## ARKANSAS DEPARTMENT OF TRANSPORTATION EQUIPMENT AND PROCUREMENT DIVISION BID INVITATION

Contract Number:	H-20-277R			ARDOT Equipment and	MAIL TO: ARDOT Equipment and	DELIVER TO: ARDOT Equipment and
Bid Opening Date:	June 2, 2020	Time:	11:00 a.m.	Procurement Division 11302 West Baseline Road Little Rock, AR 72209	Procurement Division P.O. Box 2261 Little Rock, AR 72203	Procurement Division 11302 West Baseline Road Little Rock, AR 72209
and delivery locations	until the above-noted bid ope	ning date	and time, and then	ect to the Conditions on page 2 of this publicly opened at the above-noted be and unsigned bids will not be cons	d opening location. Bids mu	
In compliance with this price set opposite each		all the Cor	nditions thereof, the u	undersigned offers and agrees to furnis	h any and all items upon whic	h prices are quoted, at the
Company Name:				Name (Type or Print):_		
Address:			Title:			
				Phone:	Fax:	
City:	State:_		Zip:	E-Mail:		
Federal Tax ID or So	cial Security No.:				original (not photocopied) and	d in ink.

### **Motor Graders**

Bid prices shall include delivery of all Equipment to the Arkansas Department of Transportation at the F.O.B. location(s) shown on attached Bid Sheet. Contract may be renewed or extended upon mutual agreement of the parties, but shall not exceed limitations allowed by Arkansas State Procurement Law.

All bidders should complete and return the Eligible Bidder Certification (Attachment A) and Disclosure Form (see Page 2 of Standard Bid Conditions – Item 18) and Restriction of Boycott of Israel Certification issued with this bid. A current copy of the DFA Illegal Immigrant Contractor Disclosure Certification (see Page 1 of Standard Bid Conditions – Item 17) should also be submitted with bid.

Literature Submittals – Item A2 of Bid Specifications shall supersede Item #11 of Standard Bid Conditions.

**Bid Bond** in the amount of \$1,000 required of all bidders at time of bid opening or bid will be rejected. **Personal and company checks are not acceptable as Bid Bonds.** See Condition 3 on page 2 of bid invitation. **Performance Bond** in the amount of 5% of the total awarded to the respective bidders must be furnished within 10 days after receipt of notice of intent to award as a guarantee of delivery in accordance with the specifications and within the time established in the bid. **Personal and company checks are not acceptable as Performance Bonds.** See Condition 3 on page 2 of bid invitation.

**Additional Bonding Requirement:** If additional units are purchased from this contract, a separate Performance Bond will be required under the same conditions as stated in this Bid Invitation.

Bidder shall specify guaranteed delivery date for all vehicles/equipment bid on in the space provided under each item number for which a price is being submitted. Successful bidder shall furnish Warranty Data for each vehicle/equipment delivered. The Warranty Data shall contain all necessary information such as motor and/or serial numbers and shall be signed by the selling dealer at the time vehicle/equipment is delivered to the Highway Department. Certificate of Origin, Federal Excise Tax Exemption Certificates, Odometer Disclosure Statement and five (5) copies of the Invoice for each vehicle/equipment to be furnished to Equipment & Procurement Division, P.O. Box 2261, Little Rock, AR 72203.

The successful bidder will be required to complete delivery within 120 days after award.

Bids and Specifications are available on-line by going to the ARDOT Web Site - <u>www.ardot.gov</u> and clicking on "Commodities & Services Bids/Contract Information". Tabulations will also be available at this site within 72 hours after bid opening. If you have any questions, call this office at 501-569-2667.

