

**BID SUBMITTAL FORM**  
**Alabama County Joint Bidding Program**  
**BID ITEM – ONE MAN POTHOLE PATCHER**  
**– OPTION B**

Company Name: COBLENTZ EQUIPMENT & PARTS CO., INC.  
Address: 10400 HIGHWAY 80 E.  
MONTGOMERY, AL 36117  
Bid Submitted by: MATTHEW COBLENTZ  
(Name of company representative)  
Title: V.P. e-mail address: matthew@coblentzep.com  
Phone: 334-215-8600 Fax: 334-215-8532

By submitting this bid, we agree:

Initials

The equipment model number identified below meets the bid specs for this bid item

DMC

That the bid price will be honored for all counties for the period from Jan. 1, 2019 to Dec. 31, 2019.

DMC

The equipment will be delivered at the bid price to all counties participating in the joint bid program

DMC

The company representative listed above will be the contact person for purchasing this bid item under the joint bid program

DMC

The bid is accompanied by a current catalog or model specification document for the model number identified below

DMC

The bid is accompanied by a copy of the manufacturer's standard warranty as required in the bid specifications

DMC

The bid includes the e-verify documentation required by Alabama law

DMC

If awarded the bid, a performance bond will be provided upon request

DMC

The bid documents include the **Manufacturer's Suggested Retail Price Sheet (MSRP)** for the Standard Machine

DMC

## ONE MAN POTHOLE PATCHER – OPTION B

Total Bid Price for Standard Machine: \$ 218,157.<sup>00</sup>  
(Total Bid Price for Standard Machine Includes Freight Preparation, Delivery and Standard Warranty Costs) \*

Freight Preparation and Delivery: \$ 981.<sup>00</sup>  
(Included in Standard Machine Bid Price)

Manufacturer's Suggested Retail Price for Standard Machine: \$ 250,700.<sup>00</sup>

Equipment Model #: DURAMAXX

Description: ONE MAN POTHOLE PATCHER Option B - INCLUDES ROW TARP COVER,  
STANDARD ARROWBOARD & DRIP TANK AS

Signature of company representative submitting bid:  STANDARD

Title: VP

\* **NOTE:** Award will be made based on the total cost of the **Standard Machine**. The total cost of the standard machine is to include the freight preparation, delivery and standard warranty cost. Freight preparation, delivery will be excluded from the total bid price of the standard machine in determining the percentage discount for any available options.

## BID SUBMITTAL FORM: OPTION COST SHEET ONE MAN POTHOLE PATCHER – OPTION B

By submitting this bid, we agree:

To offer any available options at the percent difference between the Manufacturer's Suggested Retail Price Sheet and the actual bid price on the Standard Machine\*

10%

The bid documents include the Manufacturer's Suggested Retail Price Sheet (MSRP) with **any available Options** for the Standard Machine

YES

Equipment Model #: ONE MAN POTHOLE PATCHER - OPTION B

Description: DURAMAXX ONE MAN PATCHER

Signature of company representative submitting bid: M. McGly

Title: VP

**\*Note:** The percent difference between the **Manufacturer's Suggested Retail Price Sheet (MSRP)** for the standard machine as specified by these **Bid Specifications** and the actual price bid by the vendor will be calculated to determine the percentage discount to be applied to any available options. The bid price of the freight preparation, delivery cost shall be excluded in determining the percentage discount to be applied to available options. Any individual county may choose to add any available option to the standard machine at the percentage discount at the time of purchase.

# **BID SPECIFICATIONS FOR ONE MAN POTHOLE PATCHER – OPTION B**

## **GENERAL**

These specifications shall be construed as the minimum acceptable standards for a single-operator, truck-mounted, automatic pothole patcher with a remote-controlled boom operated from the driver's seat of the truck chassis. Should the manufacturer's current published data or specifications exceed these standards, the manufacturer's standards shall be considered minimum and shall be 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. Additionally, the machine for bid offered shall include all standard manufacturers' equipment. The one-man pothole patcher must be a new current production model and shall meet all EPA applicable standards at the time of manufacture.

