



CITY OF KNOXVILLE
 OFFICE OF THE PURCHASING AGENT
 P.O. BOX 1631
 400 MAIN ST., ROOM 667
 KNOXVILLE, TN 37901

QUOTATION SHEET

THIS IS NOT AN ORDER

DATE: 05/25/2021 PAGE 1 Of 1

DOCUMENT NUMBER: **682689**

READ ALL INSTRUCTIONS AND CONDITIONS ON ATTACHED PAGES BEFORE QUOTING. QUOTE ON THIS FORM ONLY.
 QUOTE PRICE ON ITEMS LISTED OR EQUAL.

****ALL PRICES TO INCLUDE TRANSPORTATION CHARGES & NET TERMS UNLESS STATED OTHERWISE ****

Merchandise to be delivered to : See delivery instructions

QUOTE will be received at: Office of the Purchasing Agent, Room 667, 400 Main St., Knoxville, TN 37902,
 until 06/10/2021 11:00:00 AM

AIR SWEEPER TRUCK

Special Instructions:
 Item to be delivered to 1400 Loraine Street, Knoxville, TN. Direct all questions to jtucker@knoxvilletn.gov.

No.	Quantity	Description	Brand	Unit	Unit Price	Total	Applicable Discount
1	1 Each	One (1) truck-mounted regenerative air sweeper, per attached bid specifications.					

IMPORTANT - State Merchandise

Delivery Date Here: _____

Buyer Name: Tucker, James
 Phone: 865-215-2064
 Fax: (865) 215-2277
 Email: jtucker@knoxvilletn.gov

 (Company Name)

 (Authorized Signature)

 (Print Signed Name)

 (Phone Number)

 (Email Address)

In addition to submission procedures listed within this solicitation document, the City provides the option of electronic submission. To submit your proposal/bid electronically, please follow the detailed instructions below.

Electronic Submission Procedures:

Electronic submissions shall be submitted online through the City's Procurement website. **DO NOT EMAIL YOUR SUBMISSION.** All proposers/bidders must register as a vendor in order to submit an electronic file.

Step One: Register as a City of Knoxville vendor

(Vendors are encouraged to complete this step **now** to ensure seamless submission process prior to deadline.)

To register as a vendor:

Visit the website at www.knoxvilletn.gov/purchasing

Click the "Vendor Registration" tab; then "Click here to register as a City of Knoxville Vendor"

Follow the prompts to complete online registration.

Note: You will be asked for a PIN. This PIN will be emailed to you and may have been sent to your spam or junk folder.

DO NOT WAIT UNTIL SUBMISSION DEADLINE TO REGISTER AS A VENDOR. The electronic submission link will be disabled at 11:00:00 a.m. Eastern time. Vendors will not have the ability to submit any electronic files once the deadline has passed.

Step Two:

Submit all materials electronically as one (1) file to City's Procurement website **PRIOR to 11:00:00 a.m. (Eastern Time) on June 10, 2021.**

To submit electronic file:

Visit the procurement website at www.knoxvilletn.gov/bids

Click "Air Sweeper Truck"

Click "Submit Bid" (red button located at top of screen)

Follow the prompts to upload and submit electronic file.

Submit only one (1) submission file (see notes below if must submit additional files)

Files **MUST** be named as the firm's name followed by the title of the project.

Example: BobsBurgers-AVSystemKFD.pdf

Should you need to merge multiple documents into one PDF, please utilize Google to download a free software intended for merging pdf documents

**CITY OF KNOXVILLE
INVITATION TO BID**

Air Sweeper Truck

Sealed bids, invited by the City of Knoxville, will be received by the Purchasing Agent of the City of Knoxville, in Room 667-674, City County Building; 400 Main Street; Knoxville, Tennessee, until 11:00:00 a.m. (Eastern Time) on June 10, 2021, at which time they will be opened and publicly read aloud and a contract awarded as soon thereafter as practicable.

BID SUBMISSION REQUIREMENTS

Bidders must furnish the following information in writing with their submission:

1. Bid Form showing bidder's name, address, quoted price, business license number, date of expiration of business license. A copy of the bidder's current business license may be submitted in lieu of providing the license expiration date.
2. Non-Collusion Affidavit
3. Iran Divestment Act Certification of Non-inclusion

