AND CLARIFICATIONS**

- G1.1 Question: Is recycled asphalt acceptable?  
Response: Yes
- G1.2 Question: Are contractors required to repaint existing curbs to match existing conditions at Fire Lanes, Accessibility areas, No Parking Areas etc?  
Response: Yes.
- G1.3 Question: Will all projects be awarded to one contractor?  
Response: Yes
- G1.4 Question: Will one bid bond be acceptable?  
Response: Yes
- G1.5 Question: Are contractors to re-stripe playgrounds?  
Response: Yes, if seal coated and repaired all playgrounds are to be restriped to match existing conditions.

**PROJECT MANUAL REVISIONS**

**A1 SECTION 321216 – ASPHALT PAVING**

- A1.1** DELETE SECTION 321216 ASPHALT PAVING and REPLACE with the attached SECTION 321216 ASPHALT PAVING (6 pages)

**END OF ADDENDUM NO. 1**



1 Bond  
for  
911

DATE: 2-24-17

SIGN IN SHEET

BID NO: 17-012

Asphalt Improvements -  
8 schools

10:00 am

Name	Company	Phone #	Fax #
Bill Hoskins	Blacktop Paving	816-878-7932	816-356-3374
Jimmy Ehrhardt	Ehrhardt's Asphalt	816-651-2900	816-220-0410
Mike Ehrhardt	Advanced Asphalt Paving	816-317-6110	816-344-1062
SEAN McMAHON	BARILLEY ASPHALT	816-896-1111	816-415-8833
GILMAN BLOOD	SEAL O MATIC PAVING	816 741-2046	816 741 2711
Roger Avalos	McConnell & Associates Corp	816.853.5680	816.842.1638
Steve Davey	Calvert's Paving	816.468.9988	816.468.9966
GARY DAKES	SMSD	993-8500	993-8599
Tyler Clubb	SMSD	993-8507	_____
JOEY BUTTICELLI	HOLLIST+MILLER	816-442-7800	
JUSTIN DURHAM	HOLLIST+MILLER	" "	
Lisette Morgan	SMSD		
Wes McGraw	Phunk Paving	816-921-8080	

## SECTION 321216 - ASPHALT PAVING

## PART 1 - GENERAL

## 1.1 SUMMARY

- A. Section Includes:
1. Hot-mix asphalt paving.
  2. Hot Mix Asphalt Patching
  3. Hot Mix Asphalt Paving Overlay
  4. Asphalt Surface Treatments
  5. Pavement-marking paint
  6. Cold Milling of existing Hot Mix Asphalt Pavement.

## 1.2 SUBMITTALS

- A. Product Data: For each type of product indicated. Include technical data and tested physical and performance properties.
1. Job-Mix Designs: Certification, by authorities having jurisdiction KDOT, of approval of each job mix proposed for the Work.
- B. Material Certificates: For each paving material, from manufacturer.

## 1.3 QUALITY ASSURANCE

- A. Manufacturer Qualifications: A paving-mix manufacturer registered with and approved by the Kansas Department of Transportation (KDOT).
- B. Regulatory Requirements: Comply with materials, workmanship, and other applicable requirements of KDOT for asphalt paving work.

## 1.4 PROJECT CONDITIONS

- A. Environmental Limitations: Do not apply asphalt materials if subgrade is wet or excessively damp, if rain is imminent or expected before time required for adequate cure, or if the following conditions are not met:
1. Tack Coat: Minimum surface temperature of 50 deg F.
  2. Asphalt Base Course: Minimum surface temperature of 40 deg F and rising at time of placement.
  3. Asphalt Surface Course: Minimum surface temperature of 50 deg F at time of placement.
  4. Slurry Coat: Minimum surface temperature of 60 deg F. Do not place if air temperature is forecasted to go below 32 deg F within 24 hours following placement.
- B. Pavement-Marking Paint: Proceed with pavement marking only on clean, dry surfaces and at a minimum ambient or surface temperature of 50 deg F or per manufacturer's recommendations.

PART 2 - PRODUCTS

2.1 AGGREGATES

- A. Section 1100, KDOT Standard Specifications.

2.2 ASPHALT MATERIALS

- A. Asphalt Binder: Section 1201, KDOT Standard Specifications and AASHTO M 320, PG64-22 PG64-28, PG70-22, PG 70-28, PG 70-34, PG76-26, PG82-22, PG 82-28.
- B. Tack Coat: KDOT Standard Specifications for emulsified asphalt, of suitable grade and consistency for application.
- C. Emulsified Asphalt for Slurry Seal: Asphalt emulsion sealer shall conform to federal specifications RP-355e.
  - 1. Water used as diluent shall be potable and free from excessive minerals and containments.
  - 2. Asphalt emulsion sealer shall be MAC Pro-Blend Pavement Sealer as manufactured by McConnell & Associates of Kansas City, Missouri, or approved equal.
- D. Cutback Asphalt: KDOT Standard Specifications.