The use of specific names and numbers in the specification is not intended to restrict the bidder or any seller or manufacturer, but is intended solely for the purpose of indicating the type, size and quality of equipment considered best adapted to the uses of counties participating in this joint bid.

## **BID SUBMITTAL FORM**

Each bidder must submit his or her bid on the Bid Submittal Form included in the Invitation to Bid package. All written warranties to be submitted shall be attached to the Bid Submittal Form.

## **BID PRICE**

The bid price shall include all destination charges, delivery charges, title fees, rebates, and all other applicable costs and refunds.

## **MANUALS**

Each unit will be provided with one (1) copy of the operator's manuals, one (1) copy of the current parts manuals and (1) copy of the repair manual. Units will not be accepted for delivery until the manuals as outlined above are received by the purchaser.

## **WARRANTY**

Units purchased under this specification shall be warranted against defects in materials and workmanship for a period of not less than one year from date of delivery to customer. Items thought to be defective will be returned to factory prepaid to be repaired or replaced.

Yes ☒ No ☐  
Page # 1  
or  
Attachment ☒

## **MINIMUM REQUIREMENTS**

The truck-mounted machine shall be designed and constructed to repair larger cracks, potholes, and broad areas and completely controlled by one person from the driver's position of the truck cab with no support equipment necessary. The machine shall be capable of blowing water, dust or debris from the pothole or surface to be repaired. The machine must be capable of patching while moving forward or reverse, must be capable of patching at temperatures as low as 5 degrees F, and must be able to perform all patching functions with transmission engaged and in motion. The machine must be capable of performing each of the following functions:

- clean cracks and surfaces

- spray liquid asphalt emulsion over area to provide a tack coat
- apply emulsion-coated aggregate to provide a high-density cover repaired area with dry aggregate

Yes ☒ No ☐  
Page # 1

### **DIMENSIONS**

Width and height to meet State and Federal requirements without requiring oversize permits

Yes ☒ No ☐  
Page # 1

### **CHASSIS: CAB-OVER Kenworth 370 or Equivalent Minimum**

Requirements:

GVWR: 33,000 lbs.  
Front Axle: 12,000 lbs.  
Rear Axle: 21,000 lbs.  
Air Brakes: 20.8CFM @ 2,600 rpm  
Engine: 240hp @ 2,600 diesels, 6 cylinder turbocharged  
Wheelbase: 158"

Yes ☒ No ☐  
Page # 6

**Tires:** Front Single highway tread, Rear dual highway tread-11R22.5-44

Yes ☒ No ☐  
Page # 6

**Wheels:** Hub piloted steel disc rims

Yes ☒ No ☐  
Page # 6

**Transmission:** Allison, 2500 highway Series 6 speed or Equivalent

Yes ☒ No ☐  
Page # 6

Lights, Day time running lights, Map light, turn signal/hazard, 12 volt power outlet, Air, Coolant, Fuel, Temperature Gauge, Speed-o-meter & Trip meter, Tachometer, back up alarm, tinted glass cruise control am/fm radio. Tool box mounted on the truck chassis

Yes ☒ No ☐  
Page # allison

**AGGREGATE SYSTEM:**

The aggregate tank shall be rectangular in shape and have a minimum capacity of 5 cubic yards. The opening on the tank shall be large enough in length to accommodate loading from large industrial loaders and have a safety screen in place. Aggregate system shall perform with wet or dry material. The hopper box will be equipped with two (2) air operated slide gates. Aggregate shall be fed via gravity into the venturi air system which will create a vacuum to draw it into the aggregates hose to provide a constant and even flow of material. The blow-vac system must be capable of passing 2-1/2 inch material without clogging the feed system. **The hopper shall be equipped with a roll tarp system capable of being operated by one person.**