INVITATION TO BID – INSTRUCTIONS AND CONDITIONS

1. Sealed bids will be received by the Purchasing Agent of the City of Knoxville in Room 667-674, City/County Building; 400 Main Street; Knoxville, Tennessee 37902 until June 10, **2021 at 11:00:00 a.m.**, at which time they will be publicly opened and read aloud and the contract awarded as soon as practicable. **No bid will be received or accepted after the above-specified time for the opening of bids.** Bids that arrive late due to the fault of U. S. Postal Service, United Parcel Service, DHL, FEDEX, any delivery/courier service, or any other carrier of any sort are still considered late and shall not be accepted by the City. Such bids shall remain unopened and will be returned to the submitting entity upon request.
2. The City of Knoxville reserves the right to reject any or all bids, to accept or reject any items thereon, to waive technicalities or informalities, to split orders if in the best interest of the City, to evaluate bids by various criteria, and to accept any bid which, in its opinion, may be for the best interest of the City.
3. Included in the Invitation to Bid is an affidavit in proof that the undersigned has not entered into any collusion with any person in respect to this bid or any other bid. The Bidder will be required to execute and submit this affidavit with the sealed bid.
4. Each bid must be submitted in a sealed envelope, addressed to the Purchasing Agent, City of Knoxville, Room 667-674, City/County Building, 400 Main Street, Knoxville, Tennessee, 37902. Each sealed envelope containing a bid must be plainly marked on the outside as: "Air Sweeper Truck."
5. **NO CONTACT POLICY:** After the posting of this solicitation to the Purchasing Division's website, any contact initiated by any proposer with any City of Knoxville representative concerning this proposal is strictly prohibited, unless such contact is made with the Purchasing Division representative listed

herein or with said representative's authorization. Any unauthorized contact may cause the disqualification of the proposer from this procurement transaction.

6. **INCLEMENT WEATHER:** During periods of inclement weather, the Purchasing Division will enact the following procedures with regard to solicitations and weather delays:
 - If City offices are closed due to inclement weather on the date that bids/proposals/qualifications/letters of interest are due into the Purchasing Office, all solicitations due that same day will be moved to the next operational business day.
 - The City of Knoxville shall not be liable for any commercial carrier's decision regarding deliveries during inclement weather.
7. All bids must be made on the Bid Form supplied with the contract documents, and no interlineations, excisions, or special conditions shall be made or included in the Bid Evaluation Sheet by the Bidder. **Any bid on which there is an alteration of or departure from the Bid Form may be considered irregular and may be rejected.** All bids must be signed in full by the Bidder or Bidders in their business name or style when submitted and must show his or their complete address.
8. No bidder may withdraw his bid for a period of 60 days after the actual date of the opening thereof.
9. Prior to submitting their bids, bidders are to be registered with the Purchasing Division through the City of Knoxville's online Vendor Registration system. Instructions for registering on-line are available at www.knoxvilletn.gov/purchasing.
10. **Bid submissions from un-registered bidders may be rejected.**
11. Payment for completed services delivered to and accepted by the City shall be at the contract price.
12. State makes or brand on each item. If quoting on other than the make, model, or brand specified, the manufacturer's name and catalog number must be given, along with warranty information and detailed specifications. Because the City is committed to environmentally sound practices, brands are expected to be procured with environmental responsibility in mind.
13. Time of delivery is part of the consideration and must be stated in definite terms; time of delivery is guaranteed by the bidder and must be adhered to upon award. If time varies on different items, the bidder shall so state.
14. All quotations must be signed with the firm name and by a responsible officer or employee. Obligations assumed by such signature must be fulfilled.
15. Samples of items, when required, must be furnished free of expense to the City and if not called for within fifteen (15) days from the date of bid opening, same will be disposed of in a manner deemed to be in the best interest of the City. Items shipped as a result of an Agreement to purchase (Purchase Order) must match the sample provided with Vendor's bid submission. The City of Knoxville will be the sole judge as to whether or not the shipped items match said supplied sample, and the City's decision will be final. Should shipped items not, in the City's judgment, be as represented by the sample provided, Vendor shall pay the City in full for all costs associated with returning shipped items to the Vendor. No restocking fee or other fees will be assessed against the City of Knoxville.
16. Bidders shall verify bids before submission, as bids cannot be withdrawn or corrected after being opened. Bids will be evaluated by unit price.

