

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
EQUIPMENT DIVISION

BIDDER'S EVALUATION REPORT

PROCUREMENT SPECIFICATIONS  
NO. 021-2-E

OPEN END CONTRACT  
10 FOOT OR 11 FOOT POWER REVERSIBLE SNOWPLOW (HYDRAULIC)

NOTE TO BIDDER: Procurement Specification No. 021-2-E, Paragraph 2.0 recommends the completion and submittal of this Report with your bid. Purpose of this Report is to enable the West Virginia Division of Highways Evaluation Committee to make full and fair evaluation of the bid. Addendums in order, along with a summary of exception as a separate attachment, should be with Bidder's Evaluation Report.

FAILURE TO SUBMIT THIS REPORT, COMPLETE IN ITS ENTIRETY, MAY SUBJECT THE BIDDER TO DISQUALIFICATION.

Reference Requisition No.: \_\_\_\_\_

Bidder's Name: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

Years Bidder has been registered to do business with the State of West Virginia: \_\_\_\_\_ YRS.

Years Company has been an authorized dealer for proposed unit: \_\_\_\_\_ YRS.

X3.2 Have you complied with all mandatory specifications? \_\_\_\_\_ YES \_\_\_\_\_ NO

X4.2 DELIVERY:

X4.2.1 Delivery date of completed representative unit: \_\_\_\_\_ Calendar Days After  
Receipt of Purchase Agreement

X4.2.2 Delivery date of balance of completed units: \_\_\_\_\_ Calendar Days After Receipt of  
Purchase Agreement

X5.0 AWARD CRITERIA;

X5.1 Price per unit:

\_\_\_\_\_per unit

X6.0 SPECIFICATIONS - GENERAL

X6.1 Manufacturer, model, series, and date of manufacture of proposed unit:

\_\_\_\_\_  
Is descriptive literature, fully describing proposed unit attached to your bid? \_\_\_\_\_ YES \_\_\_\_\_ NO

If not, why?\_\_\_\_\_

X6.2 Will the required number of service manuals, and complete parts list be delivered to the Equipment Division at Buckhannon upon completion of delivery of total units?

\_\_\_\_\_ YES \_\_\_\_\_ NO

Will the required Equipment Preventive Maintenance Form (Section X6.2 of Bidders Evaluation Report) be provided upon inspection of the pilot unit? \_\_\_\_\_ YES \_\_\_\_\_ NO

X6.2  
2-10-00

**EQUIPMENT PREVENTATIVE MAINTENANCE QUESTIONNAIRE**

THIS FORM MUST BE COMPLETED IN ITS ENTIRETY BY SUCCESSFUL BIDDER OR MANUFACTURER'S TECHNICAL REPRESENTATIVE PRIOR TO DELIVERY OF PILOT MODEL TO THE WVDOH.

DESCRIPTION: \_\_\_\_\_ MAKE: \_\_\_\_\_

MODEL: \_\_\_\_\_ YEAR: \_\_\_\_\_ PURCHASE AMOUNT: \_\_\_\_\_

ENGINE: MAKE: \_\_\_\_\_ MODEL: \_\_\_\_\_ FUEL TYPE: \_\_\_\_\_

HORSEPOWER: \_\_\_\_\_ CYLINDER: \_\_\_\_\_ ENGINE SERIAL: \_\_\_\_\_

COOLING SYSTEM CAPACITY: \_\_\_\_\_

BELTS: DESCRIPTION: \_\_\_\_\_ PART NUMBERS: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