### **ARDOT - STANDARD BID CONDITIONS**

- 1. **GENERAL:** Any special terms and conditions included in the invitation for bid override these standard terms and conditions. The standard terms and conditions and any special terms and conditions become part of any contract entered into if any or all parts of the bid are accepted by the Arkansas Department of Transportation (ARDOT).
- ACCEPTANCE AND REJECTION: ARDOT reserves the right to reject any or all bids, to accept bids in whole or in part (unless
  otherwise indicated by bidder), to waive any informalities in bids received, to accept bids on materials or equipment with
  variations from specifications where efficiency of operation will not be impaired, and to award bids to best serve the interest of the
  State.
- 3. **PRICES:** Unless otherwise stated in the Bid Invitation, the following will apply: (1) unit prices shall be bid, (2) prices should be stated in units of quantity specified (feet, each, lbs., etc.), (3) prices must be F.O.B. destination specified in bid, (4) prices must be firm and not subject to escalation, (5) bid must be firm for acceptance for 30 days from bid opening date. In case of errors in extension, unit prices shall govern. Discounts from bid price will not be considered in making awards.
- BID BONDS AND PERFORMANCE BONDS: If required, a Bid Bond in the form of a cashier's check, certified check, or surety bond issued by a surety company, in an amount stated in the Bid Invitation, must accompany bid. Personal and company checks are not acceptable as Bid Bonds. Failure to submit a Bid Bond as required will cause a bid to be rejected. The Bid Bond will be forfeited as liquidated damages if the successful bidder fails to provide a required Performance Bond within the period stipulated by ARDOT or fails to honor their bid. When a bidder claims and can show clear and convincing evidence that a material mistake was made in the bid and was not the bid intended, the bidder may be permitted to withdraw their bid prior to award without forfeiture of bid bond. Cashier's checks and certified checks submitted as Bid Bonds will be returned to unsuccessful bidders; surety bonds will be retained. The successful bidder will be required to furnish a Performance Bond in an amount stated in the Bid Invitation and in the form of a cashier's check, certified check, or surety bond issued by a surety company, unless otherwise stated in the Bid Invitation, as a guarantee of delivery of goods/services in accordance with the specifications and within the time established in the bid. Personal and company checks are not acceptable as Performance Bonds. In some cases, a cashier's check or certified check submitted as a Bid Bond will be held as the Performance Bond of the successful bidder. Cashier's checks or certified checks submitted as Performance Bonds will be refunded shortly after payment has been made to the successful bidder for completion of all terms of the bid; surety bonds will be retained. Surety bonds must be issued by a surety company that is authorized to do business in the State of Arkansas and that is listed on the current United States Department of the Treasury Listing of Approved Sureties. Surety bonds must be executed by a resident or non-resident agent who is licensed by the Arkansas State Insurance Commissioner to represent the surety company executing the bond, and the resident or non-resident agent shall file with the bond the power of attorney of the agent to act on behalf of the bonding company. Certain bids involving labor will require Performance Bonds in the form of surety bonds only (no checks of any kind allowed). These bonds shall not only serve to guarantee the completion of the work, but also to guarantee the excellence of both workmanship and material until the work is finally accepted and the provisions of the Plans, Specifications, and Special Provisions fulfilled. In such cases, the company issuing the surety bond must comply with all stipulations herein and must be named in the U. S. Treasury listing of companies holding Certificates of Authority as acceptable sureties on Federal Bonds and as acceptable reinsuring companies. Any excess between the face amount of the bond and the underwriting limitation of the bonding company shall be protected by reinsurance provided by an acceptable reinsuring company. Annual Bid and Performance Bonds on file with E & P Division must have sufficient unencumbered funds to meet current bonding requirements, or the bid will be rejected, unless the balance is submitted as set forth above, prior to bid opening.
- 5. **TAXES:** The ARDOT is not exempt from Arkansas State Sales and Use Taxes, or local option city/county sales taxes, when applicable, and bidders are responsible to the State Revenue Department for such taxes. These taxes should not be included in bid prices, but where required by law, will be paid by the ARDOT as an addition thereto, and should be added to the billing to the ARDOT. The ARDOT is exempt from Federal Excise Taxes on all commodities except motor fuels; and excise taxes should not be included in bid prices except for motor fuels. Where applicable, tax exemption certificates will be furnished by the ARDOT.
- 6. "ALL OR NONE" BIDS: Bidders who wish to bid "All or None" on two or more items shall so stipulate on the face of bid sheet; otherwise, bid may be awarded on an individual item basis.
- 7. **SPECIFICATIONS:** Complete specifications should be attached for any substitution or alternate offered, or where amplification is necessary. Bidder's name must be placed on all attachments to the bid.
- 8. **EXCEPTIONS TO SPECIFICATIONS:** Any exceptions to the bid specifications must be stated in the bid. Any exceptions to manufacturer's published literature must be stated in the bid, or it will be assumed that bidder is bidding exactly as stated in the literature.
- 9. **BRAND NAME REFERENCES:** All brand name references in bid specifications refer to that commodity or its equivalent, unless otherwise stated in Bid Invitation. Bidder should state brand or trade name of item being bid, if such name exists.
- 10. **FREIGHT:** All freight charges should be included in bid price. Any change in common carrier rates authorized by the Interstate Commerce Commission will be adjusted if such change occurs after the bid opening date. Receipted common carrier bills that reflect ICC authorized rate changes must be furnished.

