

**ARKANSAS STATE HIGHWAY COMMISSION
ARDOT-EQUIPMENT AND PROCUREMENT DIVISION
BID INVITATION**

Contract Number: H-21-224R

BID OPENING LOCATION:	MAIL TO:	DELIVER TO:
ARDOT Equipment and Procurement Division 11302 West Baseline Road Little Rock, AR 72209	ARDOT Equipment and Procurement Division P.O. Box 2261 Little Rock, AR 72203	ARDOT Equipment and Procurement Division 11302 West Baseline Road Little Rock, AR 72209

Bid Opening Date: September 22, 2020 Time: 11:00 a.m.

Sealed bids for furnishing the commodities and/or services described below, subject to the Standard Bid Conditions of this Bid Invitation will be received at the above-noted mail and delivery locations until the above-noted bid opening date and time, and then publicly opened at the above-noted bid opening location. **Bids must be submitted on this form, with attachments when appropriate, or bids will be rejected. Late bids and unsigned bids will not be considered.**

In compliance with this Bid Invitation and subject to all the Conditions thereof, the undersigned offers and agrees to furnish any and all items upon which prices are quoted, at the price set opposite each item.

Company Name: _____	Name (Type or Print): _____
Address: _____	Title: _____
_____	Phone: _____ Fax: _____
City: _____ State: _____ Zip: _____	E-Mail: _____
Federal Tax ID or Social Security No.: _____	Signature: _____
	Signature must be legible, original (not photocopied) and in ink. Unsigned bids will be rejected.

Road Sweepers

Bid prices shall include any applicable labor cost as well as delivery of all **Equipment** to ARDOT 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 4 on page 1 of Standard Bid Conditions. **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 4 on page 1 of Standard Bid Conditions. **Bid Invitation number should be clearly displayed on the sealed bid envelope or package.**

Bidder shall specify guaranteed delivery date for all vehicles/equipment 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 Department of Transportation. 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 **180** days after award.

Bids and Specifications are available on-line by going to the ARDOT Web Site – www.ardot.gov and clicking on “Commodities and Services Bids/Contracts Information”. Tabulations will also be available at this site after award of bid/contract. If you have any questions, call this office at 501-569-2667.

64-0149, 64-0150

**ARKANSAS STATE HIGHWAY COMMISSION
ARDOT-EQUIPMENT AND PROCUREMENT DIVISION
BID SHEET**

Contract No.: H-21-224R

BIDDER: _____

1. **2** – Road Sweeper, Regenerative Type, Truck Mounted, Single Diesel Engine,
to meet **ARDOT Spec. 21-321-194.**

FOB: 1 ea. - ARDOT District 3 Headquarters, 2911 Highway 29 North, Hope, AR 71801

FOB: 1 ea. - ARDOT District 9 Headquarters, 4590 Highway 65 South, Harrison, AR 72601

Bid Price (Do not include any Local, State or Federal Taxes) Each \$ _____

Total for **2 Road Sweepers** \$ _____

Road Sweepers proposed as meeting specifications:

Make _____ Model _____ Warranty _____

Guaranteed Delivery Date _____

Additional Units may be purchased at the same pricing and
conditions through _____

(Date)

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).
2. **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.
4. **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. Received 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@ahtd.ar.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 <https://www.ark.org/dfa/immigrant/index.php>.
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 this 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	
Contractor name	

Contractor Signature: _____ Date: _____
Signature must be hand written, in ink

“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.

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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: _____

Date: _____

CONTRACT AND GRANT DISCLOSURE AND CERTIFICATION FORM

Failure to complete all of the following information may result in a delay in obtaining a contract, lease, purchase agreement, or grant award with any Arkansas State Agency.

SUBCONTRACTOR NAME:

Yes No

IS THIS FOR:

Goods? Services? Both?

