#### BID #WG20-05 SPECIFICATIONS

These specifications shall be construed as minimum. Should manufacturer's published data or specifications exceed these, such standards shall be considered minimum and furnished. All integral parts not specifically mentioned in the scope of these specifications that are necessary to provide a complete working unit shall be furnished.

Bidder shall give a unit prices as indicated on the Bid Response Form. The price shall include all applicable charges, to include but not limited to delivery, etc.

# The use of specific names and numbers in the specifications is not intended to restrict the bidder or any seller or manufacturer's, but is solely for the purpose of indicating the type, size and quality of equipment considered best adapted to Baldwin County.

Award will be to the lowest responsible bidder meeting specifications. It is not the policy of the Baldwin County Commission to purchase on the basis of low bid only. Quality, conformity with specifications, purchase for which required, terms of delivery, finance package, resale value of equipment, and fast service and experience are among the factors that will be considered in determining the responsive bidder.

#### **BID RESPONSE FORM**

Each supplier should use the Response Form provided for their bid. <u>Exceptions are to be</u> <u>attached to the back of the Response Form</u>. The Bid Guarantee should be attached to the front of the Response Form.

#### DELIVERY

Delivery shall be as soon as possible but not more than **NINETY (90) days** after receipt of order from the Baldwin County Commission. Delivery shall be coordinated with Eric Scott the Baldwin County Highway Department, at (251) 348-0135. **Delivery location shall be to the Baldwin County Area 200 Highway Barn located at 22220 West Blvd., Silverhill, AL 36576.** 

A Purchase Order will be issued for the equipment listed.

#### WARRANTY

Bidders shall submit a copy of the manufacturer's standard warranty along with a complete explanation of the warranty **with their bid**. If a separate warranty is required for the tarp system, it shall be included as well **with the bid**.

#### AWARD

The bid will be awarded to the lowest responsible bidder complying with the conditions of the bid invitation provided that said bid is reasonable and is in the best interest of Baldwin County. The specifications shall be construed as minimum. All integral parts not specifically mentioned in the scope of these specifications that are necessary to provide a complete working unit shall be furnished.

#### LAWS AND REGULATIONS

The bidders attention is directed to the fact that all applicable federal and state laws, municipal ordinances, and rules and regulations of all authorities having jurisdiction over the purchase of the material described in this bid advertisement shall apply to the purchase agreement throughout, and they will be deemed to be included in the purchase agreement the same as though herein written out in full.

#### PRICE BID

Destination charges, delivery charges, title fees, rebates and any other similar costs and refunds on the equipment shall be included in the purchase price.

The purchase price shall not include extended warranty cost. These costs shall be stated separately as provided in the specifications.

#### **TITLE INFORMATION**

Title shall have the following listed as owner: Baldwin County Commission 312 Courthouse Square, Suite 11 Bay Minette, AL 36507

# MINIMUM SPECIFICATIONS FOR TRAILER MOUNTED BITUMINOUS MACHINE DOUBLE SEAT

#### SCOPE

1.0

The following are standard specifications for a trailer mounted bitumen type marker adhesive applicator capable of heating and dispensing metered quantities of thermal adhesive bitumen-type material at approximately 425 degrees on roadways. The double seat model will have two dispensing systems and two control systems for application of bitumen from either side of trailer.

#### TRAILER

#### 2.0

The frame is constructed of 2" x 2" X 11 gauge steel square tubing with mitered and full electric welded joints. Cross members and support pieces are of 1/8" x 1-1/2" x 1-1/2" angle steel. Bed of trailer is 5' 8" x 8 ft. made of 10 ga. steel plate. Trailer has 1700 lbs. leaf springs, a 4" offset axle, and two 13 x 175-80-D tries. Tail lights enclosed in 4" pipe, all wiring inside frame with 4 prong connector near hitch, tag plate holder with light left rear of unit. Welded to trailer bed is operator's safety containment bar and L.P. bottle support bracket with lower ring and positive holding clamp on right rear of trailer. The tongue is 3 ft. long with 2" snap action ball hitch welded to tongue of trailer with safety chain. Jack is a standard crank-type swing-away jack stand mounted to trailer.