- 11. **SAMPLES, LITERATURE, DEMONSTRATIONS:** Samples and technical literature must be provided free of any charge within 14 days of ARDOT request, and free demonstrations within 30 days, unless ARDOT extends time. Failure to provide as requested within this period may cause bid to be rejected. Samples, literature and demonstrations must be substantially the same as the item(s) being bid, unless otherwise agreed to by ARDOT. Samples that are not destroyed will be returned upon request at bidders expense. Samples from successful bidders may be retained for comparison with items actually furnished.
- 12. **GUARANTY:** Unless otherwise indicated in Bid Invitation, it is understood and agreed that any item offered or shipped on this bid shall be newly manufactured, latest model and design, and in first class condition; and that all containers shall be new, suitable for storage or shipment and in compliance with all applicable laws relating to construction, packaging, labeling and registration.
- 13. **BACKORDERS OR DELAY IN DELIVERY:** Backorders or failure to deliver within the time required may constitute default. Vendor must give written notice to the ARDOT, as soon as possible, of the reason for any delay and the expected delivery date. The ARDOT has the right to extend delivery if reasons appear valid. If reason or delivery date is not acceptable, vendor is in default.
- 14. **DEFAULT:** All commodities furnished will be subject to inspection and acceptance by ARDOT after delivery. Default in promised delivery or failure to meet specifications authorizes the ARDOT to cancel award or any portion of same, to reasonably purchase commodities or services elsewhere and to charge full increase, if any, in cost and handling to defaulting vendor. Applicable bonds may be forfeited.
- 15. **ETHICS:** "It shall be a breach of ethical standards for a person to be retained, or to retain a person, to solicit or secure a State contract upon an agreement of understanding for a commission, percentage, brokerage, or contingent fee, except for retention of bona fide employees or bona fide established commercial selling agencies maintained by the contractor for the purpose of securing business." (Arkansas Code, Annotated, Section 19-11-708).
- 16. NOTICE OF NONDISCRIMINATION: The Arkansas State Highway Commission, through ARDOT, complies with all civil rights provisions of federal statutes and related authorities that prohibit discrimination in programs and activities receiving federal financial assistance. Therefore, ARDOT does not discriminate on the basis of race, sex, color, age, national origin, religion (not applicable as a protected group under the Federal Motor Carrier Safety Administration Title VI Program), disability, Limited English Proficiency (LEP), or low-income status in the admission, access to and treatment in the ARDOT's programs and activities, as well as the ARDOT's hiring or employment practices. Complaints of alleged discrimination and inquiries regarding the ARDOT's nondiscrimination policies may be directed to Joanna P. McFadden Section Head EEO/DBE (ADA/504/Title VI Coordinator), P. O. Box 2261, Little Rock, AR 72203, (501)569-2298, (Voice/TTY 711), or the following email address: joanna.mcfadden@ardot.gov. Free language assistance for Limited English Proficient individuals is available upon request. This notice is available from the ADA/504/Title VI Coordinator in large print, on audiotape and in Braille.
- 17. **PROHIBITION OF EMPLOYMENT OF ILLEGAL IMMIGRANTS:** Pursuant to Arkansas Code Annotated 19-11-105, all bidders must certify prior to award of a contract that they **do not** employ or contract with any illegal immigrant(s) in its contract with the state. Bidders shall certify online at <a href="https://www.ark.org/dfa/immigrant/index.php">https://www.ark.org/dfa/immigrant/index.php</a>.
- 18. **DISCLOSURE:** Failure to make any disclosure required by Governor's Executive Order 98-04, or any violation of any rule, regulation, or policy adopted pursuant to that order, **shall** be a material breach of the terms of this contract. Any contractor, whether an individual or entity, who fails to make the required disclosure or who violates any rule, regulation, or policy **shall** be subject to all legal remedies available to the agency.