TAXPAYER ID NAME:

YOUR LAST NAME:

FIRST NAME:

M.I.:

ADDRESS:

STATE:

ZIP CODE:

COUNTY:

AS A CONDITION OF OBTAINING, EXTENDING, AMENDING, OR RENEWING A CONTRACT, LEASE, PURCHASE AGREEMENT, OR GRANT AWARD WITH ANY ARKANSAS STATE AGENCY, THE FOLLOWING INFORMATION MUST BE DISCLOSED:

FOR INDIVIDUALS*

Indicate below if: you, your spouse or the brother, sister, parent, or child of you or your spouse is a current or former: member of the General Assembly, Constitutional Officer, State Board or Commission Member, or State Employee:

Position Held	Mark (✓)		Name of Position of Job Held <small>(senator, representative, name of board/ commission, data entry, etc.)</small>	For How Long?		What is the person(s) name and how are they related to you? <small>(i.e., Jane Q. Public, spouse, John Q. Public, Jr., child, etc.)</small>	Relation
	Current	Former		From MM/YY	To MM/YY		
General Assembly							
Constitutional Officer							
State Board or Commission Member							
State Employee							

None of the above applies

FOR AN ENTITY (BUSINESS)*

Indicate below if any of the following persons, current or former, hold any position of control or hold any ownership interest of 10% or greater in the entity: member of the General Assembly, Constitutional Officer, State Board or Commission Member, State Employee, or the spouse, brother, sister, parent, or child of a member of the General Assembly, Constitutional Officer, State Board or Commission Member, or State Employee. Position of control means the power to direct the purchasing policies or influence the management of the entity.

Position Held	Mark (✓)		Name of Position of Job Held <small>(senator, representative, name of board/ commission, data entry, etc.)</small>	For How Long?		What is the person(s) name and what is his/her % of ownership interest and/or what is his/her position of control?	Ownership Interest (%)	Position of Control
	Current	Former		From MM/YY	To MM/YY			
General Assembly								
Constitutional Officer								
State Board or Commission Member								
State Employee								

None of the above applies

Contract and Grant Disclosure and Certification Form

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.

As an additional condition of obtaining, extending, amending, or renewing a contract with a state agency I agree as follows:

1. Prior to entering into any agreement with any subcontractor, prior or subsequent to the contract date, I will require the subcontractor to complete a **CONTRACT AND GRANT DISCLOSURE AND CERTIFICATION FORM**. Subcontractor shall mean any person or entity with whom I enter an agreement whereby I assign or otherwise delegate to the person or entity, for consideration, all, or any part, of the performance required of me under the terms of my contract with the state agency.
2. I will include the following language as a part of any agreement with a subcontractor:

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 subcontract. The party 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 contractor.
3. No later than ten (10) days after entering into any agreement with a subcontractor, whether prior or subsequent to the contract date, I will mail a copy of the **CONTRACT AND GRANT DISCLOSURE AND CERTIFICATION FORM** completed by the subcontractor and a statement containing the dollar amount of the subcontract to the state agency.

Signature _____	Title _____	Date _____
Vendor Contact Person _____	Title _____	Phone No. _____

<small>Agency Use Only</small>	Agency Name _____	Agency Contact Person _____	Contact Phone No. _____
Agency Number _____			Contract or Grant No. _____

ARKANSAS DEPARTMENT OF TRANSPORTATION
SPECIFICATION 21-321-194
FOR
TRUCK MOUNTED REGENERATIVE AIR SWEEPER

A. General Conditions:

1. **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. **Literature:** 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. **Manuals:** 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. **Training:** 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. **Parts Inventory & Service Facilities:** The successful bidder shall maintain a representative inventory of replacement parts and service facilities for servicing equipment bid on.
9. **Demonstration:** 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 Highway Department shall remain "out of the loop" for such transactions: all contact, orders, invoices, 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. Unit Specifications:

1. **General:** This specification is intended to cover a self-propelled regenerative air sweeper which has a hopper with a minimum volumetric capacity of 8 cubic yards, right and left hand gutter brooms, and pick up head providing a minimum sweeping swath of 144". Unit shall consist of a sweeper unit completely mounted on a conventional type cab and chassis and be ready for full operation at time of delivery. Machine furnished must be a current model built for the U.S. market. Machines manufactured for foreign markets will not be accepted.
2. **Cab & Chassis:** Sweeper manufacturer shall supply a single rear axle cab & chassis with conventional type cab. Shall have dual controls for left and right hand vehicle operation. Chassis shall meet the following specifications at minimum:
 - a) **GVWR:** No less than 33,000 pounds.
 - b) **Wheelbase:** As required for specified minimum effective CA not exceeding 180".
 - c) **Cab to Axle:** Nominal effective CA of 106" minimum to 113" maximum.
 - d) **Engine:** Liquid cooled, turbocharged, 4 cycle diesel with a minimum piston displacement of 6.7 liters developing no less than 240 SAE gross horsepower at rated RPM and no less than 560 ft. lbs. SAE gross torque. Shall have full flow oil filter(s), fuel filters, dry type air cleaner, 12-volt electrical equipment with no less than a 160-amp alternator and maintenance free batteries as regularly furnished with engine specified. Engine shall be equipped with a factory installed block heater rated at no less than 1,000 watts which will operate on 120 volts AC.
 - e) **Emissions Control:** Engine shall meet all current U.S. EPA emission regulations. The engine emission control system shall be programed to allow regeneration to occur even if the truck is being used in an urban or low speed highway applications.
 - f) **Cooling System:** As recommended and regularly furnished by the manufacturer for use with engine size specified above with anti-freeze protection to -20° F, or lower.
 - g) **Exhaust System:** Vertical exhaust as required by sweeper manufacturer. Exhaust stack shall have a rain cap or curved outlet and be equipped with a heat shield.
 - h) **Engine Shutdown:** Shall have engine safety shutdown system with manual or automatic override. System shall include the following features:
 - 1) Low oil pressure - warning bell/buzzer plus shutdown
 - 2) High coolant temperature - warning bell/buzzer plus shutdown
 - 3) Low coolant level - warning bell/buzzer plus light or shutdown.
 - i) **Fuel Tank:** Minimum capacity of 50 gallons. Tank chassis location shall be determined by sweeper manufacturer. DEF tank capacity and chassis location to be determined by sweeper manufacturer.
 - j) **Transmission:** Allison 2500 RDS or 3500 RDS automatic with programming as recommended by sweeper manufacturer. Transmission shall have synthetic lubricant and be equipped with a transmission oil cooler.
 - k) **Steering:** Hydraulic actuated power steering as regularly offered by manufacturer. Shall include dual operator steering controls in cab providing left and right hand machine operation.
 - l) **Front Axle:** I Beam Type with oil bath hubs and wet seals, outboard mounted drums and a minimum capacity of 12,000 pounds.
 - m) **Rear Axle:** Single or dual speed full-floating type with wet seals, outboard mounted drums and a minimum capacity of 21,000 pounds. Ratio provided shall achieve a maximum theoretical electronic governed speed of no less than 70 MPH and still provide acceptable startability and gradeability under loaded conditions for on/off highway applications. Gear ratio(s) shall be as required by sweeper manufacturer for this application.
 - n) **Springs:** As required to meet GVWR and axle ratings specified above. Rear springs shall consist of both main and auxiliary or overloads.
 - o) **Tires:** Six (6) steel belted tubeless radials, no less than 11R22.5 - "G" Load Range; single front and dual rear.
 - p) **Wheels:** Six (6) 22.5" Diameter tubeless type, hub piloted steel disc with 220 mm center hole, 285.75 mm 10-hole bolt circle diameter and not less than 8.25" rim section.
 - q) **Air System:** Air compressor shall have a minimum capacity of 18 CFM and draw air through the engine air cleaner. Air system shall be equipped with manufacturer's regularly offered governor and a heated, self-purging, air dryer.