2.3 AUXILIARY MATERIALS

- A. Blotter Sand: Clean fine sand or other approved material.
- B. Paving Geotextile: Petromat as manufactured by Propex Fabrics, or approved equal.
- C. Pavement Marking Material: Pavement areas shall be striped as indicated or described on the drawings. Provide material as specified as follows:
  - 1. Manufacturer Product Name: PPG Pittsburg Traffic and Zone marking paint, 11 Line Sherwin Williams Pro Mar Alkyd Traffic Marking Paint.
  - 2. Colors should be white or yellow, full bodied. All striping shall be 4", 12", or 24" wide and uniform, with sharp straight edges and neat intersections. Handicap accessible and pedestrian crosswalks to be painted per current city codes. Furnishing of material and paint striping shall be done by a licensed and insured parking lot and service contractor.
  - 3. Playground marking shall be to match existing for size, type, color and layout unless otherwise noted on drawings.

2.4 MIXES

- A. Hot-Mix Asphalt: Dense, hot-laid, hot-mix asphalt plant mixes approved by KDOT and complying with the following requirements:
  - 1. Base Course: BM-2B.
  - Z. Surface Course: BM-2.

2.5 COLD MILLING EQUIPMENT

- A. The preferred milling machine and equipment is as follows:

1. The milling machine to be used in this contract shall be designed and built for cold milling work, shall be self-propelled, and shall have a means of milling of the old pavement surface. The drum patterns shall permit a grooved or smooth surface finish and the drum shall be totally enclosed to prevent discharge of any loosened material on adjacent work areas. A dust suppression system must be part of the equipment. Maximum width of the milling machine shall be 12'6"; drum widths shall be 4'6" minimum to 9'6" maximum. Smaller machines may be used for auxiliary purposes only.
2. The milling operation shall provide for pick-up and elevating into dump trucks, all in a single land operation. Side loading for dump trucks will be permitted. The Contractor shall supply and adequate number of dump trucks and qualified drivers to accept the asphalt cuttings in a manner set forth above. All asphalt cuttings shall become the property of the Contractor and shall be hauled from the site and be disposed of at the Contractor's sole cost and expense.
3. Small milling machines and alternative milling methods may be used at the Owner's discretion. Contractor prior to milling operations shall identify, justify and obtain Owner's approval for use of smaller machines and/or alternate milling methods.

2.6 SEAL COAT

- A. MAC — S1: McConnell & Associates, Inc. MAC ProBlend Surface Treatment, or approved equal.
  1. Seal Coat shall include the application of an aggregate at a rate of 3-5 pounds per gallon of concentrated seal coat. Aggregate shall be clean silica sand or synthetic aggregate with an average grain fineness between 50-70 shall be added for increased traction and textured appearance.

2.7 CRACK AND JOINT FILLING

- A. CRAFCO Parking Lot Sealant, or approved equal.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Proof-roll subgrade below pavements with loaded 10-wheel, tandem axle dump truck weighing not less than 15 tons to identify soft pockets and areas of excess yielding. Limit speed to 3 mph. Do not proof-roll wet or saturated subgrades.
- B. Proceed with paving only after unsatisfactory conditions have been corrected

3.2 SURFACE PREPARATION

- A. General: Immediately before placing asphalt materials, remove loose and deleterious material from substrate surfaces. Ensure that prepared subgrade is ready to receive paving.
- B. Tack Coat: Apply uniformly to surfaces of existing pavement at a rate of 0.2 +/- 0.05 gallon per square yard.

1. Avoid smearing or staining adjoining surfaces, appurtenances, and surroundings. Remove spillages and clean affected surfaces.

### 3.3 PATCHING

- A. Hot-Mix Asphalt Pavement: Saw cut perimeter of patch and excavate existing pavement section to sound base. Excavate rectangular or trapezoidal patches, extending 12 inches into adjacent sound pavement, unless otherwise indicated. Cut excavation faces vertically. Remove excavated material. Recompact existing unbound-aggregate base course to form new subgrade.
- B. Tack Coat: Apply uniformly to vertical surfaces abutting or projecting into new, hot-mix asphalt paving at a rate of 0.05 to 0.15 gal./sq. yd.
  1. Allow tack coat to cure undisturbed before applying hot-mix asphalt paving.
  2. Avoid smearing or staining adjoining surfaces, appurtenances, and surroundings. Remove spillages and clean affected surfaces.
- C. Patching: Partially fill excavated pavements with hot-mix asphalt base mix and, while still hot, compact. Cover asphalt base course with compacted, hot-mix surface layer finished flush with adjacent surfaces.

### 3.4 HOT-MIX ASPHALT PLACING

- A. Machine place hot-mix asphalt on prepared surface, spread uniformly, and strike off. Place asphalt mix by hand to areas inaccessible to equipment in a manner that prevents segregation of mix. Place each course to required grade, cross section, and thickness when compacted.
  1. Spread mix at minimum temperature of 250 deg F.
  2. Regulate paver machine speed to obtain smooth, continuous surface free of pulls and tears in asphalt-paving mat.
- B. Promptly correct surface irregularities in paving course behind paver. Use suitable hand tools to remove excess material forming high spots. Fill depressions with hot-mix asphalt to prevent segregation of mix; use suitable hand tools to smooth surface.