### ATTACHMENT A

### **ELIGIBLE BIDDER CERTIFICATION**

The Bidder represents and warrants for itself, its employees and its subcontractors and certifies they:

- 1. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- 2. Have not within a three-year period preceding thus Bid been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- 3. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph two (2) of this Certification;
- 4. Have not within a one-year period preceding this application/Bid had one or more public transactions (Federal, State, or local) terminated for cause or default; and

The Bidder represents, warrants and acknowledges the understanding that restrictions placed on the employment of labor or on the scale of pay for the work on a contract will be the requirements of the Fair Labor Standards Act (Federal Wage-Hour Law) of 1938, 28 USC §201 et seq., and other applicable labor laws.

The person executing this Certification further represents, warrants and affirms the truthfulness and accuracy of the contents of the statements submitted on or with this Certification and understands that the provisions of 31 USC §3801 et seq. are applicable thereto.

BIDDER NAME
BY:
Signature
TITLE:

### RESTRICTION OF BOYCOTT OF ISRAEL CERTIFICATION

Pursuant to Arkansas Code Annotated § 25-1-503, a public entity **shall not** enter into a contract valued at \$1,000 or greater with a company unless the contract includes a written certification that the person or company is not currently engaged in, and agrees for the duration of the contract not to engage in, a boycott of Israel.

By signing below, the Contractor agrees and certifies that they do not currently boycott Israel and will not boycott Israel during any time in which they are entering into, or while in contract, with any public entity as defined in § 25-1-503\* If at any time after signing this certification the contractor decides to engage in a boycott of Israel, the contractor must notify the contracting public entity in writing.

If a company does boycott Israel, see Arkansas Code Annotated § 25-1-503.

Name of public entity	Arkansas Department of Transportation
Description of product or service	
Description of product of service	
Contractor name	
Contractor Signature:	Date:
Signature must be hand written, in ink	Bato

"Public Entity" means the State of Arkansas, or a political subdivision of the state, including all boards, commissions, agencies, institutions, authorities, and bodies politic and corporate of the state, created by or in accordance with state law or regulations, and does include colleges, universities, a statewide public employee retirement system, and institutions in Arkansas as well as units of local and municipal government.

### ILLEGAL IMMIGRANT CERTIFICATION

Pursuant to Arkansas Code Annotated § 19-11-105, Contractor(s) **shall** certify with OSP that they do not employ or contract with illegal immigrants.

By signing below, the Contractor agrees and certifies that they do not employ illegal immigrants and will not employ illegal immigrants during the remaining aggregate term of the contract.

Bid Number/Contract Number  AASIS Number  N/A  Description  Contractor name  Contractor Signature:		<u> </u>
Contractor Signature: Date:	Bid Number/Contract Number	
Contractor Signature: Date:		
Contractor name  Contractor Signature: Date:	AASIS Number	N/A
Contractor name  Contractor Signature: Date:		
Contractor Signature: Date:	Description	
Contractor Signature: Date:		
Contractor Signature: Date:Signature must be hand written, in ink.	Contractor name	
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Contractor Signature: Date:Signature must be hand written, in ink.		
Signature must be hand written, in ink.	Contractor Signature:	Date:
	Signature must be hand written, in ink.	