17. If federal excise tax applies, show amount of same and deduct. Bear in mind that the City is exempt from Tennessee sales tax.
18. Prices are considered FOB Knoxville unless otherwise stated in the Invitation to Bid.
19. By execution and delivery of a bid submission, the bidder agrees that any additional terms and conditions, whether submitted to the City purposely or inadvertently, shall have no force or effect.
20. Bidders must comply with the President's Executive Orders No. 11246 and 11375 which prohibit discrimination in employment regarding race, color, religion, sex or national origin. Bidders must not maintain or provide for their employees any facilities that are segregated on the basis of race, color, religion or national origin. Bidders must also comply with Title VI of the Civil Rights Act of 1964, Copeland Anti-Kick Back Act, the Contract Work Hours and Safety Standard Act, Section 402 of the Vietnam Veterans Adjustment Act of 1974 and Section 503 of the Rehabilitation Act of 1973, all of which are herein incorporated by reference.
21. All bidders must comply with Title VI of the Civil Rights Act of 1964, as codified in 42 U.S.C. 2000d. The successful bidder must follow Title VI guidelines in all areas including hiring practices, open facilities, insurance, and wages. The City of Knoxville reserves the right to review all compliance records by a contract compliance officer designated by the City.
22. No interpretation of the meaning of the plans, specifications, or other pre-bid documents will be made to any bidder orally. Each request for such interpretation should be in writing addressed to **James Tucker, Senior Buyer** for the City of Knoxville, 400 Main Street, Room 667, Knoxville, TN 37902, or emailed to him at jtucker@knoxvilletn.gov. To be given consideration, such requests/questions must be received at least five (5) business days prior to the date fixed for the opening of bids. Any and all such interpretations and any supplemental instructions will be in the form of written addenda to the specifications which, if issued, will be posted to the City's website at www.knoxvilletn.gov/purchasing. Submitting organizations are strongly encouraged to view this website often to see if addenda are posted. Failure of any bidder to receive such addendum or interpretation shall not relieve such Bidder from any obligation under his bid as submitted. All addenda so issued shall become part of the Contract Documents.
23. Attention of all bidders is directed to the set off provision contained in Article II, Section 24-33, entitled, "Debts owed by persons receiving payments other than salary", and Section 2-1049 entitled "Receipt of benefits from City contracts by council members, employees, and officers of the City" of the Code of the City of Knoxville.
24. Before a Purchase Order is issued, the submitting entity, if selected, **must** provide the City Purchasing Division with a copy of its valid business license **or** with an affidavit explaining why it is exempt from the business licensure requirements of the city or county in which it is headquartered. If a contract is signed, the contractor's business license shall be kept current throughout the duration of the contract, and the contractor shall inform the City of changes in its business name or location. Any Agreement to purchase resulting from this Invitation to Bid shall be governed by and construed in accordance with the substantive laws of the State of Tennessee and its conflict of laws provisions. Venue for any action arising between the City and the Vendor from the Agreement shall lie in Knox County, Tennessee.
25. In compliance with Tennessee state law, bids must be accompanied by a certification attesting that, to the best of the bidder's knowledge, the bidder does not engage in investment activities in Iran. The Iran Divestment Act of 2014 Certification of Non-inclusion form may be found in this solicitation document.

26. By acceptance and delivery of the Purchase Order resulting from the award of this Invitation to Bid, the Vendor agrees to the following:

Contractor shall defend, indemnify and hold harmless the City, its officers, employees and agents from any and all liabilities which may accrue against the City, its officers, employees and agents or any third party for any and all lawsuits, claims, demands, losses or damages alleged to have arisen from an act or omission of Contractor in performance of this Agreement or from Contractor's failure to perform this Agreement using ordinary care and skill, except where such injury, damage, or loss was caused by the sole negligence of the City, its agents or employees.

Contractor shall save, indemnify and hold the City harmless from the cost of the defense of any claim, demand, suit or cause of action made or brought against the City alleging liability referenced above, including, but not limited to, costs, fees, attorney fees, and other expenses of any kind whatsoever arising in connection with the defense of the City; and Contractor shall assume and take over the defense of the City in any such claim, demand, suit, or cause of action upon written notice and demand for same by the City. Contractor will have the right to defend the City with counsel of its choice that is satisfactory to the City, and the City will provide reasonable cooperation in the defense as Contractor may request. Contractor will not consent to the entry of any judgment or enter into any settlement with respect to an indemnified claim without the prior written consent of the City, such consent not to be unreasonably withheld or delayed. The City shall have the right to participate in the defense against the indemnified claims with counsel of its choice at its own expense.

Contractor shall save, indemnify and hold City harmless and pay judgments that shall be rendered in any such actions, suits, claims or demands against City alleging liability referenced above.

The indemnification and hold harmless provisions of this Agreement shall survive termination of the Agreement.

CITY OF KNOXVILLE

BID FORM

TO: Purchasing Agent
City of Knoxville
Suite 667-674
City/County Building
400 Main Street
Knoxville, TN 37902

Having carefully examined the specifications for the "Air Sweeper Truck" to open on June 10, 2021 at 11:00 a.m. and the other Contract Documents and addenda, we hereby propose to furnish the items requested as specified.

Total cost for the air sweeper truck (includes all freight & delivery charges). _____.