Yes ☒ No ☐  
Page # 2

**AGGREGATE CONDUIT SYSTEM:**

The aggregate conduit system shall consist of an abrasion resistant 3-1/2 inch ID flexible non-kinking plastic wire reinforced rubber neoprene-lined hoses designed for long life. The flexible hoses shall be fitted with a vent flow nozzle that has a 1/2 inch by 1/16 inch single spray slot incorporated in the nozzle body. No multiple spray slots or rings will be accepted. The perforated holes in the vent flow nozzle shall relieve air pressure as the aggregate mix exits the nozzle to prevent the coated aggregate mix from being blown out of the repair area. The unit must prevent over-spray of material therefore allowing repairs to be made close to objects such as cars and curbs.

The operator will control the flow of aggregate with the RPM's of the auxiliary engine only. No belts, conveyors or two speed blower controls will be accepted.

The unit must be capable of dispensing aggregate at the rate of 135 lbs. per minute in continuous operation under normal patching conditions when using 1/4 to 3/8 in aggregates. Unit must be capable of performing repairs with aggregate up to 3/4 inch in size.

Yes ☒ No ☐  
Page # 2

**AUXILIARY ENGINE:**

The pothole patching machine shall be powered by a liquid cooled diesel tier IV engine with a rated minimum gross horse power of 74 HP. The engine must carry a factory warranty of two (2) years. The engine must be enclosed by an engine compartment with an access door and the enclosure will be lined with sound suppression material. Enclosure shall be powder coated black. Engine shall be protected with an automatic shutdown system to protect against a loss of engine oil pressure and overheating.

Yes ☒ No ☐  
Page # 4

**BLOWER SYSTEM:**

The blower shall be directly coupled to the flywheel of the engine. It shall produce a minimum of 450 CFM at 7 PSI at 1500 RPM's. The blower shall be protected from overheating by a pop-off valve set at 10 PSI. The filter for the blower shall be an easily accessible paper type with a minimum of 175 square inches of filtration

Yes ☒ No ☐  
Page # 5

**EMULSION TANK:**

The emulsion tank shall be an ASME certified pressure vessel with a minimum capacity of 300 gallons. It shall have a 200 PSI working pressure at 500 degrees F. It shall be insulated with 2-inch fiberglass insulation with an R value of 15 and covered with a weatherproof, fire retardant re-enforced plastic cover with metal end caps. Overnight heating will be done with 2-1500 watt, 120-volt heater blankets that are thermostatically controlled. The heater blankets are wrapped around the outside of the tank to provide gentle heat on the emulsion tanks itself to avoid putting direct heat on the emulsion. The heating system shall be capable of operating continuously regardless of whether the emulsion tank is empty or full with no damage to the heater blankets or other components. This allows an empty tank to be preheated in cooler weather. The tank shall have a pressure relief valve set between 100 PSI and 110 PSI. The tank must have a minimum 12-inch filler neck with a T-bolt closure.

Tank shall have a 5 inch dial thermometer that is visible from ground level.

Yes ☒ No ☐  
Page # 142

The unit must feed the emulsion via a pressurized emulsion tank to allow the system to be unaffected by cold weather. Must be capable of performing in temperatures as low As 5 degrees F.

Yes ☒ No ☐  
Page # 2

**EMULSION CLEAN OUT SYSTEM:**

The emulsion clean out tank shall be a 13-gallon pressurized vessel. It shall have a pressure relief valve set at 100 PSI to 110 PSI. In the open position, diesel or solvent from the clean out tank will flow through the emulsion line and valves to allow the system to shut down without clogging.

Yes ☒ No ☐  
Page # 4

No disassembly or soaking of any part of the emulsion system will be necessary. The entire cleanout procedure shall not get emulsion, diesel or solvent on the operator.

Yes ☒ No ☐  
Page # 4

**HOT FLUID HEATING SYSTEM:**

The unit shall come equipped with a heat exchanger system to keep the emulsion lines and valves hot during operation in cool or cold weather. A 12-volt circulation pump shall circulate heat transfer oil through 3/8 inch lines the full length of the hose to the emulsion nozzle then back to the heat exchanger. All parts including emulsion valves, hose, and nozzles will be heated by this hot fluid heating. No units circulating chassis engine coolant will be accepted.