### 3.5 JOINTS

- A. Construct joints to ensure a continuous bond between adjoining paving sections. Construct joints free of depressions, with same texture and smoothness as other sections of hot-mix asphalt course.
  1. Clean contact surfaces and apply tack coat to joints.
  2. Offset longitudinal joints, in successive courses, a minimum of 6 inches.
  3. Offset transverse joints, in successive courses, a minimum of 24 inches.
  4. Construct transverse joints at each point where paver ends a day's work and resumes work at a subsequent time. Construct these joints using either "bulkhead" or "papered" method according to AI MS-22, for both "Ending a Lane" and "Resumption of Paving Operations."

### 3.6. COLD MILLING

- A. Limits of Work: The areas to be cold milled and the types of cold milling are as designated and/or described. The area outlined on the drawings do not in all cases include the entire area between limits given, but represent the area within those limits that are to be milled. This milling work is in preparation for resurfacing work.
- B. Cold milling (edge cut): In areas designated for cold milling (Edge Cut), sufficient passes, or cuts, shall be made such that all irregularities or high spots are eliminated from the edge of the concrete gutter to the limits of work to a point two inches (2") below edge of the gutter lip. The maximum tolerance for cold milling (edge cut) in a longitudinal direction shall be one half inch (1/2") under a ten foot (10') straight edge and shall be three eighths inches (3/8") straight edge in a transverse direction.
- C. Clean Up: The Contractor shall remove no less than 95% of all cuttings and debris from the property. The Contractor shall remove all asphalt material and debris that is left in the gutter. All cold milled areas shall be cleaned with a power broom. Material shall not remain that would recompact or leave an unsuitable surface for subsequent overlay operations.

### 3.7. COMPACTION

- A. General: Begin compaction as soon as placed hot-mix paving will bear roller weight without excessive displacement. Compact hot-mix paving with hot, hand tampers or with vibratory-plate compactors in areas inaccessible to rollers.
  - 1. Complete compaction before mix temperature cools to 185 deg F.
- B. Breakdown Rolling: Complete breakdown or initial rolling immediately after rolling joints and outside edge. Examine surface immediately after breakdown rolling for indicated crown, grade, and smoothness. Correct lay down and rolling operations to comply with requirements.
- C. Intermediate Rolling: Begin intermediate rolling immediately after breakdown rolling while hot-mix asphalt is still hot enough to achieve specified density. Continue rolling until hot-mix asphalt course has been uniformly compacted to the following density:
  - 1. Average Density: 92 percent of reference maximum theoretical density according to ASTM D 2041, but not less than 90 percent nor greater than 96 percent.
- D. Finish Rolling: Finish roll paved surfaces to remove roller marks while hot-mix asphalt is still warm.
- E. Edge Shaping: While surface is being compacted, and finished, trim edges of pavement to proper alignment. Bevel edges while asphalt is still hot; compact thoroughly.
- F. Protection: After final rolling, do not permit vehicular traffic on pavement until it has cooled and hardened.
- G. Erect barricades to protect paving from traffic until mixture has cooled enough not to become marked.

### 3.8 INSTALLATION TOLERANCES

- A. Pavement Thickness: Compact each course to produce the thickness indicated within the following tolerances:
  - 1. Base Course: Plus or minus 1/2 inch.
  - 2. Surface Course: Plus 1/4 inch, no minus.
  
- B. Pavement Surface Smoothness: Compact each course to produce a surface smoothness within the following tolerances as determined by using a 10-foot straightedge applied transversely or longitudinally to paved areas:
  - 1. Base Course: 1/2 inch
  - 2. Surface Course: 1/4 inch
  - 3. Crowned Surfaces: Test with crowned template centered and at right angle to crown. Maximum allowable variance from template is 1/4 inch.

### 3.9 SEAL COAT

- A. Seal coat shall be applied in two coats using a spray and squeegee application. Material shall be sprayed first and then using a squeegee or broom, further worked to ensure uniform coverage.
  - 1. 1<sup>st</sup> coat: Apply with aggregate at a rate of 0.10 — 0.12 gallons per square foot.
  - 2. 2<sup>nd</sup> coat: Apply with aggregate at a rate of 0.09 — 0.10 gallons per square foot.

### 3.10 CRACK AND JOINT FILLING

- A. Remove existing joint filler material from cracks or joints to a depth of one quarter inch (1/4").
- B. CRAFCO Parking Lot Sealant: Preparation and installation shall be per the manufacturer's recommendations.
- C. Joint Sealant: Preparation and installation shall be per the manufacturer's recommendations.

### 3.11 PAVEMENT MARKING

- A. Sweep and clean surface to eliminate loose material and dust.
- B. Apply paint with mechanical equipment to produce pavement markings, of dimensions indicated, with uniform, straight edges. Apply at manufacturer's recommended rates to provide a minimum wet film thickness of 15 mils.

### 3.12 DISPOSAL

- A. Except for material indicated to be recycled, remove excavated materials from Project site and legally dispose of them in an EPA-approved landfill.

END OF SECTION 321216