## ARKANSAS STATE DEPARTMENT OF TRANSPORTATION LITTLE ROCK, ARKANSAS EQUIPMENT AND PROCUREMENT DIVISION

### **BID SHEET**

Con	tract No.: H-20-277R	BIDDE	ER:	
1.	7 – Motor Grader, 165/185 V ARDOT Spec. 20-198-111.	ariable Horsepower, Scari	ifier, Powershift Transmission	
	FOB: 2 ea. ARDOT – Distriction FOB: 2 ea. ARDOT – Distriction	et 3 Headquarters, 2911 H et 5 Headquarters, 1673 B	lighway 65 South, Pine Bluff, AR 7161 lighway 29 North, Hope, AR 71801 satesville Blvd., Batesville, AR 72503 lighway 65 South, Harrison, AR 72601	
	Bid Price (Do not include any	Local, State or Federal T	Γaxes) Each \$	
	Total for 7 Motor Graders		\$	
	Loader proposed as meeting	g specifications:		
	Make	_ Model	Warranty	
	Guaranteed Delivery Date		<u></u>	
	Additional Units may be purc			
		(Date)		

### ARKANSAS DEPARTMENT OF TRANSPORTATION SPECIFICATION 20-198-111

**FOR** 

# ARTICULATED MOTOR GRADER 170/230 VARIABLE HORSEPOWER WITH POWERSHIFT TRANSMISSION AND SCARIFIER

### A. General Conditions:

- Current Model: Units furnished under this specification shall be the latest improved model in current production, as
  offered to commercial trade, built for the U.S. market, and shall be of quality workmanship and material. Machines
  manufactured for foreign markets will not be accepted. All equipment offered under this specification shall be new.
  Used, reconditioned, shopworn, demonstrator, prototype or discontinued models are not acceptable. Manufacturers of
  the units supplied must have been in the business of producing operational units for at least two years and must have
  recently sold similar units to domestic governmental agencies. The model furnished must have been in production for a
  minimum of one year, or be the latest version of a previous model. Bidder/s may be required to submit documentation
  substantiating the aforementioned requirements. A list of user references may also be required.
- 2. <u>Literature</u>: Manufacturers literature, verifying adherence of proposed unit to each line item addressed in this specification, shall be submitted with the bid. If any literature and/or specifications of items conflict with ARDOT specifications, the conflict(s) shall be specifically noted, corrected and submitted with the bid.
- 3. Any deviations from specifications and requirements herein must be clearly pointed out by bidder. Otherwise it will be considered that equipment offered is in strict compliance with these specifications and requirements, and successful bidder will be held responsible therefore. Deviations must be explained in detail on an attached sheet. However, no implication is made by the Arkansas Department of Transportation that deviations will be acceptable.
- 4. <u>Manuals</u>: The successful bidder shall furnish one (1) Operator's Instruction Manual with each unit delivered and one (1) copy each of Shop Repair Manual and Parts Book to each FOB point.
  - The successful bidder may provide Shop Repair Manuals and Parts Manuals on computer media (CD, DVD, USB Drive, etc.) in lieu of printed manuals.
- 5. <u>Training</u>: The successful bidder shall furnish qualified personnel to instruct ARDOT operators and service technicians on operation and maintenance of machine.
  - In addition, the successful bidder shall furnish information on any factory service schools which would be available for ARDOT service technicians.
- 6. Shall be assembled, adjusted and made ready for continuous operation at time of delivery.
- 7. All parts, accessories and tools necessary for satisfactory operation of this unit shall be furnished whether or not they are specifically mentioned in this specification (including standard equipment as regularly furnished by manufacturer as shown on printed literature and specifications unless specifically excluded by this specification).
- 8. <u>Parts Inventory & Service Facilities</u>: The successful bidder shall maintain a representative inventory of replacement parts and service facilities for servicing equipment bid on.
- 9. <u>Demonstration</u>: The Arkansas Department of Transportation reserves the right to require a demonstration, under actual working conditions, of equipment bid under this specification before award is made. The demonstration would be performed (free of any charge) by the bidder or an authorized representative at a mutually acceptable location. If requested, the bidder should be prepared to demonstrate the equipment within thirty (30) days after notification. Failure of the bidder to perform a satisfactory demonstration within the specified time may be grounds for rejection of the bid.
- 10. Cooperative Purchasing: Other tax-supported entities\* in Arkansas (cities, counties, state agencies, school districts, etc.) may purchase from this Contract on an individual basis under the same specifications and conditions, and at the pricing set forth by each vendor, all at the discretion of each vendor in each case. Prices could be reduced by a vendor for minor alterations in conditions (changing order quantities, deleting options, etc.) as agreed by both parties, but could not be raised above the contract bid price except for any additional freight charges. Vendors would not be required to sell to any such entity under this contract, and those entities would not be obligated to purchase from the contract.
  - Each entity wishing to purchase from the contract must make contact directly with the appropriate vendor(s). The Arkansas Department of Transportation shall remain "out of the loop" for such transactions: all contact, orders, invoices,