GUARANTEE the item to be delivered no later than _____ days after receiving the order.
(Bidder must initial) _____

Firm Name: _____

Official Address: _____

(By)

(Name Typed)

(Title)

Date _____

Terms _____

Email address _____

Telephone _____

NON-COLLUSION AFFIDAVIT OF PRIME BIDDER

State of _____

County of _____

_____, being first duly sworn, deposes and says that:

- (1) He is owner, partner, officer, representative, or agent of _____, the Bidder that has submitted the attached Bid;
- (2) He is fully informed respecting the preparation and contents of the attached Bid and of all pertinent circumstances respecting such Bid;
- (3) Such Bid is genuine and is not a collusive or sham Bid;
- (4) Neither the said Bid nor any of its officers, partners, owners, agents, representatives, employees, or parties in interest, including this affiant, has in any way colluded, conspired, connived or agreed, directly or indirectly, with any other Bidder, firm or person to submit a collusive or sham Bid in connection with the Contract for which the attached Bid has been submitted or to refrain from proposing in connection with such Contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other Bidder, firm, or person to fix the price or prices in the attached Bid or of any other Bidder, firm, or person to fix any overhead, profit, or cost element of the bid price or the bid price of any other Bidder, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against the City of Knoxville or any person interested in the proposed Contract; and
- (5) The price or prices quoted in that attached Bid are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the Bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affidavit.

Signed: _____

Title: _____

Subscribed and sworn to before me this ____ day of _____, 2____.

My commission expires: _____

IRAN DIVESTMENT ACT

Certification of Noninclusion

NOTICE: Pursuant to the Iran Divestment Act, Tenn. Code Ann. § 12-12-106 requires the State of Tennessee Chief Procurement Officer to publish, using credible information freely available to the public, a list of persons it determines engage in investment activities in Iran, as described in § 12-12-105. Inclusion on this list makes a person ineligible to contract with the state of Tennessee; if a person ceases its engagement in investment activities in Iran, it may be removed from the list. A list of entities ineligible to contract in the State of Tennessee Department of General Services or any political subdivision of the State may be found here:

[https://www.tn.gov/content/dam/tn/generalservices/documents/cpo/cpo-library/public-information-library/List of persons pursuant to Tenn. Code Ann. 12-12-106, Iran Divestment Act updated 7.7.17.pdf](https://www.tn.gov/content/dam/tn/generalservices/documents/cpo/cpo-library/public-information-library/List%20of%20persons%20pursuant%20to%20Tenn.%20Code%20Ann.%2012-12-106,%20Iran%20Divestment%20Act%20updated%207.7.17.pdf)

By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief that each bidder is not on the list created pursuant to T.C.A. § 12-12-106.

Vendor Name (Printed)	Address
By (Authorized Signature)	Date Executed
Printed Name and Title of Person Signing	

NOTARY PUBLIC:

Subscribed and sworn to before me this _____ day of _____, 2_____.

My commission expires: _____

DIVERSITY BUSINESS ENTERPRISE (DBE) PROGRAM

The City of Knoxville strongly encourages prime contractors to employ diverse businesses in the fulfillment of contracts/projects for the City of Knoxville.

The City of Knoxville's Fiscal Year 2017 goal is to conduct 3.33% of its business with minority-owned businesses, 9.21% of its business with women-owned businesses, and 45.5% with small businesses.

While the City cannot engage (pursuant to state law), in preferential bidding practices, the city does **strongly encourage** prime contractors to seek out and hire diverse businesses in order to help the city meet its goals as stated above. As such, the City encourages prime contractors to seek out and consider competitive sub-bids and quotations from diverse businesses.

For DBE tracking purposes, the City requests that prime contractors who are bidding, proposing, or submitting statements of qualifications record whether or not they plan to employ DBE's as sub-contractors or consultants. With that in mind, please fill out, sign and submit (with your bid/proposal) the following sub-contractor/consultant statement.

Subcontractor/Consultant Statement
(TO BE SUBMITTED IN THE BID/PROPOSAL ENVELOPE)

We _____ do certify that on the _____
 (Bidder/Proposer Company Name)

 (Project Name)
 (\$ _____)
 (Amount of Bid)

Please select one:

Option A: Intent to subcontract using Diverse Businesses

A Diversity business will be employed as subcontractor(s), vendor(s), supplier(s), or professional service(s). The estimated **dollar value** of the amount that we plan to pay is:

\$ _____
 Estimated Amount of Subcontracted Service

Diversity Business Enterprise Utilization			
Description of Work/Project	Amount	Diverse Classification (MOB, WOB, SB, SDOV)	Name of Diverse Business

Option B: Intent to perform work "without" using Diverse Businesses

We hereby certify that it is our intent to perform 100 % of the work required for the contract, work will be completed without subcontracting, or we plan to subcontract with non-Diverse companies.