#### 2.1

The box is constructed from 14ga. steel and is 19-1/4" x 28" x 12" in size mounted to trailer bed.

2.2 (2)

Fabricated from 16ga. metal, the basket is  $15" \ge 31-1/8" \ge 4-1/4"$  in size located by operator mounted to trailer bed.

2.3 (2)

Complete with foot support, guard rail and seat belt, two fold down seats are located on the left and right side in front of trailer wheel. Foot supports are 12" wide with a 3" lip for containment and safety, and adjustable for leg length. The complete seat and foot frame with valve line, swivels to a vertical position and fastens in place by a 5/8" spring loaded pin and socket. The operator's seat is approximately 9" above ground.

#### POWER PACK

3.0

The power pack frame is constructed from 1/4" x 3" angle iron and mounted to trailer and supported by 1" rubber pads off trailer bed. Generator, air compressor, engine and belt guard are all mounted to frame.

#### 3.1

Generator: 2000 watts 120 VAC at 3600 RPM.

# 3.2

<u>Air Compressor:</u> 2.5 CFM at 100 PSI, equipped with a 15 gallon air tank with safety overload valve. Air system pressure set at 90-95# controlled by continuous run unloader valve. Tank- ASME code, all parts are UL approved.

3.3

Engine: 9.0hp or greater, L.P. fueled, with electric start and oversize muffler.

# MATERIAL MELTING UNIT

4.0

The vat support frame is constructed from C4-5.4 channel iron with supporting pieces made of 1/8" x 1-1/2" x 1-1/2" angle and 1/4" x 1" x 1" angle mounted to trailer frame.

# 4.1

The 39 gallon vat, constructed from 10 gauge steel, has four ridged supports welded to vat and bolted to vat support. The size of the vat is 20" in diameter, 28" high with 7-1/2" lid opening to easily load bituminous. Latch on lid is provided to prevent accidental opening.

# 4.2

The jacket is constructed of 22 gauge galvanized steel with one inner and one outer jacket supporting 1" thick fiberglass Durablanket S86-1 insulating material. Outside dimensions of jacket is approximately 24" in diameter and 32" in height with a 1" captive heat chamber on all sides of vat. The heating chamber is vented by holes in top

of the insulation jacket allowing heat on bottom and all sides of vat. A 4" x 4" sliding door is provided in jacket for lighting pilot.

4.3

Heating system uses a ten inch, 60,000 BTU burner to melt the bituminous material. A <sup>1</sup>/<sub>4</sub>" thick by 14" diameter flame guard is used to protect bottom of vat.

4.4

Burner is thermostatically controlled with an adjustable temperature range of 175 degrees to 550 degrees. The vat is equipped with a 0 to 650 degree thermometer with an 18" stem. Thermostat sensing bulb and thermometer are located together in vat for an accurate temperature control.

4.5

Gas valve used with system is a millivolt powered, 100% safety shut-off valve with block out installed for L.P. gas only. For operation of gas valve, a pilot-generator combination producing 750 millivolts is used.

The system includes all necessary piping, connectors, regulators, and valves for operation. All parts are UL approved.

4.6

The vat is equipped with an agitator driven by a 200 inch pound, 6 RPM, 120 VAC motor with a disc clutch system. An on/off switch is located in control box to control motor. A removable manual crank handle is provided to operate agitator manually. The agitator shaft is supported at top and bottom of vat.

# DISPENSING SYSTEM

5.0 (2)

<u>Pump:</u> A free floating piston and valve combination capable of dispensing 0-9 cubic inches of material per stroke at 0-20 strokes per minute. The pump is operated by a 2-1/2" x 3" air cylinder with a safety shut of valve and volume control screw. Pump is enclosed in an insulated jacket and heated from heating chamber of vat. When pump is held in the down position flow from vat automatically shuts off.