GVW: \_\_\_\_\_ AXLE CAPACITY:FRONT: \_\_\_\_\_ REAR: \_\_\_\_\_

TIRES: FRONT MAKE & SIZE: \_\_\_\_\_

REAR MAKE & SIZE: \_\_\_\_\_

DIMENSIONS OF UNIT: LENGTH: \_\_\_\_\_ WIDTH: \_\_\_\_\_ LENGTH: \_\_\_\_\_

VENDOR CONTACT PERSON: \_\_\_\_\_ PHONE: \_\_\_\_\_

**PARTS:**

BATTERY MAKE: \_\_\_\_\_ MODEL: \_\_\_\_\_ CCA: \_\_\_\_\_

TOP OR SIDE POST: \_\_\_\_\_ DIMENSIONS: LENGTH \_\_\_\_\_ WIDTH \_\_\_\_\_ HEIGHT \_\_\_\_\_

SPARK PLUGS OR FUEL INJECTORS MAKE: \_\_\_\_\_ PART # \_\_\_\_\_

FUEL PUMP OR INJECTION PUMP MAKE: \_\_\_\_\_ MODEL: \_\_\_\_\_

ALTERNATOR MAKE: \_\_\_\_\_ PART #: \_\_\_\_\_

STARTER MAKE: \_\_\_\_\_ PART #: \_\_\_\_\_

TURBO CHARGER MAKE: \_\_\_\_\_ PART #: \_\_\_\_\_

TRANS. MAKE: \_\_\_\_\_ MODEL: \_\_\_\_\_ AUTO/MANUAL: \_\_\_\_\_

HYDRAULIC PUMP MAKE: \_\_\_\_\_ MODEL: \_\_\_\_\_

FILTERS	MAKE	PART NO.	LUBRICANT	MANUFACTURER TYPE
OIL	_____	_____	ENGINE	_____
AIR INNER	_____	_____	TRANSMISSION	_____
AIR OUTER	_____	_____	POWER STEERING	_____
FUEL PRIMARY	_____	_____	HYDRAULIC	_____
FUEL SECONDARY	_____	_____	DIFFERENTIALS	_____
COOLANT	_____	_____	BRAKE FLUID	_____
HYDRAULIC	_____	_____	COOLANT	_____
OTHER	_____	_____	OTHER	_____

X6.3 TRAINING:

Will training seminar be conducted on Preventive Maintenance, Operator and Mechanic Training  
\_\_\_\_\_ YES \_\_\_\_\_ NO

**Will you conduct training with each purchase order against this open end contract?**  
\_\_\_\_\_ YES \_\_\_\_\_ NO

Will training be conducted within 2 working days from the delivery of the pilot unit on the individual purchase order?  
\_\_\_\_\_ YES \_\_\_\_\_ NO

If NO, explain time frame \_\_\_\_\_

**Will an Operator's Manual be furnished directly to Training Academy prior to the delivery of the pilot?**  
\_\_\_\_\_ YES \_\_\_\_\_ NO

**X6.4 If you are the successful vendor, will you furnish all training aids, i.e., videos, projectors, required in conducting the training?**  
\_\_\_\_\_ YES \_\_\_\_\_ NO

**X6.4.1 Will all manuals, booklets, etc. explaining preventive maintenance, operator procedures, and service schedule be delivered with each unit?**  
\_\_\_\_\_ YES \_\_\_\_\_ NO  
If NO, explain \_\_\_\_\_

X6.5 WARRANTY AND SERVICE POLICY

Will the warranty and service you provide comply with all areas as stated in Section 6.5 of specifications  
\_\_\_\_\_ YES \_\_\_\_\_ NO

Is warranty literature attached? \_\_\_\_\_ YES \_\_\_\_\_ NO

**Is a minimum two (2) year bumper to bumper basic parts and labor warranty excluding abuse and normal wear items included?**  
\_\_\_\_\_ YES \_\_\_\_\_ NO

Describe:

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X6.6 EVALUATION COMMITTEE REQUIREMENTS

Is all component specifications, product literature, component models provided for Evaluation Committee bid determination?  YES  NO

**X6.7 Will all parts, equipment, accessories, material, design and performance characteristics not specified herein, but which are necessary to provide a complete unit, be furnished with the unit and conform in strength, quality of material, and quality of workmanship to those which are advertised and provided to the market in general by the unit industry?**  
 YES  NO

**X6.7.1 Are all parts and accessories adequate and regularly supplied as standard to be included except those which may be duplications of specifications herein, and except these by specification are not to be furnished?**  
 YES  NO

**X6.7.2 Are all standard safety features that are required by Federal and State statutes of law included?**  
 YES  NO

X7.0 SPECIFICATIONS OF THE QUOTED UNIT

The bidder should complete the following schedule in order for the Division to compare the actual bid unit to the specifications. Should the bidder except a requirement, then such exception may be only on the basis that such feature is not offered by the manufacturer. The Division will have the sole discretion as to whether the bidder's substitution meets the requirements of the specifications. by the manufacturer. The Division will have the sole discretion as to whether the bidder's substitution meets the requirements of the specifications.