DATE: _____ COMPANY NAME: _____

SUBMITTED BY: _____ TITLE: _____
 (Authorized Representative)

ADDRESS: _____

CITY/STATE/ZIP CODE: _____

TELEPHONE NO: _____

CITY OF KNOXVILLE DIVERSITY BUSINESS DEFINITIONS

Diversity Business Enterprise (DBE's) are minority-owned (MOB), women-owned (WOB), service-disabled veteran-owned (SDVO), and small businesses (SB), who are impeded from normal entry into the economic mainstream because of past practices of discrimination based on race or ethnic background. These persons must own at least 51% of the entity and operate or control the business on a daily basis.

Minority: A person who is a citizen or lawful admitted permanent resident of the United States and who is a member of one (1) of the following groups:

- a. African American, persons having origins in any of the Black racial groups of Africa;
- b. Hispanic American, persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish culture or origin, regardless of race;
- c. Native American, persons who have origin in any of the original peoples of North America ;
- d. Asian American, person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands.

Minority-owned business (MOB) is a continuing, independent, for profit business that performs a commercially useful function, and is at least fifty-one percent (51%) owned and controlled by one (1) or more minority individuals.

Woman-owned business (WOB) is a continuing, independent, for profit business that performs a commercially useful function, and is at least fifty-one percent (51%) owned and controlled by one (1) or more women.

Service Disabled Veteran-owned business (SDOV) is a continuing, independent, for profit business that performs a commercially useful function, owned by any person who served honorably on active duty in the armed forces of the United States with at least a twenty percent (20%) disability that is service connected. Meaning such disability was incurred or aggravated in the line of duty in the active military, naval or air service, and is at least fifty-one percent (51%) owned and controlled by one (1) or more service disabled veteran.

Small Business (SB) is a continuing, independent, for profit business which performs a commercially useful function and has total gross receipts of not more than ten million dollars (\$10,000,000) average over a three-year period or employs no more than ninety-nine (99) persons on a full-time basis.

City of Knoxville Regenerative Air Sweeper Truck

This specification describes a truck mounted regenerative air sweeper equal to an Elgin Regen X Regenerative Air Sweeper. Bidders must describe each exception if it does not meet the standards below. This will be a turn-key truck chassis and sweeper combination.

The vehicle including all necessary equipment shall be furnished and delivered complete and ready for use. All parts not specifically mentioned but which are necessary for the complete unit shall be supplied and installed by the vendor even though such work or material are not specifically outlined.

The bidder shall respond to each item listed in this specification in the space provided, indicating whether they meet or do not meet specification, and describe/clarify the proposed item or any deviation to the item. These pages are to be included in the Bid Response. **Bidder will be considered non-compliant if response is not on these specifications.**

1. MINIMUM SPECIFICATIONS – CHASSIS
(Freightliner M2 or equal)

Item #	Description	Meet Specification?	Description/ Deviation
1.1	Chassis shall be conventional design with 33,000 GVW rating		
1.2	Wheelbase shall not exceed 176 inches		
1.3	Cab to axle shall not be more than 110 inches		
1.4	Front tow hooks shall be provided		
1.5	The single speed rear axle shall have a ratio of 6.43:1 for proper sweeping speeds		
1.6	Cummins ISB 6.7-200 turbocharged diesel, 200 HP @ 2400 RPM, 520ft-lbs. @ 1600 RPM		
1.7	Block heater		
1.8	Automatic transmission – Allison RDS series		
1.9	12,000lb Front Axle 21,000lb Rear Axle		
1.10	Tire size 11R22.5 - the rear axle shall include dual tires for load capacity		
1.11	Brakes shall be full air brakes S Cam with automatic slack adjusters and ABS		
1.12	Steering shall be full power with dual operator controls		
1.13	West coast type exterior mirrors with lower 8" convex lens for easy viewing of the side broom during sweeping		
1.14	To maximize operator visibility of the curb and sweeping gear, an 8" outside RH fender mirror shall be mounted forward of the front wheels		
1.15	For safety during night sweeping, switches shall be illuminated to be readily identified without the use of the cab dome light		