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payments, etc. regarding such transactions must take place exclusively between the tax-supported entity and the vendor. The Department shall be held harmless of any and all liability arising from such transactions.

\* Tax-supported entities are defined as those receiving more than half of total funding from appropriated tax funds.

### B. <u>Unit Specifications</u>:

- 1. General: This specification is intended to cover a variable horsepower power-shift motor grader consisting of an operator's control cab, rear mounted power unit, and hydraulic functions to include at minimum: frame articulation, moldboard side shift and tilt, circle turn, lift and shift, scarifier raise-lower, front axle steering and wheel lean. Machine furnished must be a current model built for the U.S. market. Machines manufactured for foreign markets will not be accepted.
- 2. Engine: Rear mounted, liquid cooled, turbocharged diesel engine with a governed speed of not more than 2,100 RPM. Shall have a minimum piston displacement of 9.0 liters. Shall be a variable horsepower engine developing a minimum of 175 net horsepower in first gear per ISO 9249. Engine ISO net horsepower shall increase as the transmission progressively shifts upward achieving a minimum of 210 ISO net horsepower in fourth gear and a minimum of 230 ISO net horsepower in high gear. Engine shall comply with current U.S. EPA standards for off-road vehicles. Shall have a 24V electrical system including starter, battery, alternator and charge indicator. All gauges or indicators, including temperature, oil pressure, charge, and electric hour meter, are to be mounted in the instrument panel in cab readily visible to operator from seat. Shall have electronic governor, lube oil filters and fuel filters with replaceable elements, approved dry type air cleaner and pre-cleaner. Cooling system shall have anti-freeze protection to -20° F, or lower. Engine shall be equipped with a block heater rated at no less than 1,000 watts which will operate on 120V AC current.
- 3. <u>Transmission</u>: Power shift type with no less than 8 speeds forward and 6 speeds reverse. Shall be a direct drive type and provide speed ranges up to 27 mph in forward direction.
- 4. <u>Differential</u>: Locking type with operator controlled lock/unlock or automatic locking/unlocking no-spin type.
- 5. <u>Frame</u>: Hydraulically articulated frame design providing no less than 20° articulation left and right of machine centerline. Frame shall be boxed type continuous welded of proven design and strength for weight class grader specified. Shall have front push block and rear mounted tow hitch installed.
- 6. <u>Fuel System:</u> Shall have a fuel tank and DEF tank serviceable from the ground. Fuel tank shall have a sediment drain with a minimum capacity of 100 U.S. gallons.
- 7. <u>Axles</u>: Front axle shall be leaning wheel type, power controlled from the operator's station, with a minimum lean of 18° both right and left from center position. Front axle oscillation shall be a minimum of 32°. Ground clearance shall be no less than 13 inches at lowest point. Rear axles shall be a semi or full floating type with tandem drive.
- 8. <u>Brakes</u>: Shall have foot pedal operated wet disc service brakes. Shall be effective on all four tandem wheels with parking brake, as regularly furnished by manufacturer. Brake system shall meet the requirements of ISO 3450.
- 9. Tires and Wheels: Shall have 17.5R25 tires with lug tread. Rims shall have a minimum width of 14".
- 10. <u>Circle</u>: Shall have both right and left hand 90° bank cutting angle capability. Shall be rigidly mounted and provide slack adjustments to compensate for wear. The circle shall have a minimum diameter of 60° with a hydraulic circle rotation of 360°. Circle shall be equipped with an input drive slip clutch, to protect from shock loads when the blade encounters an immovable object.
- 11. <u>Moldboard</u>: Hydraulic shifting type with a minimum of 46" total side shift. Moldboard shall be no less than 14' long, no less than 23.5" in height, no less than 0.87" in thickness and be complete with 8" cutting edges and reversible overlay end bits. Shall be punched for standard cutting edge and of a contour to permit the use of the 8" curved edges used by the Arkansas Department of Transportation. Shall have a lift of no less than 16" above ground level. Blade pitch shall be hydraulically adjustable with a minimum of 45° total pitch adjustment.
- 12. Blade Base: Blade base measurement shall be no less than 8 feet measured from center of front axle to moldboard.
- 13. Controls: Shall be full hydraulic with joysticks convenient to operator. Hydraulic controls shall include the following:
  - a) Machine steering
  - b) Frame articulation with auto return to straight
  - c) Circle side shift
  - d) Circle rotation
  - e) Blade side shift