Is the snowplow designed for mounting on a single axle or tandem dump truck  
 YES  NO

Is the snowplow capable of plowing to the right or left at and angle approximately 35° discharging to the right or left  
 YES  NO

Is it a straight blade type with an integral type snow shield  YES  NO

Does it have two (2) trip springs setting inside the two (2) moldboard struts  YES  NO

**Will you supply the hose and fittings to connect both systems to the valve located under the front bumper**  
 YES  NO

Is the blade section type, made up of three (3) and four (4) foot sections to total 10 feet or 11 feet wide, having a tungsten carbide inserted cutting edge  
 YES  NO

Manufacturer: \_\_\_\_\_ Model: \_\_\_\_\_

X7.1 Moldboard:

X7.1.1 Overall Width:

X7.1.1.1 **OPTION #1** – 10 Foot  YES  NO

X7.1.1.2 **OPTION #2** – 11 Foot  YES  NO

X7.1.2 Overall height: \_\_\_\_\_ inches

X7.1.3 **Moldboard construction:** \_\_\_\_\_ U.S. Gauge \_\_\_\_\_ steel and rolled to give the snow a free rolling action  YES  NO

X7.1.4 **Travel arc:** \_\_\_\_\_ ° each way; total \_\_\_\_\_ °

X7.1.5 **Moldboard has a cutting edge attach angle with three (3) adjustments from 5 degree, 10 degree, and 20 degree vertical measurement from ground using 3/4 inch pins**  YES  NO

X7.1.6 Weight of plow: 10 foot \_\_\_\_\_ Lbs. 11 foot \_\_\_\_\_ Lbs.

X7.1.7 **Number of vertical ribs** \_\_\_\_\_ Formed steel

X7.1.8 Is an additional rubber snow shield provided?  YES  NO

Size of belting \_\_\_\_\_ Run entire length of plow?  YES  NO

Mounted so it won't add to overall height?  YES  NO

X7.1.9 Continuously welded ribs, moldboard, and angles  YES  NO

X7.1.10 **Reinforced at top and bottom edges?**  YES  NO

Top of moldboard reinforced with integrally structural channel?  YES  NO

Size of channel: \_\_\_\_\_

Bottom angle \_\_\_\_\_ x \_\_\_\_\_ x \_\_\_\_\_ angle gusseted.

X7.2 Cutting Edge:

X7.2.1 **Sectioned, standard AASHO punched, in three (3) foot and four (4) foot lengths?**  YES  NO

X7.2.2 Blade Sections:

X7.2.2.1 \_\_\_\_\_ inch thick by \_\_\_\_\_ inches wide having a Grade WC cemented tungsten carbide insert of approximately 88 Rockwell A scale hardness? \_\_\_\_\_ YES \_\_\_\_\_ NO

X7.2.2.2 Insert silver soldered on all sides of a milled slot near the center of the working edge? \_\_\_\_\_ YES \_\_\_\_\_ NO

X7.2.2.3 Braze joint transverse rupture strength: \_\_\_\_\_ PSI

X7.2.2.4 **Blade section identifiable by manufacturer, name and part number stamped on the reverse side of each section?** \_\_\_\_\_ YES \_\_\_\_\_ NO

X7.2.2.5 Will wrap around curb guards be mounted on right and left side of plow \_\_\_\_\_ YES \_\_\_\_\_ NO

X7.2.2.6 Curb guards are \_\_\_\_\_ inch thick, \_\_\_\_\_ inches high and \_\_\_\_\_ inches long

X7.3 Safety Trip Mechanism:

X7.3.1 **Tripping mechanism attached to semi-circle and moldboard ribs use two (2) compression springs** \_\_\_\_\_ YES \_\_\_\_\_ NO

X7.3.2 **Are springs two (2) external compression springs sitting inside (2) moldboard adjusting struts made from (2) 1/2 inch x 2.5 inch bars sliding to a 3/4 x 2.5 inch center bar with an overall length of 39.5 inches** \_\_\_\_\_ YES \_\_\_\_\_ NO