City of Knoxville
Regenerative Air Sweeper Truck

Item #	Description	Meet Specification?	Description/ Deviation
1.16	Switches shall be clearly identified by name and symbol		
1.17	Cab interior environment shall be fully air-conditioned including a fresh air heater/ventilator/defroster		
1.18	Wipers shall have intermittent feature		
1.19	All glass shall be tinted safety glass		
1.20	Each operator position shall have adjustable sun visor		
1.21	Passenger (RH) seat shall be adjustable, high back, air-suspension, including 3 point seat belt (orange preferred)		
1.22	Driver (LH) seat shall be high back, including 3 point seat belt (orange preferred)		
1.23	LH and RH doors shall be keyed alike		
1.24	Cab shall include 12V power supply		
1.25	Door windows shall be manually operated		
1.26	Cab shall include two speakers, roof mounted antenna, and AM/FM radio equipped with Bluetooth		
1.27	Dual electric horns shall be provided		
1.28	Chassis left side operator instrument panel shall be chassis OEM, full vision illuminated with tachometer, speedometer, odometer, trip odometer, hour meter, fuel gauge, water temperature gauge, oil pressure gauge, transmission temperature gauge, air pressure gauge, and volt gauge		
1.29	Chassis right side operator instrument panel shall be chassis OEM, full vision illuminated with tachometer, speedometer, fuel gauge, water temperature gauge, oil pressure gauge, transmission temperature gauge, air pressure gauge, and volt gauge		
1.30	Chassis engine instruments shall include warning light and chime for low coolant level and high coolant temperature		
1.31	Console shall have left/right primary driver switch		
1.32	Hydraulic functions shall be controlled by rocker switches located in the cab mounted control panel		
1.33	Chassis engine shall have a 160 amp alternator		
1.34	Chassis lighting shall include sealed multi-beam halogen head-lights with daytime running		
1.35	Chassis shall have two (2) maintenance free batteries rated at not less than 1850 CCA total, 12 volt		
1.36	Chassis color - white		

City of Knoxville
Regenerative Air Sweeper Truck

2. REGENERATIVE AIR SWEEPER – Elgin RegenX or equal mounted on above chassis

Item #	Description	Meet Specification?	Description/ Deviation
2.1	<p>Diesel Auxiliary Engine:</p> <ul style="list-style-type: none"> • 4 cylinder, turbocharged, dynamically counter balanced 74hp @ 2400RPM, EPA Tier Four Final • Torque: 224 lb-ft @ 1600RPM • No DEF required • Auxiliary engine shall drive the blower “fan” by a heavy-duty lightweight two (2) "V" groove power belt for simplicity and ease of maintenance • A fluid coupler shall be installed between auxiliary engine and power belt drive, for smooth starting and stopping of the engine, to prevent the momentum of the fan system from driving the engine when the engine is turned off • Auxiliary engine shall have ECU for throttle control • Auxiliary engine shall be protected by a dual safety element dry type air cleaner and restriction indicator that indicates it is time to service the filter element • Auxiliary engine shall have individually replaceable wet sleeve cylinder liners • Hydraulic oil level gauge w/thermometer on tank shall be provided. 		
2.2	<p>Blower (Fan):</p> <ul style="list-style-type: none"> • Driven by a two (2) "V" groove power belt with spring-loaded tensioner; not requiring repositioning of the auxiliary engine for adjustment • Blower speed shall not exceed 3050 RPM • Closed face turbine type, 333/8 in. diameter, with 9 vanes constructed of Hardox steel. • Blower housing to be 7-gauge steel • Inspection door to provide access to blower without removing the blower housing or looking into the air exhaust opening • Blower housing shall not be an integral part of the hopper for ease of replacement • Belt tension shall not exceed 20 Hz • The blower housing shall include Flow Blocker feature (or equal) providing automatic enhanced dust control through eliminating airflow prior to raising the pickup head for transport, reversing, and prior to deployment of sweep gear. • The Flow Blocker (or equal) feature shall eliminate the need for sweeping in reverse, with the pickup head lowered, during instances where fugitive dust is not desired. 		

City of Knoxville
Regenerative Air Sweeper Truck

Item #	Description	Meet Specification?	Description/ Deviation
2.3	<p>Pickup Head:</p> <ul style="list-style-type: none"> • Spring-supported, all steel fabricated pickup head with separated upper and lower chambers where pressurized air is blasted from the upper chamber through an elongated blast orifice, to the lower vacuum chamber • 90” wide and 30” long for a total area of 2700 square inches • 14” diameter pressure hose that connects the blower outlet with the pickup head. Urethane transition pieces between the pressure hose and the pickup head are not acceptable • 13” diameter suction hose with a quick disconnect coupling at the lower end near the pickup head and the higher end near the hopper inlet, steel portion of this suction tube shall be no shorter than 19” • The pressure side shall be equipped with an in-cab steel cable-controlled pressure relief valve/vacuum enhancer/leaf bleeder no smaller than 116 square-inches • The suction chamber shall be equipped with a washout port that does not restrict the sizing of washout nozzle(s) used • The front and rear debris curtains shall be removable through the loosening of four (4) slotted bolts without removing the pickup head from the unit • Sweeping paths: <ul style="list-style-type: none"> • Pickup head only = 90 inches • One side broom and pickup head = 117 inches • Two side brooms and pickup head = 144 inches • The pickup head to be equipped with side-mounted adjustable steel runners with carbide inserts with a minimum width of 1 1/8 inches. Both LH and RH side-mounted steel runners shall be reversible and interchangeable • Pickup head to be raised and lowered by rocker switch on the control panel inside the cab 		