- r) **Brakes:** Factory installed full air operated, two shoe s-cam type, with automatic slack adjusters and dust shields on front and rear. Rear brakes shall have spring set parking brakes. Brakes shall be the anti-lock (ABS) type system.
- s) **Frame:** Section modulus and yield strength of frame material shall provide a minimum RBM of 1,500,000 inch lbs.
- t) **Cab:** Shall be full width, "Enclosed Type" conventional cab as regularly furnished by chassis manufacturer, with full width doors and be complete with insulation and all interior trim. Cab glass shall include windshield, roll-up windows in doors and rear cab glass as a minimum. Shall have tinted glass on side and rear windows. Shall have key type locks on doors, factory installed fresh air heater-defroster unit, grab handle on each side, right and left sun shades and fitted rubber floor mat. Unit shall have the following cab equipment at minimum:
 - 1) **Instruments:** Shall have all necessary instruments and controls to actuate and control operation of sweeper and include the following as a minimum:
 - (a) Speedometer/odometer
 - (b) Electric tachometers with engine hour meter
 - (c) Ammeter or volt meter
 - (d) Oil pressure gauge
 - (e) Coolant temperature gauge
 - (f) Transmission oil temperature gauge or warning light
 - (g) Electric hour meter for sweeper system
 - (h) Fuel gauge
 - (i) Air brake pressure gauge
 - 2) **Dual Steering:** Shall have dual operator controls providing right and left hand steering and control with visibility to both gutter brooms. Shall have gauges and instruments on both left and right sides, or have them centrally located and easily visible for the operator driving from left or right side.
 - 3) **Air Conditioning:** Factory installed air conditioning.
 - 4) **Windshield Wipers:** Dual electric intermittent windshield wipers with washers.
 - 5) **Suspension Seats:** Two (2) individual (right and left) air suspension seats. Shall include right and left seat belts.
 - 6) **Radio:** Factory installed electronic AM/FM/WB radio.
 - 7) **Auxiliary Switches:** Shall be equipped with a minimum of six (6) rocker switches mounted in the instrument panel of the truck or sweeper control console. Switches are to be fused and have the ability to provide 12-volt power for warning lights, work lights, and other accessories as needed. These switches are in addition to standard operating switches, and are to be used at ARDOT's discretion.
 - 8) **Mirrors:** Shall have right and left side, heated, remote, west coast type outside mirrors, installed in such manner to ensure full visibility from either side of sweeper. West coast mirrors shall have bottom mount convex mirrors on left and right side. In addition, fender mounted convex mirrors shall be provided to help observe the brooms while sweeping.
 - 9) **Horn:** Air horn or dual note electric horn.
- u) **Hood:** Tilting fiberglass or composite hood and fenders.
- v) **Lights:** Shall be equipped with dual beam headlights, parking lights, combination tail stop and directional lights, clearance lights, spotlights for gutter brooms, rear floodlight, directional turn signal with column mounted switch and hazard flasher switch, automatic backup light, and any other lights required by U.S. DOT regulations. All lighting shall be as regularly furnished by manufacturer. Unit shall have all U.S. DOT required reflective markers and striping.
- w) **Backup Alarm:** Shall be equipped with an electric backup alarm meeting the requirements of SAE J994 with a minimum sound level output of 97 decibels.
- x) **Rear Bumper:** Shall have rear bumper or end of frame panel as regularly furnished by manufacturer meeting U.S. DOT regulations.

- y) **Color:** Truck cab, hood, fenders and wheels shall be painted Sherwin Williams F8W2030 Frost White Acrylic Enamel, or equivalent. Front bumper, grill, mirrors, and chassis, shall be color regularly furnished by truck manufacturer.
3. **Sweeper System:** Truck cab and chassis shall be fitted with a regenerative air sweeper system complete with hopper, left and right side gutter brooms, regenerative air pickup hood, hydraulically driven blower fan, vacuum hose attachment, and water system for dust control and cleanup. Unit shall be of a single engine design with sweeper utilizing *only* the chassis' engine/transmission, compressed air system, and electrical systems to power all functions. Sweeper system shall have a "work mode" which will allow for proper chassis transmission gearing and sweeper power. Sweeper shall also have a "travel" mode which will allow for the normal travel operation of the truck chassis at full highway speeds. Sweeper system and sub-systems shall be installed and fully operational at time of delivery.
- a) **Power System:** All functions of the street sweeper shall be powered by the truck chassis power plant. The use of an auxiliary engine is not acceptable in this application. Sweeper power system to consist of one of the following arrangements:
- 1) Hydraulic pumps driven off of the Allison transmission's auxiliary PTO system. Shall have two (2) PTO gear drives with two (2) hydraulic pumps providing dedicated flow to the operation of the sweeper blower fan. Shall have two (2) hydraulic pumps dedicated to auxiliary functions such as gutter brooms and low pressure water spray system, hydraulic system cooling fan, and unit wash system.
 - 2) Variable speed device installed between the chassis engine and the Allison transmission allowing efficient use of the chassis engine power for sweeper operation and variable speed driving. The variable speed device shall be capable of directly driving hydraulic pumps without the use of the chassis transmission auxiliary PTO devices, transfer cases, or belt drive systems. The variable speed device shall be of a planetary gear design.
- b) **Hydraulic System:** Shall be adequate for use within the manufacturer's design requirements of sweeper system, and shall include the following at minimum:
- 1) 20-gallon hydraulic reservoir with an 80 mesh suction strainer and oil level sight gauge
 - 2) Replaceable hydraulic filter(s) elements
 - 3) Pumps, drive motors, cylinders, control valves, relief valves, oil cooler(s), hoses and standard fittings
 - 4) The hydraulic pump(s) shall be driven by the chassis power plant system.
 - 5) Hydraulic system oil cooler that stands alone and is independent of the truck chassis engine cooling system
- c) **Operator Controls:** A high resolution, color LCD multi-function display that provides the operator with real time information on the status of the sweeper shall be provided. Display shall provide all information needed to provide proper operation of the sweeper unit. Sweeper system shall be designed to operate with the truck's dual seat controls. All displays, controls, and operator consoles, shall be conveniently located for the operator from either right or left operator seat.
- d) **Sweeper System Controls:** Shall be mounted in water tight enclosures, under truck chassis hood, or inside the cab of the truck. Control systems shall be impervious to heat, moisture, dirt, or any other element that arrives from day to day operation. All wiring and hoses shall be tied and routed around and away from moving parts of machine if design allows. All electrical controls shall be protected by fuses and/or relay circuits. All switches and controls shall be clearly marked and identifiable to operator. All controls shall be installed and fully operational at time of delivery.
- e) **Rear View Camera:** Sweeper shall be equipped with a factory installed rear view camera system that can be monitored from the left or right operators seat in the truck cab.
- f) **Air Blower:** Centrifugal type fan no less than 29" in diameter constructed of high strength Hardox steel or of abrasion resistant stainless steel. Shall run on anti-friction bearings, be dynamically balanced and be driven by a direct drive hydraulic motor. Belt drive systems are not acceptable. Bearings shall be sealed and lubricated or grease type. Grease type bearings shall have grease lines routed to a common area with zerks easily serviced by operator while standing on the ground. Blower housing to be constructed of 10-gauge steel at a minimum and lined with a full length and width replaceable wear resistant liner, or constructed of abrasion resistant AR 500 steel. Blower housing shall not be part of the hopper's integral design.
- g) **Blower Hydraulic Motor:** Shall meet the following requirements at minimum:
- 1) Shall have the ability to maintain and operate at the advertised 3000 RPM operating speed
 - 2) Shall have the ability to maintain and operate at the advertised 20,000 CFM air flow rating for sweeper system