X7.3.3 **Does the trip mechanism hold the plow rigid in plowing position and trip automatically when cutting edge comes in contact with an obstruction then returns to normal plowing position?** \_\_\_\_\_ YES \_\_\_\_\_ NO

X7.4 Push Frame:

X7.4.1 **All welded construction designed per manufacturer's heavy duty specifications?** \_\_\_\_\_ YES \_\_\_\_\_ NO

Push frame length for 10 foot: \_\_\_\_\_ inches Structural tube size: \_\_\_\_\_

Push frame length for 11 foot: \_\_\_\_\_ inches Structural tube size: \_\_\_\_\_

X7.4.2 **Number of hinges in moldboard to push frame connection?** \_\_\_\_\_

**Each hinge has a fully welded in bushing to house pin** \_\_\_\_\_ YES \_\_\_\_\_ NO

**Bushings are 1 1/4 inch mounted to two 5/8 inch mounting ears for total bearing surface per bushing of 2 1/2 inches** \_\_\_\_\_ YES \_\_\_\_\_ NO

**X7.4.3** Equipped with an oscillating center pin of plow portion hitch of 2 inch with push plate being 1 inch x 33 inches x 5 inches feature to permit plow to follow uneven road surfaces? \_\_\_\_\_ YES \_\_\_\_\_ NO

Semi-circle is 3 ½ inches x 3 ½ inches x ½ inch \_\_\_\_\_ YES \_\_\_\_\_ NO

X7.4.4 Hydraulic Power Reversing Mechanism:

**X7.4.4.1** Consist of two (2) double acting 4 inch x 2 inch power reversing hydraulic cylinders fitted with the fixed base end in the center of the push frame? \_\_\_\_\_ YES \_\_\_\_\_ NO

Are cylinders mounted above the semi-circle \_\_\_\_\_ YES \_\_\_\_\_ NO

**X7.4.4.2** Does hydraulic power reverse mechanism include a dual cross-over relief cushion valve? \_\_\_\_\_ YES \_\_\_\_\_ NO

Rated at \_\_\_\_\_ GPM

**X7.4.4.3** The "A" frame is made from \_\_\_\_\_ inch channel with \_\_\_\_\_ inch flanges supporting a \_\_\_\_\_ inch center reversing pin mounted in a \_\_\_\_\_ inch, \_\_\_\_\_ inch wall tube and having a grease fitting \_\_\_\_\_ YES \_\_\_\_\_ NO

Push ends are welded to a \_\_\_\_\_ inch x \_\_\_\_\_ inch x \_\_\_\_\_ inch base plate having a \_\_\_\_\_ inch pivot hole for the oscillator bar to attach to \_\_\_\_\_ YES \_\_\_\_\_ NO

X7.4.5 Skid Shoes:

**X7.4.5.1** Are caster mounted carbide mushroom type shoes included? \_\_\_\_\_ YES \_\_\_\_\_ NO

One on each side \_\_\_\_\_ YES \_\_\_\_\_ NO

**X7.4.5.2** Manufacturer's standard adjusting mechanism included? \_\_\_\_\_ YES \_\_\_\_\_ NO

X7.5 Hitch:

**X7.5.1** Universal heavy duty type designed to carry plows of weight specified when mounted on a **32,000 pound class truck minimum**? \_\_\_\_\_ YES \_\_\_\_\_ NO

**X7.5.2** Bumper to frame type adaptable to any conventional truck and to accommodate a tilt front end on the carrier? \_\_\_\_\_ YES \_\_\_\_\_ NO

**X7.5.2.1** Is hitch attached in truck's frame rails? \_\_\_\_\_ YES \_\_\_\_\_ NO

X7.5.2.2 Does hitch include a lift system  YES  NO

**Designed at a rated capacity of \_\_\_\_\_ lbs.**

**Is lift cylinder the same size as plows reversing cylinder for WVDOH interchangeability**  
 YES  NO

X7.5.3 Hitch to Bumper Attachment:

**X7.5.3.1 Is hitch frame height 33 5/8 inches and hitch width 26 inches**  YES  NO

X7.5.3.2 Hitch members are \_\_\_\_\_ inches x \_\_\_\_\_ inches x \_\_\_\_\_ inches structural angle or tubing  
 YES  NO

