

**HANCOCK COUNTY SCHOOLS
ASPHALT PAVING WORK
BID**

The Hancock County Board of Education will accept sealed bids for the following asphalt Sealing/ Stripping work. The Hancock County Board of Education (HCBOE) reserves the right to accept or reject any or all bids and to accept irregularities in the bidding process. Sealed bids clearly marked "Asphalt Sealing/ Stripping Bid" shall be received at the Hancock County Board of Education office by 10:30 a.m. on May 17, 2017. All bidders are responsible for viewing areas of work to be completed before bidding. This work should be performed between May 29- June 30, 2017, with advanced notice prior to work being performed. All bidders shall include proof of One Million Dollars (\$1,000,000) of liability insurance and worker's compensation on all employees with their submitted bid.

At the specified time stated above, all bids which are in order, properly sealed, signed, labeled, etc., shall be opened and read aloud. Any interested parties may attend the bid opening. No immediate decision will be rendered on this date.

Information pertaining to any item or conditions in this bid request may be obtained by calling Mark Garvin at (270) 927-6472 or (270) 927-6914.

The following work should be included:

- A. All specifications included in the "Detailed Specifications for Asphalt Maintenance" (attached to bid) shall be followed by approved bidder.
- B. The project start date and time must be submitted and approved by the HCBOE prior to commencing.
- C. All MDS sheets & material application specifications sheets should be presented to the HCBOE prior to commencing work.
- D. Verification of outlined application process must be approved as satisfactory by the Hancock County Board of Education's inspector at, during, or before time of work.

Area 1:	Middle School parking area with 2 circle drives in front of Middle and High School ■ 12,500 square yards	COST \$ _____
Area 2:	Bus travel area from the Hancock Middle School to the back of the High School ■ 3,154 square yards ■ 225 square yards, Athletic Bld Drive (note: addition from 2014 bid)	COST \$ _____
Area 3:	Hancock County School Bus Garage ■ 4,913 square yards	COST \$ _____
Area 4:	Hancock County High School Student Parking ■ 8,266 square yards	COST \$ _____
Area 5:	Hancock County Board of Education ■ 2,188 square yards	COST \$ _____
Area 6:	School Bus Parking located at Bus Garage ■ 4,818 square yards	COST \$ _____
Area 7:	North Hancock Elementary School ■ 12,800 square yards (includes walking trail) ■ Basketball Court with striping behind North Hancock 340 square yards	COST \$ _____
Area 8:	South Hancock Elementary School ■ 7,634 square yards	COST \$ _____

TOTAL PROJECT COST \$ _____

BID FORM

(Bids must be submitted on this form or an exact duplicate)

ASPHALT SEALING AND STRIPPING WORK

COST

TOTAL BID SUBMITTED

\$ _____

In compliance with this invitation to bid; in consideration of the detailed description attached hereto; and subject to all conditions thereof, the undersigned agrees that if this bid be accepted, the bidder agrees to furnish any of all of the items upon which prices have been quoted or prices quoted for the time period stipulated, and upon acceptance of said firm's bid by the Board of Education, said bid becomes a contract to furnish materials and supplies needed to complete project.

FIRM NAME: _____

BY: _____

TITLE: _____

ADDRESS: _____

TELEPHONE: _____ **DATE:** _____

AUTHORIZED SIGNATURE: _____

CONFLICTS OF INTEREST, GRATUITIES AND KICKBACKS AS DEFINED IN KRS 45A.445 AND AS PROVIDED FOR IN KRS 45A.455 ARE ABSOLUTELY PROHIBITED. THE PROVISIONS OF THESE STATUTES SHALL BE NOTED AND ACKNOWLEDGED BY THE USERS OF THIS PROCUREMENT DOCUMENT.

Equal Educational and Employment Institution

Detailed Specifications for Asphalt Maintenance

1.0 Objectives

This specification covers the application of coal tar emulsion seal that meets or exceeds Federal specification ASTM 5727-00, a cold applied protective coating for existing, sound asphalt pavements.

1.1 To extend the service life of the asphalt pavement by sealing out:

- sun's ultraviolet rays, which result in oxidative decomposition.
- deteriorating effects of deicing salts, oils, gasoline, and grease.
- water and subsequent damage to the sub-base caused by water penetration.

1.2 To beautify and enhance the appearance.

1.3 To reduce the maintenance costs and extend the service life.

1.4 To fill minor surface imperfections and yield an even looking surface.

1.5 To provide a limited degree of skid resistance.

1.6 To apply coal tar emulsion only on asphalt pavement, no coal tar emulsion will be applied on any concrete surface.

2.0 Materials for

2.1 Coal Tar Pitch Emulsion.

2.1.1 Coal Tar Pitch Emulsion must meet or exceed Federal specification ASTM 5727-00, U.S. Air Force requirements and the F.A.A.

2.1.2 The material shall be prepared from the straight run high temperature coke-oven tar meeting the requirement of ASTM D-490. Petroleum tar and oil and water gas tars shall not be used even though they comply with ASTM D -490.

2.1.3 The material shall be homogeneous and show no separation or coagulations of components that cannot be redispersed with moderate stirring.