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- f) Blade pitch
- g) Blade lift
- h) Blade float
- 14. Engine Control: Shall have foot actuated decelerator pedal in addition to hand operated throttle.
- 15. <u>Steering</u>: Hydraulically boosted or hydrostatic steering. Shall provide secondary steering (dead engine steering) meeting the requirements of SAE J1511 in the case of engine or hydraulic failure.
- 16. <u>Scarifier</u>: "V" type with a minimum swath of 46". Scarifier shall be mid-mount with a minimum of nine (9) shanks with replaceable teeth. Control shall be full hydraulic from cab within easy reach of operator.
- 17. <u>Dimensions</u>: Machine shall have a maximum overall length of 30' measured at the front edge of the front tire, to rear of machine. Maximum overall width from outside edge of rear tires shall be 106" and maximum overall height with low profile cab of 11'.
- 18. Weight: Motor Grader with cab, front push block, hydraulic moldboard, scarifier and 17.5R25 tires without ballast, shall have a minimum typical operating weight of 40,000 pounds with the ability to achieve a maximum operating weight of no less than 55,000 pounds.
- 19. <u>Cab</u>: Fully enclosed, pressurized, Low Profile ROPS Cab with laminated safety glass windows to permit a full view of the moldboard and the road in front, rear, and each side. Cab shall be equipped with: right and left entrance/exit doors, adjustable suspension seat, seat belts, floor mats, inside rear view mirror, left and right mounted outside rear view mirrors, factory installed air conditioning and heater, front and rear defroster, and front and rear electric windshield wipers.
- 20. Rear View Camera: Unit shall be equipped with a factory installed rear view camera and in-cab mounted screen.
- 21. <u>Lights</u>: Shall have at minimum moldboard work lights, headlights, stop and tail lights, and directional turn signals with hazard flashers. Lighting shall be factory installed LED type bulbs.
- 22. <u>Safety equipment</u>: Backup alarm meeting the requirements of SAE J994 with a minimum sound level output of 97 decibels. Shall be equipped with an electric horn.
- 23. <u>Vandalism Protection</u>: Shall be equipped with vandalism protection including the following items as a minimum:
  - a) Locking cab door(s) and window(s).
  - b) Locking filler caps for the fuel tank, hydraulic tank, and radiator. Filler caps located behind locking panels are acceptable in lieu of locking caps.
  - c) Lockable engine enclosure.
  - d) Lockable battery box cover(s), if batteries are not mounted inside lockable engine enclosure.
  - e) All lockable panels and compartments shall be equipped with an integrated locking system or padlocks. All locks shall be keyed alike.
- 24. Color: Manufacturer's standard color is acceptable.
- 25. <u>Remote Monitoring System</u>: Unit shall be equipped with an integrated factory installed remote monitoring system which interacts with electronic system controls. System shall offer the following capabilities as a minimum:
  - a) System shall be capable of monitoring and storing electronic data produced by the machine.
  - b) Unit shall be equipped with cellular communication capability for the transmittal of collected data.
  - c) This data shall be accessible to designated employees of the department for review from any internet connection. All data shall be in real time.
  - d) Data collected by this system shall be stored by the manufacturer for a period of not less than (1) one year (twelve months). This historical data shall be accessible to designated employees of the department for review from any internet connection.
  - e) The system shall be capable of notifying the manufacturer/dealer and ARDOT personnel in the event a fault code is generated by a component of the machine. If the code is a priority code (immediate attention required, such as low engine oil pressure, low coolant, high coolant temperature, hydraulic pressure, etc.) the manufacturer/dealer will immediately contact ARDOT personnel to verify receipt of message.