City of Knoxville
Regenerative Air Sweeper Truck

Item #	Description	Meet Specification?	Description/ Deviation
2.4	<p>Side Brooms:</p> <ul style="list-style-type: none"> • 144" total sweep path with both side brooms extended • The right and left side broom shall be a free-floating trailing arm design. The trailing arm to be a parallelogram design for simple, non-binding action/motion and for constant bristle and wear pattern • 42" diameter with hydraulically driven rotation, pneumatically raised and lowered • Adjustable down pressure shall be pneumatically controlled by the operator from the cab in order to maintain proper surface contact consistently during vertical broom travel • The broom hydraulic motor drive shall provide not less than 6045 in/lbs. of torque for superior digging power and speed • The side broom assemblies shall have greaseless pivot pins, and only one (1) grease zerk for the side-to-side tilt plate • The side broom assemblies shall be held in the storage position by a positive means to support broom during travel • Controlled by in cab rocker switches • Variable speed control to alter the rotational speed on the sidebrooms to adjust to changing road or sweeping conditions • Electrically operated tilting mechanism for operator to change inward/outward tip of the right and left sidebrooms. Angle can be changed from the cab while sweeping. 		
2.5	<p>Hopper:</p> <ul style="list-style-type: none"> • 8 cu. yards with all fore-and-aft edges being minimum of 6" radius • Constructed of 10-gauge steel and ¼" thick steel floor • 50° total dump angle, 10° hopper floor plus 40° dump angle • Dumping shall be accomplished by tilting the hopper via two (2) single-stage telescoping cylinders • External hopper props • A removable, steel deflector to be located at the suction inlet to direct material to the rear-center of the hopper for optimal loading 		

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Item #	Description	Meet Specification?	Description/ Deviation
	<ul style="list-style-type: none"> • The hopper rear door shall be hinged at the top and opened by means of two (2) hydraulic cylinders. The hopper door shall open first prior to tilting the hopper. The hopper rear door should open at a minimum angle of 100 degrees. • Dump control shall consist of weatherproof toggle switches located on the exterior right side of sweeper along with optional in-cab dump switches – hopper raise/lower and hopper door open/close – shall also be available • The rear hopper door shall have an external door prop and include an automatic locking-pin mechanism • A single screen assembly with total surface area of 3970 square inches, constructed of 11-gauge steel, shall be installed to allow air to move freely from the hopper into the centrifugal dust separator • Screen shall be hinged and lowered via a pneumatically controlled cable drop-down system • The LifeLiner Hopper System or equal shall be provided to protect the hopper against corrosion and wear and to facilitate the removal of the debris when dumping. This liner system shall provide protection and will be warranted for the life of the sweeper. Bare steels including stainless steels are unacceptable 		
2.6	<p><i>Dust Separator:</i></p> <ul style="list-style-type: none"> • Dirt separation from the air stream shall be accomplished by means of a centrifugal style dust separator that is installed external to the hopper and bolted on for ease of servicing and replacement. The separator shall be designed so that it will not plug with debris • To allow inspection and cleaning of the separator interior, the dust separator shall have minimum of two hinged inspection doors. Both doors are self-opening when tilting the hopper • To allow automatic discharge of debris when tilting the hopper, the dust separator shall have a self-opening door made of steel. Cable or other manual/mechanical means required for discharging the separator are not allowed 		
2.7	<p><i>Spray Water System:</i></p> <ul style="list-style-type: none"> • The water tank shall be a removable, 250 gal. total capacity Polyethylene tank • The water tank shall be frame mounted with no part sharing any common wall with the hopper and shall not rise during hopper dumping 		

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Item #	Description	Meet Specification?	Description/ Deviation
	<ul style="list-style-type: none"> • 16' 8" fill hose with NST coupling with strainer shall be supplied • Shall have an external water level gauge that is visible from the operator's position • All water lines shall be color coded for easy identification • The water filter must be accessible and cleanable from ground level without tilting the hopper. A ball valve must be provided at the filter inlet to allow cleaning of the filter without the loss of water from the water tank • All water piping shall be external to the operator cab. • Three (3) spray nozzles located at each side broom with a pivoting bracket for positioning • Three (3) removable water spray nozzles are located at the lower portion of the suction hose for lubrication of the suction hose and to further enhance dust control • One (1) electric 12 volt, diaphragm type pump to provide a capacity of 4 GPM to the pickup head, the suction hose and the side brooms. The system pressure shall be sized for 40 PSI • Water pump must have two flow rates, selectable by the operator from within the cab and capable of running dry without damage • Water system shall be capable of winterization without the use of an air purge system 		
2.8	<p>Hydraulic System:</p> <ul style="list-style-type: none"> • Gear driven hydraulic pump with a flow capacity of 7.0 GPM @ 2100 RPM and 8.3 GPM @ 2500 RPM • 11 gal. capacity with exterior site gauge • All hydraulic circuits to have quick disconnect pressure check ports for ease of maintenance • Hydraulic oil cooler shall be standard to provide adequate cooling with fresh air intake and accessible without raising the hopper. The hydraulic system shall operate below 200 degrees F. 		
2.9	<p>Pneumatic System:</p> <ul style="list-style-type: none"> • All pneumatic cylinders rated to 150 PSI and have a separate rod seal and wiper • All pneumatic cylinders to be interchangeable 		