5.1 (2)

<u>Dispensing Pipe:</u> Two pieces made of 1" schedule 80 pipe connected under the trailer by a horizontal/vertical cross swivel, and supported by cross sectional harden rods under the seat support and trailer. Both pipes are wrapped with 1 layer of 1" fiberglass blanket, 1 layer of 1/8" x 2" woven fiberfrax and 1 layer of hi-heat adhesive aluminum duct tape. The seat support and the lower dispensing pipe can be brought to a vertical position when not in use. The vertical position automatically stops any flow of hot material through the pipe. All items which are hot to touch are enclosed or marked red.

5.2 (2)

<u>In-Line Heaters:</u> Both line pipes are heated internally with two "MI" 3/16 2/c s.s. Sheathed heaters connected in series to produce 70 watts per foot at 120 VAC, sensored by type "J" thermocouple. Temperature controlled, Watlow analog on/off control, 120 VAC input, relay 15 AMP SPDT output, accuracy + or -1% at 77 degrees ambient and + or - 10% voltage input, operating environment 30-130 degrees; 0-90% RH, dial setting 0-600 degrees.

#### 5.3 (2)

<u>Dispensing Valve</u>: A drip free quick action plunger, operated by a 1-1/2" x 1" air cylinder. Valve is heated by a cartridge heater and controlled by preset thermostat set at 400 degrees. Metered control of shots is activated by foot pedal. Valve head is approximately 3" above pavement in operating position and is capable of horizontal swivel action over an 18- inch radius.

#### CONTROL SYSTEM

6.0 (2)

The control is constructed out of 1/8" aluminum and mounted to box on trailer within easy reach of operator.

#### 6.1 (2)

The control board consists of the following: #1 Watlow EZ-Zone series microprocessorbased temperature controller with four digit displays.

- #2 15 AMP fuse holder
- #3 Input power switch to control board on/off
- #4 Power stirrer switch on/off
- #5 Dispenser valve heat switch on/off with indicator light
- #6 Flow line temperature switch on/off with indicator light
- #7 Safety air valve control switch on/off

#### 6.2 (2)

The air regulator box is constructed from 1/8" aluminum with a blue powder coat finish and mounted on tool box. The air regulator box consists of a pressure regulator, gauge and solenoid valve.

# MISCELLANEOUS

7.0

<u>Wiring:</u> All wiring is insulated and enclosed in flexible conduit or by some other form. Wiring is securely fastened at sufficient intervals to prevent sagging and ensure clearance of moveable and mechanical parts.

# 7.1

<u>Fittings</u>: The unit includes all necessary piping, connectors, regulators, valves, and other fittings for operation. All components meet standard specification or UL approved.

# 7.2

<u>Paint:</u> Manufacturer's standard color is Red except for glass, rubber and metallic accessories of fixtures constructed of rust resistant or plated material not normally painted. All items hot to the touch are painted red, marked "HOT" or enclosed.

# 7.3

<u>Manuals</u>: A detailed manual containing illustrated parts list, operating and service instructions for the unit and engines shall be delivered with each unit. We do not offer manuals on CD-ROM

# 7.4

<u>Warranty:</u> The Manufacturer will at its options, replace or repair without charge system component or components found to be defective in workmanship and/or material during the first year after shipment.

# 7.5

<u>Training</u>: The Manufacturer should provide in the Bid price an Eight (8) hour training course on operating and maintaining the unit. Course will cover safe lighting and dispensing procedures for both vat and line. Course will also cover safe start up procedures for engine and proper maintenance of all power pack components.

# **BID #WG20-05 RESPONSE FORM Purchase of one (1) Trailer Mounted Bituminous Machine**

Date:
Out of State or If yes, Registration Number
Company Name:
Address:
Company Rep:
(Rep. Name Typed or Printed)
Position:
Phone:
Fax:
Email:
Financing through another agency beside yourself $\underline{\qquad}$ or $\underline{\qquad} x \underline{\qquad}$ Yes No If yes, must attach a copy of the financing agreement and all conditions to this response from.
in yes, must attach a copy of the financing agreement and an conditions to this response from.
Financing Agency Authorized Signature
Furnish and Deliver (1) one Trailer Mounted Bituminous Machine
Bid Amount: \$
Make / Model:
Delivery Time after Receipt of Order (Days)

Brochures showing the equipment offered shall be attached to this Response Form. <u>All exceptions must be listed and attached to the bid response form</u>.