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- f) System shall be capable of allowing remote access by technicians for the purpose of diagnostic trouble shooting and software updates.
- g) Unit shall be capable of showing the exact location of the machine as a street address and GPS coordinates.
- h) Shall be capable of showing hour meter reading in real time and have the ability to notify maintenance personnel when service is due. ARDOT personnel shall have the capability to set service parameters in the system for each unit.
- i) System shall be capable of generating the following reports as a minimum.
  - (1) Unit tracking
  - (2) Idle time
  - (3) Machine usage
  - (4) Engine fuel burn
- System shall allow designated ARDOT personnel the ability to establish geofencing and curfew parameters for each unit.
- k) The subscription for this package shall be provided to the ARDOT free of charge for a minimum of (3) three years (36 months). The manufacturer's dealer representative shall provide training and demonstration of system to ARDOT personnel at time of delivery.
- 1) The remote monitoring (GPS) system shall be activated and operational at the time of delivery. The manufacturer's dealer representative, shall provide documentation certifying the equipment's GPS system has been registered to ARDOT and is fully operational and online.
- 26. <u>Warranty</u>: Units purchased under this specification shall be warranted against defects in material and workmanship for a minimum period of twelve (12) months (365 days) from date unit is placed in operation by ARDOT.
  - a) Warranty shall include all parts, labor and transportation costs to the location of equipment.
  - b) If equipment cannot be repaired on location, warranty shall include cost of transport to the facility where the repair work will be done.
  - c) It will be the responsibility of the successful bidder to insure that repairs are completed in a timely manner.
  - d) This is a minimum warranty required in order for a bid to be considered. Any warranty by the manufacturer on components of the grader purchased that exceeds the minimum warranty specified (and is so advertised and included in manufacturer's printed data sheets) shall be passed on to the ARDOT.
  - e) If any warranty literature submitted with the bid conflicts with ARDOT warranty requirements, the conflict(s) shall be specifically noted, corrected and included with the bid or the conflict(s) will be considered an exception to warranty specifications and the bid rejected.
  - f) Recent prior failure to provide warranty-work, parts, replacement parts or service, in a timely manner, for equipment from the same manufacturer or dealer shall be grounds for the rejection of any submitted bid, or for the denial of any otherwise qualified low bidder, whether such failure is attributable to the manufacturer or the dealer of the equipment. For the purposes of this paragraph "timely manner" means a period of time not exceeding thirty (30) calendar days to provide requested warranty-work, parts, replacement parts, or service. For the purposes of this paragraph "manufacturer" means the original manufacturer of the equipment and its successor or successors, regardless of number, and whether acquired by sale, merger, or otherwise. For the purposes of this paragraph "replacement part" means a part redesigned by a manufacturer to correct a design or engineering defect and which replacement part is capable of providing dependable performance in normal operation conditions for its normal service life without failure. Such bid or bids may be rejected by the Department until such failure or failures have been remedied to the satisfaction of the Department and until such manufacturer or dealer is providing such warranty-work, parts, replacement parts, and service in a timely manner.