2.1.4 The material shall be capable of application and complete coverage by squeegee, brush, or by approved mechanical methods to the bituminous surface at a spreading rate of 0.18 – 0.20 gallons (of undiluted coal tar sealer) per square yard in 2 coats application.

COAL TAR SEALER is high grade sealers that meet or exceed the requirements detailed above.

All contractors must submit certificate from manufacturer that the material meet or exceed Federal Specifications.

2.2 **Sand** shall be clean hard and irregular silica sand which is free of clay, dust, salt, and organic matter.

2.3 **Water** shall be clean and potable within a temperature of 50-80 F.

3.0 **Recommended Mix Design**

3.1 Bulk pavement sealer shall be diluted at a 25-30% with clean potable water. Bulk coal tar sealer shall be diluted to no more than 20 % with clean potable water.

3.2 Three (3) lbs. sand per gallon of bulk sealer shall be added to coal tar sealer for each coat (equaling 6 lbs sand per gallon bulk applied to the surface).

3.2.1 **Sand Slurry Preparation**

- Add the required amount of water to the sealer in the mixing tank and mix thoroughly.
- Keep the mixer running at a moderate rate.
- Add the sand in a steady stream of about one (100 lbs) bag/min.
- After adding all the sand, close the lid of the mixing tank and raise the speed of the mixer to “high” setting.
- Mix for ten minutes to allow the contents of the tank to mix thoroughly and break and sand clumps.
- Reduce the agitator speed to moderate setting and keep running. If the mixer is shut off during transport to the job site, it must be restarted and contents mixed for at least 10 minutes before the application begins. Keep the agitator running during the entire application period.

4.0 **Surface Preparation and Asphalt Repair**

4.1 Clean the surface thoroughly to remove all foreign debris (dirt, gravel, silt, etc) using air blowers or by flushing with water. Embedded dirt and silt shall be removed with steel bristle hand brooms. Remove dirt and debris from site being careful to avoid upsetting existing landscaping and accumulating dirt in grass along asphalt areas.

4.2 Treat all grease and oil spots by scraping off the excess oil and dirt away with a wire bristle and coat with an oil spot primer. It should be diluted 2 parts water to one part primer. The primer shall be applied using brush or garden sprayer covering the oil spot and at least two inches of the asphalt surrounding the oil spot.

5.0 Crack Sealing

5.1 Materials- Crack Sealant should be hot pour Parking Lot Sealant or equivalent. Sealant will be heated in an oil jacketed melter to pourable temperature of 350F-400F.

5.1 The sealant should be applied when the surface temperature exceeds 40F.

5.2 Routing – none required

5.3 Cracks or joints should be cleaned to be free from all foreign debris using 3000 degree heat lance.

5.4 To ensure dryness of the crack and to guarantee adhesion of the sealant to the crack wall, a heat lance using 3000F compressed air will be used.

5.5 Install crack sealant using speed banders or pumping unit whichever is appropriate but ensuring a uniform band of cracksealant.

6.0 Method of Sealer Application

6.1 The agitator of the sealer tank should be kept on to keep the material in suspension at all times. The machine should be equipped with a fog bar to be used for pre-dampening if the pavement temperature exceeds 90F.

6.2 Coat the edges first. Pour a continuous ribbon of coal tar sealer mix along the pavement edge 6-12 inches from curbing.

6.3 Draw mix away from the pavement edge by pulling a squeegee or brush perpendicular through the ribbon of material at a slight angle. Walk parallel to the pavement edge. Repeat the process in reverse direction pulling the excess material toward the center of the pavement.

6.4 After trimming (6.3) apply sealer over the remaining area using either a squeegee or a self propelled machine that squeegees and brushes the sealer into the pores of the pavement.

6.5 Allow the first coat to dry sufficiently to take light traffic scuffing. It will take a 2-6 hours depending on drying conditions.

6.6 After trimming (6.3) use machine with spray wand or spray bar apparatus that deposits the material according the coverage rates recommended. The spray application will take out any squeegee marks and give a uniform appearance.

6.7 The completed application shall be allowed to cure at least for 24 hours and then tested for traffic ability prior to opening for regular use.

6.8 Quantities of the material will vary according to porosity and texture of the pavement. The guidelines quantities expressed as the amount of undiluted are as below:

1st coat – 0.10-0.12 gal/ sq yd

2nd coat - 0.06-0.08 gal/sq. yd.

7.0 **Striping**

7.1 Materials

7.1.1 Use heavy duty latex based paint or suitable paint meeting 1952F specifications. Allow the seal coat to dry at least 6-24 hours before striping. Refer to the Technical Data Sheet on appropriate traffic paint details.

7.2 Application

7.2.1 The traffic paint shall be applied at an average rate of 300-400 L.F./gal.

7.2.2 All lines shall be chalked prior to striping to provide a uniform, neat layout. Careful attention should be paid to ensuring the end points of each stall line up.

7.2.3 All lines are painted using an airless striping machine.

7.2.4 Repaint all lettering, handicapped symbols, and arrows as exists.