Hitch is low profile for access to the truck's engine compartment  YES  NO

**X7.5.3.3 Is the lift arm and lift frame designed to accept a 4 inch lift cylinder with nitrided cylinder tube?**  YES  NO

Cylinder pins are \_\_\_\_\_ inch cold rolled steel  YES  NO

X7.5.3.4 Does unit have self-storing arm  YES  NO

Is this accomplished by pulling one (1)- one (1) inch pin and folding the cylinder up which allows you to re-pin to store?  YES  NO

**X7.5.3.5 Axle clamp allows longitudinal motion but not vertical and horizontal motion?**  
 YES  NO

**X7.5.4** Does unit provide custom 1/2 inch Grade 50 or better check plates which are bolted welded or bolted to main hitch and allows for bolting to truck's frame rail \_\_\_\_\_  
YES \_\_\_\_\_ NO

**X7.6** Hydraulic System:  
Will you supply the following hydraulic components \_\_\_\_\_ YES \_\_\_\_\_ NO

**X7.6.1** Provide one (1) 4 inch lift cylinder with 10" stroke double-acting nitrided hydraulic lift cylinder, clevis pinned top and bottom?

**X7.6.2** Provide two (2) four (4) inch double acting nitrided hydraulic reversing cylinders?

**X7.6.3** Provide three (3) pieces of two (2) wire hydraulic pressure hose one-quarter (1/4) inch diameter by approximately ten (10) feet long? \_\_\_\_\_ YES \_\_\_\_\_

Is each hose equipped with the following \_\_\_\_\_ YES \_\_\_\_\_ NO

**X7.6.3.1** Each hose equipped with one (1) quick coupler at plow end with dust cap? \_\_\_\_\_ YES \_\_\_\_\_

NO

Manufacturer/Model: \_\_\_\_\_

**X7.6.3.2** Each hose equipped with two (2) crimp-type fittings with male JIC 370 threads (one (1) to mate with swivel and the other to mate with quick coupler? \_\_\_\_\_ YES \_\_\_\_\_ NO

**X7.6.3.3** Each hose equipped with one (1) JIC 370 - swivel - 90°elbow/male JIC 370? \_\_\_\_\_ YES \_\_\_\_\_

NO

**X7.6.3.4** Each hose equipped with one (1) adaptor to mate bank valve port to JIC swivel? \_\_\_\_\_ YES \_\_\_\_\_

**X7.7** Other Standard Features:

List other standard features offered and not addressed above:

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**X7.8** Does the proposed unit meet or exceeds the OSHA of 1970 and/or subsequent

changes?

\_\_\_\_\_ YES \_\_\_\_\_

**X7.9** Is snowplow close fitting, **simple, reversible snowplow that will be designed to operate as close as possible to the vehicle pushing it, to maintain truck balance within reasonable limits**

\_\_\_\_\_ YES \_\_\_\_\_ NO

**Is it a relatively light weight compact unit**

\_\_\_\_\_ YES \_\_\_\_\_ NO

Is push frame and/or hitch assembly designed with regard to overall distance of truck to front of plow which would jeopardize truck balance?

\_\_\_\_\_ YES \_\_\_\_\_

NO

X7.10 Paint:

X7.10.1 Will unit be sandblasted and prepped prior to painting as stated in 7.10.1? \_\_\_\_\_ YES \_\_\_\_\_ NO

X7.10.2 Will complete assembly receive one (1) layer of powder coating \_\_\_\_\_ YES \_\_\_\_\_ NO

Will front be sprayed in enamel \_\_\_\_\_ YES \_\_\_\_\_ NO

X7.10.3 Describe painting of front of plow: \_\_\_\_\_

X7.10.4 Describe painting of rear of plow: \_\_\_\_\_

X7.10.5 Paint for push frame and hitch \_\_\_\_\_

**Will push frame and hitch be completely covered** \_\_\_\_\_ YES \_\_\_\_\_ NO

**X7.11 Does the unit conform to the advertising guidelines?** \_\_\_\_\_ YES \_\_\_\_\_ NO

X7.12 Will all loose hardware be in separate containers for each plow and be shipped with each plow?