- 3) Shall be a direct drive type with a coupling to the blower fan
 - 4) Shall have a pump system to supply sufficient oil volume and pressure to operate at fan's advertised CFM and RPM ratings
 - 5) Blower motor shall have a variable speed control located in the sweeper control panel which allows operator to control fan speed.
- h) **Pick-up Hood:** Shall be a spring balanced pick-up head with a sweeping width of no less than 90". Air pressure hose shall have a minimum diameter of 14" and suction hose shall have a minimum diameter of 12.75". The pick-up head shall be raised and lowered hydraulically with in-cab controls. Shall be supported on steel runners with carbide inserts when in operating position.
- i) **Pressure Waste-gate:** Shall be equipped with a vacuum enhancing pressure relief device, designed to assist in removal of leaves, grass, paper and other light materials. Pressure relief device shall be actuated by either an electric motor or hydraulic/pneumatic cylinder. Shall be controlled by a switch located in the cab, convenient to the operator.
- j) **Gutter Brooms:** Shall be wire filled vertical digger type, no less than 42" in diameter, mounted on right and left side of sweeper and be controlled from sweeper cab. Shall be hydraulic motor driven and operated vertically and laterally by means of air or hydraulic cylinders. Gutter brooms shall have a variable speed control located in sweeper control panel which allows operator to adjust broom speed. Shall be infinitely adjustable for pattern and wear. Gutter broom down pressure shall automatically adjust to requirement. Gutter brooms shall be able to cover at minimum a 144" sweep path. Shall be complete with one additional set of filled gutter brooms for both sides of sweeper.
- 1) **Gutter Broom Tilt:** Each gutter broom (right and left) shall additionally incorporate a tilt capability, remotely controlled from cab of sweeper, to allow instant adjustment for debris removal from deep gutters.
 - 2) **Gutter Broom Drop-Down:** Shall be equipped with a gutter broom override feature which allows the operator to switch from normal gutter broom extension to an inboard operation of the gutter brooms to allow the gutter brooms to drop down underneath the sweeper in front of the pick-up head area for road surface agitation. There shall be a control for each gutter broom allowing independent operation of the drop-down feature. Controls shall be located in the cab of the sweeper.
- k) **Dust Separator:** Separation of the dirt and refuse from the air stream shall be accomplished within the hopper by means of a dust separator. The separator housing shall be constructed of abrasion resistant material. An abrasion resistant steel screen shall be provided to allow air to move freely from the hopper into the centrifugal dust separator.
- l) **Hopper:** Shall have a minimum volumetric capacity of eight (8) cubic yards. Construction shall be mild steel with a complete polyurethane lined hopper system to extend the life of the hopper, or shall be constructed of heavy duty abrasion resistant stainless steel. Hoppers shall be constructed to meet manufacturers regularly advertised specifications. Shall have a hydraulically operated quick raising dump system controlled from the outside of sweeper and from inside the operator's cab. Shall have a warning light/buzzer in cab to indicate when hopper is full and bed is raised. The rear door of hopper shall be opened with hydraulic cylinders. Rear door shall have a rubber type seal with tight fit and have an automatic locking system. Shall be equipped with a hopper inspection door on the left and right side to allow operator to easily view inside hopper without opening rear door. Hopper shall be equipped with drain valve(s) as regularly furnished by manufacturer.
- m) **Refuse Screens:** Hopper shall be equipped with refuse screens to separate large debris from hopper airstream. Screen construction shall be stainless steel.
- n) **Safety Equipment:** Unit shall be equipped with all safety equipment as regularly furnished by manufacturer for normal operating conditions. Travel locks/chains, bed safety props, tailgate props/locks, sweeper control safety functions, emergency stops, shall be provided. All safety equipment/functions offered as standard equipment by manufacturer but not listed in this specification, shall be included at time of delivery.
- o) **Water System:** Shall have a high pressure, low volume, water spray system for dust control as regularly offered by manufacturer. Spray system shall have sufficient nozzles to adequately cover the sweeping path of gutter brooms and pickup head. Spray nozzles shall be mounted at gutter brooms, suction tube, and inside hopper/hopper inlet at minimum. Sweeper shall have a front mounted chassis spray bar in addition to broom and pick-up hood nozzles. Front mounted spray bar shall have independent control switch. Water tank shall be constructed of polyethylene and have a minimum capacity of 240 gallons with a suction screen or filtration system easily serviced by operator. Pump system shall be manufacturer's regularly offered standard equipment with the ability to self-prime and run dry without damage. Shall have a warning light or buzzer for low tank water level. Water system shall be fitted with tank drain valves and a pneumatic purge system for winterization. Controls for spray system shall be operated from cab of sweeper. A water