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Item #	Description	Meet Specification?	Description/ Deviation
2.10	<p>Electrical System:</p> <ul style="list-style-type: none"> • Rear-facing backup camera • Electronic backup alarm • Sweeper to have a pickup head camera for visibility of the front of the pickup head while sweeping • Sweeper lighting shall include rear identification lights and rear clearance lights • Sweeper warning lights shall include hopper up and hopper door open (when equipped with incab tilt), screen down, and hopper full load • Wiring system to be color coded and function stamped • Rear LED arrowstick shall be installed • LED side broom lights, rear flood lights installed 		
2.11	<p>Controls:</p> <ul style="list-style-type: none"> • All sweeper controls shall be mounted on a stationary central console to allow for use and visibility from either right or left operating positions • The controls shall include sweep, spray water and lighting functions and shall be rocker switches • Controls for auxiliary engine ignition and throttle, side broom down pressure shall be located in the control console • Controls for the auxiliary engine throttle to be a pre-set rotary knob and shall include individual settings for "idle", "light", "medium", "medium/heavy", and "heavy" to provide clarity to the operator of proper throttle setting for any given application • Controls for sweep system shall include sweep/resume feature; allowing the automatic raise when chassis transmission gear selector is put into reverse of side brooms and pickup head 		
2.12	<p>Instrumentation:</p> <ul style="list-style-type: none"> • "Raised" hopper indicator and "open" hopper door indicator and a "full" hopper indicator • Sweeper instruments shall include diagnostic information for the sweeper engine and sweeper functional information to sweeping mode and transport mode • Sweeper engine instruments shall include tachometer, hour meter, oil pressure, voltage, and coolant temperature for complete information for the operator on the condition of the auxiliary engine, visible from both operator positions 		

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Item #	Description	Meet Specification?	Description/ Deviation
2.13	<p><i>Additional Enhancements Included:</i></p> <ul style="list-style-type: none"> • Right hand gutter broom tilt – no display • Left hand gutter broom tilt - no display • Right hand inspection door • In-cab hopper dump • Wandering hose • Auxiliary hydraulic pump with in-cab hopper dump • Automatic Flow block • Rear mounted tool box left hand side • Rear mounted tool box right hand side • Left hand fender mounted mirror 		
2.14	<p><i>Paint:</i></p> <ul style="list-style-type: none"> • All visible exterior metallic surfaces shall be coated prior to assembly with polyester powder coat. The paint must be a minimum of 2 mils thick. The uses of acrylic enamels and/or polyurethane's are not acceptable • Color shall be the manufacture's standard color of "white" 		
2.15	<p><i>Manuals and Warranty:</i></p> <ul style="list-style-type: none"> • Manufacturer's warranty shall be not less than one (1) year on entire sweeper, including all parts and labor • Manufacturer's warranty shall be not less than three (3) years on chassis engine, including all parts and labor • Manufacturer's warranty shall be not less than lifetime protection against rust-through of the water tank 		
2.16	<p><i>Service and Training:</i></p> <ul style="list-style-type: none"> • Vendors shall have a full parts and service facility within a reasonable distance from the City of Knoxville (may be a determining factor in the bid award). State the location and distance • A qualified technician shall provide complete training to personnel at the City of Knoxville. Training shall include safety, operation, maintenance, and service. • Vendor will complete complimentary service, maintenance and operator training for the life of the equipment upon request 		

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Item #	Description	Meet Specification?	Description/ Deviation
2.17	<p><i>Delivery and Payment</i></p> <ul style="list-style-type: none"> • Vehicle shall be delivered chassis and body complete, fully serviced, inspected for safety and safe operation, and ready to perform the work for which it is being purchased, with no less than 1/4 tank of fuel • Winning bidder shall provide the manufacturer's statement of origin (MSO) when vehicle is delivered. <p>The payment process will not begin until the vehicle is delivered, accepted and actual MSO has been received. No exceptions.</p>		