Yes ☒ No ☐  
Page # 1

**FRONT MOUNTED BOOM AND CONTROL SYSTEM:**

The unit will be a fully proportional, 3-axis, single joystick that is modular in construction. The system is used in conjunction with a hydraulically operated mechanical arm mounted to the truck. The arm is used to position the vent flow nozzle over the section of the roadway needing repair. The system must be operable by a single person from the driver's seat in the cab of the truck with minimal training.

Yes ☒ No ☐  
Page # 3

**CONTROL SYSTEM:**

The control system shall be a modular unit that includes a mounting base. The console is a fully adjustable design with a cushioned armrest and operator interface panel located at the operator's fingertips. The console will have 3 easily accessible switches that control the master power, engine kill and pump control. All switches are to be illuminated with function. The console must have a display area for function indicators and engine information.

Yes ☒ No ☐  
Page # 3

The joystick shall have a non-gated X and Y axis that are 100% proportional. The joystick shall have a second thumb actuated switch with a gated X and Y axis that are 100% proportional. The joystick handle will have buttons for selecting functions including: throttle, emulsion flow, vibrator and rock flow. The joystick shall be able to control 4 proportional valve functions simultaneously. All proportional control must be provided by a programmable controller that monitors the joystick positions and all inputs.

Yes ☒ No ☐  
Page # 3

**MECHANICAL ARM:**

The unit must come with a 4 axis, heavy duty, hydraulically manipulated assembly used to position a dispensing nozzle. The arm and control must prevent the nozzle from moving beyond the side of the vehicle into the traffic lane. The range of motion must allow repair a minimum of 36" beyond the side of the vehicle opposite the traffic lane. The nozzle must be vertically adjustable to compensate for vehicle height variations. The mechanical arm (boom) is to fold against the bumper of the vehicle and in no way obstruct the driver's vision when locked in the transport position. This is a safety issue!

Yes ☒ No ☐  
Page # 3

All pivot points must be greaseable and replaceable. The arm must mount to the passenger side of a truck bumper with 4 bolts. A stow bracket, and a welded cylinder bracket are also attached to the bumper. The arm must have a stow support for traveling to eliminate bushing fatigue at all pivots. All arm cylinders and rotary actuator must utilize counter balance valves to maintain position while moving the truck or operating the arm.

Yes ☒ No ☐  
Page # 3

The emulsion control valve must be mounted near the emulsion nozzle and all hoses to the tank must be protected in insulating wrap to prevent clogging. The arm must have a minimum reach of 96 inches from the bumper. The nozzle must rotate through a 36 inch radius and 270 degrees of rotation and have a vertical range of motion no less than 8 inches at the nozzle tip.

Yes ☒ No ☐  
Page # 1

**Wiring and Connection Specifications:**

Wiring and harness system should meet ISO rating IP68 and NEMA 6. The connectors should be zinc die cast E-coated, similar to a MIL spec connector. Each should have three sealing points- the lock ring itself, a raised portion of the molded plastic around each pin, and a viton O-ring that seals the whole connector. The cable jacket should be TPE- thermoplastic elastomer, and molded to the connectors. Connectors and harness should be rated and tested for a temperature range from -30C to +70C. Connectors should be tested to be water tight when submerged in 6' of water for 24 hours, in 275' of water for 1 hour, and when subjected to a 1000-psi pressure wash. The connectors should be designed to have NO corrosion after 500 hours in a 35C salt spray. Cabling should be rated excellent in its resistance to oxidation, heat, oil, low temperature flexibility, weather, sun, ozone, abrasion, electrical priorities, flame, water, acid, alkali, gasoline, benzol, toluol, degreaser solvents, alcohol, and weld slag.

