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The purpose of these specifications is to describe a Pavement Router Self-Propelled. This unit must be of the manufacturer's current production. This unit shall be capable of routing while accurately following random cracks in asphalt or concrete surfaces at an estimated speed of 1,500 linear feet (500 meters) per hour. The Self-Propelled reduces worker fatigue by moving the router effortlessly from one distressed pavement area to another, working especially well on roads with inclines or hills. The router also reduces physical strain associated with loading and unloading the router onto a trailer during transport

	<u>Comply</u>	<u>Does Not Comply</u>
<b>1. <u>FRAME</u></b>		
A. There shall be a stub axle attached on each side of the frame assembly in line with the cutter head.	_____	_____
B. Attached to each stub axle shall be a pneumatic tire with tapered bearing. (Total tires on machine is 2)	_____	_____
C. The entire assembly of engine, cutter head, cutter head housing and all other part assemblies shall be mounted on a heavy steel frame, electric welded through 100% of the metal thickness at each joint for maximum strength and rigidity.	_____	_____
<b>2. <u>ENGINE</u></b>		
A. The engine shall be mounted on a hinged saddle to permit belt tension.	_____	_____
B. The cutter shall be powered by a Kohler Command Pro engine with hour meter. This engine shall be capable of producing 27 HP (20.1 kW) at 3600 RPM.	_____	_____
C. The engine shall have a full flow oil filter and oil cooler.	_____	_____
D. A dual element air cleaner shall be installed on the engine.	_____	_____
E. A dirty air cleaner indicator will be installed between the two air filtration systems and the engine.	_____	_____
<b>3. <u>CUTTER HEAD</u></b>		
A. The cutter head shall be mounted on a drive shaft having a minimum diameter of 1¾ inch (4.4 cm) and is fastened with a minimum of two ½ inch (1.2 cm) hex head cap screws in conjunction with a minimum 3/8 inch (0.95 cm) x 4 inch (10.2 cm) key.	_____	_____
B. The cutter head drive shaft shall be mounted by means of two self-aligning ball bearings. The cutter head shall accommodate a minimum of six - eight tooth carbide tipped cutters.	_____	_____

	<u>Comply</u>	<u>Does Not Comply</u>
C. These cutters shall be equally spaced on the cutter head and revolve on the hardened pins of a length that permits the use of spacers.	_____	_____
D. By rearranging the spacers, the cut width can be varied from ½ inch (1.2 cm) to 2 inch (5.1 cm) wide.	_____	_____
E. The cutter head shall be housed in a steel-housing capable of containing the cutter assembly and covering 80% of the total cutter assemblies surface area.	_____	_____
F. The driving force from the engine to the cutter head shall be transmitted through a clutch and twin grooved sheaves and twin matched "V" belts covered with a removable metal guard ventilated to prevent upward suction of pavement debris.	_____	_____
G. The cutter head and its protective housing shall be able to raise and lower a minimum of four inches by means of an electric lineal actuator operated by a fingertip control switch mounted on the operator handle.	_____	_____
<b>4. <u>CLUTCH</u></b>		
A. An electric clutch shall be mounted on the engine in such a manner as to stop the cutter head on demand without stopping the engine.	_____	_____
B. The clutch switch shall be located on the handle in order to facilitate easy access by the operator.	_____	_____
<b>5. <u>DRIVE / PROPEL COMPONENTS</u></b>		
A. The drive shall consist of a belt driven propelling clutch, which can be engaged or disengaged at the operator's handle.	_____	_____
B. By engaging the control handle, the propelling drive clutch is activated and transmits power to the wheels.	_____	_____
C. The control handle at the operator station can be feathered for speed control.	_____	_____
D. There shall be an interlock which prevents the cutter head from rotating when the propelling drive is engaged.	_____	_____
E. All belts and chains shall be guarded for safety.	_____	_____
<b>6. <u>CARBIDE SKID PLATE</u></b>		
A. A pavement router shall be equipped with a replaceable carbide skid plate mounted at the rear of the cutter head housing in order to facilitate stopping of the unit, controls speed and increases crack tracking accuracy.	_____	_____

	<u>Comply</u>	<u>Does Not Comply</u>
<b>7. <u>BATTERY</u></b>		
A. The unit shall be equipped with a 12-volt battery capable of starting the engine and operating the clutch and actuator.	_____	_____
B. The battery shall also be housed in a fully enclosed box that is weather resistant and heavy duty.	_____	_____
<b>8. <u>FUEL TANK</u></b>		
A. The unit shall be equipped with a 6 gallon (22.7 l) minimum size gasoline tank.	_____	_____
B. The tank shall be safely strapped to the frame and shielded by means of a metal guard that protects the front and corners of the tank.	_____	_____
C. The tank shall also be manufactured from unbreakable, shatterproof, nonmetallic materials.	_____	_____
<b>9. <u>CUTTERS</u></b>		
A. The unit shall be supplied with pins, spacers and a complete set of wide hub carbide cutters.	_____	_____
<b>10. <u>TRAINING</u></b>		
A. An authorized, factory-trained representative will be made available for a full day of "on the job" training at a facility designated by the bidding agency.	_____	_____
B. At this training session a complete operational, mechanical and safety overview will occur. The CD manual and startup video will be viewed and discussed with all concerned personnel.	_____	_____
<b>11. <u>MANUALS</u></b>		
A. An instruction manual containing warranty information, safety instructions, as well as an operation guide shall be provided.	_____	_____
B. The instruction manual shall also contain a complete parts list with detailed service and maintenance instructions.	_____	_____
<b>12. <u>PARTS</u></b>		
A. Bidders must show proof that a large stock of parts for the model of equipment upon which he is bidding is maintained at his facility.	_____	_____
<b>13. <u>WARRANTY</u></b>		
A. The manufacturer shall warranty the equipment for no less than one year.	_____	_____

	<u>Comply</u>	<u>Does Not Comply</u>
B. A written manufacturer's standard warranty policy shall be provided in the Operator's Manual.	_____	_____

**14. QUALIFICATIONS OF BIDDERS**

A. The bidder of this equipment must (1) meet the requirements of the specifications without material changes or modifications and (2) have been engaged in the manufacture of said equipment for at least forty-eight months.	_____	_____
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