fill hose no less than 20' long, complete with 2-1/2 inch NST bronze coupling for fire hydrant, with a truck mounted hose storage rack/box shall be provided.

- p) Wash Down System: Shall have a high pressure wash down system complete with no less than 20' of high pressure wash down hose and quick disconnects on both sides of sweeper. Wash down system shall also be used in conjunction with hand hose vacuum for drain clean outs, and must have the ability to operate simultaneously.
 - q) Hopper Deluge System: Shall consist of a high volume nozzle located in the hopper which attaches to a fire hydrant, by means of the water fill hose, to flush the hopper.
 - r) Auxiliary Hand Hose Vacuum: Shall be equipped with an auxiliary vacuum system to provide catch basin cleaning and small debris pickup. Hose shall be no less than 8" in diameter, connected to hopper so that hose can be moved from side to side.
 - 1) Assembly shall have a minimum working reach of 10'
 - 2) Shall have a nozzle no less than 48" long for cleaning catch basins
 - 3) Shall have an independently controlled water system spray nozzle for dust control and hose lubrication
 - 4) Assembly shall be supported from a swivel boom and be equipped with hydraulic boom assist for ease of use
4. Sweeper Bed Color: Shall be Sherwin Williams F8W2030 Frost White Acrylic Enamel, or equivalent. Manufacturer's regularly furnished stencils/decals are acceptable.
5. Safety Lighting: Shall have a LED type directional arrow light bar mounted on the rear of sweeper bed as regularly installed by manufacturer.
6. Warranty: Cab and chassis shall have truck manufacturer's regular warranty. Warranty Data shall be furnished with each unit. 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 is delivered to the Highway Department.
- a) The sweeper and other incidental equipment purchased under this specification shall be warranted against defective material and workmanship for a minimum period of twelve (12) months (365 Days) from date unit is placed in operation by ARDOT. In addition, the manufacturer's advertised standard warranty period on certain machine components that exceeds the 12 months' warranty shall remain in effect.
 - 1) Warranty shall include all parts, labor and transportation costs to the location of equipment.
 - 2) If equipment cannot be repaired on location, warranty shall include cost of transport to the facility where the repair work will be done.
 - 3) It will be the responsibility of the successful bidder to insure that repairs are completed in a timely manner.
 - b) 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.
 - c) 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.