Yes ☒ No ☐  
Page # INCL

**Hydraulic Valve Enclosure:**

The intent of this specification is to describe a hydraulic valve enclosure designed for over-the-road and mobile applications. The Enclosure must be constructed of minimum 10-gauge steel with the option of stainless steel construction.

Yes ☒ No ☐  
Page # INCL

Enclosure must be of template style for bulkhead "through" mounting of the valve and be completely free from internal tubing or hoses from the work ports and inlet of the valve. The valve must be electrically operated proportional type and must be removable as a unit with template for service and accessibility. Enclosure shall have gusseted frame mounting flanges for horizontal mounting to the truck frame.

Yes ☒ No ☐  
Page # INCL



There shall be optional side access panels for further service and accessibility and the provisions for cable or electronic control valves. All panels must have formed gaskets and be weather sealed with bottom welded mounting nuts for panels. All panels and valve plate to be secured with stainless steel bolts. Enclosure lid shall have handles and a minimum of six latches for quick release and easy access to valve compartment. Lid shall seat against bun style lip seal incorporated beneath and against the entire length of the lid assembly. The Assembly will be designed to accommodate a variety of valve controls including, mechanical cables, pneumatic and electrical and any combination thereof

Yes ☒ No ☐  
Page # NCL

Electrical, air and cable connections shall be made via bulkhead connectors on the front (cab) side of the enclosure. Hydraulic hose connections shall be made through the bottom of the valve plate for easy access. Enclosure must be symmetrical and capable of mounting on either side of the truck frame. Model MTEA-200 ValveGuard enclosure is acceptable.

Yes ☒ No ☐  
Page # NCL

**Cartridge Control Valve:**

Integrated valve to be of the cartridge design capable of 20 GPM input flow. The unit will have four proportional 3 position 4 way, closed center design used in conjunction with a pressure compensator. Manual overrides are provided on each of the cartridges in case of a power failure or interrupt. 12volt electrical connections to be of DIN style. Optional Load sense port for horsepower limiting and full load sense capabilities. An optional relief valve integrated into the manifold available for circuit protection. Unit to have 0-6 GPM control range for each valve. Storm Guard Series Valve, SG040900XX is acceptable.

Yes ☒ No ☐  
Page # NCL

**HYDRAULIC FLUID RESERVOIR:**

The hydraulic fluid reservoir must contain a replaceable filter, filler breather, sight gauge, drain port, suction strainer, temperature switch, low level float switch, and a remote mounted fluid cooler with electric fan. The reservoir must powder coated, black in color, frame mounted, and made of steel.

Yes ☒ No ☐  
Page # NCL

**WARNING LIGHTS:**

30" x 60", two-way lighted arrow board with cab controls. Cab-mounted rotating

beacon.

Yes ☒ No ☐  
Page # INCL

**FINISHING:**

The entire unit shall be primer painted and finished with a high grade of enamel paint to match manufacturer standard color.

Yes ☒ No ☐  
Page # INCL

**DESIGN:**

This unit applies tons of highly abrasive aggregate per day. All features of this pothole-patching machine have been designed to reduce wear and maintenance costs.

Yes ☒ No ☐  
Page # INCL

**ENVIRONMENTAL:**

The unit must not produce more than one (1) quart of waste fluid in the process of preparing the machine to patch, nor during the cleanup sequence before storing the machine overnight. The use of one (1) quart or less of waste fluid must be sufficient to prepare the emulsion spray system for operation or for its normal cleanup and storage.

Yes ☒ No ☐  
Page # INCL

**DEMONSTRATION:**

In order to be considered for purchase, any company wishing to supply the equipment described in this specification must perform a satisfactory on-site demonstration for evaluation by the buyer. This demonstration must also include an operator from the purchasing agency operating the unit for not less than one hour continuously. Aggregate of 2.5-inch diameter will also be fed through the aggregate feed system to determine specification compliance. The test unit will be compared with the complete specification at this time.

Yes ☒ No ☐  
Page # INCL