CITY OF CONCORD
CONCORD, NORTH CAROLINA

FOR

ONE (1) CONVENTIONAL CAB REAR-LOADING REFUSE TRUCK

FOR

SOLID WASTE SERVICES DEPARTMENT

ANNOUNCED DATE: THURSDAY, SEPTEMBER 27, 2012

DUE DATE: TUESDAY, OCTOBER 16, 2012

TIME: 2:00 PM
IN CONFERENCE ROOM C
ALFRED M. BROWN OPERATIONS CENTER
850 WARREN C. COLEMAN BOULEVARD
P.O. BOX 308
CONCORD, NC 28025

REQUEST FOR BID

The City of Concord will receive sealed bids, on Tuesday, October 16, 2012 at 2:00 PM, in Conference Room C, Alfred M. Brown Operations Center, 850 Warren C. Coleman Boulevard, Concord, North Carolina 28025. Said proposals will be publicly opened and read for:

ONE (1) CONVENTIONAL CAB REAR-LOADING REFUSE TRUCK

Copies of the specifications if not included in the bid can be Obtained by contacting the Purchasing Department, Alfred M. Brown Operations Center, 850 Warren C. Coleman Blvd., P.O. Box 308, Concord, N.C. 28025. Telephone #704-920-5441, Fax # 704-785-8856.

NC General Statutes, including G.S. §143-129, and the city of Concord, NC General Specifications and Instructions to bidders will govern the RFB and award of the contract.

The City of Concord reserves the right to reject any or all bids.

Sid Talbert
Purchasing Manager
City of Concord, N.C.

In accordance with state law (G.S. 143.129), the award shall be made to the lowest responsible, responsive bidder, taking into consideration quality, performance, the time specified in the bid. Prices should be quoted for each line as well as a price for the total award.

Each bid must be submitted in a sealed envelope, so marked as to indicate its contents when being opened. **All bids should be marked BID #2210 ONE (1) CONVENTIONAL CAB REAR-LOADING REFUSE TRUCK**

An authorized official of the firm must sign the bid.

The vendor will be required to submit a written request for payment. Payment will depend on projected delivery date stated in the bid for items and certified acceptable by Mr. Daniel Nuckolls – Fleet Services Director, for City of Concord, P.O. Box 308, Concord, North Carolina 28025. Telephone (704)920-5431. Questions concerning bid requirements or specifications should be directed to the Purchasing Manager, Alfred M. Brown Operations Center, 850 Warren C. Coleman Boulevard, P.O. Box 308, Concord, NC 28025. Any changes in specifications will be in writing in form of an addendum and furnished to all bidders. Verbal information obtained otherwise will not be considered in the awarding of bids. No changes to specifications will be permitted within (5) days to the bid opening.

Instructions for preparation and submission of a bid/proposal are contained in the attached packet. Please note that specific forms for submission may be required. Any changes to the conditions and specifications must be in the form of a written addendum to be valid; therefore, the Purchasing Department will issue a written addendum to document on all approved changes. Any bid submitted which does not acknowledge the receipt of an issued addendum will not be considered. Bidders should have no contact with elected officials or appointed officials except the Purchasing Manager during the bidding process. Any such contact will subject bidders to immediate disqualification. Questions regarding specifications should be directed to the Purchasing Manager. A bid proposal from your firm will be appreciated.

Bid Proposal

City of Concord
P.O. Box 308
Concord, North Carolina

Gentlemen/Ladies:

The undersigned, as bidder, hereby declares the proposal is made without connection with any other person, company, or parties making a similar bid or proposal, and that it is in all respects fair and in good faith without collusion or fraud. The Bidder has carefully examined the annexed form of the specifications and instructions to the bidder and hereby declares that he will furnish the material called for in a manner prescribed in the specifications and instructions to bidders for the following prices listed.

PRICE _____

DELIVERY DATE_____

COMPANY NAME _____

AUTHORIZED SIGNATURE _____

TYPE NAME AND TITLE _____

FEDERAL ID # _____

NC CONTRACTORS LICENSE # _____

TELEPHONE # _____

Note:
This signature page must be signed for your bid to be valid.

GENERAL SPECIFICATIONS & INSTRUCTIONS TO BIDDERS

Scope

It is the intent of this bid invitation to obtain proposals for supplying the materials, supplies and/or equipment listed on the Proposal Sheet. You are requested to submit your bid on the enclosed Proposal Sheet and return the entire sealed package to Sid Talbert, Purchasing Manager, City of Concord (hereinafter "City"), PO Box 308, Concord, NC 28026-0308 no later than the time specified in the bid advertisement. Bidders will be required to comply with all applicable statutes, regulations, and local ordinances, ect. And those attached to and made a part of the proposal.

Marking of Bid Envelopes

Bids must be contained in a sealed envelope, plainly marked, showing the bid name, bid number, date, time for opening bids and the bidder's name.

Late Bids Not Considered

Bids received after the stipulated bid opening date and time will not be considered.

Compliance With Specifications

Your bid must be in strict compliance with the specifications and offer the same or equal equipment. Exceptions are to be listed separately in a letter that will become a part of your proposal; otherwise, it is fully understood that the equipment offered is exactly as specified. The City reserves the right to allow or disallow minor deviations from the specifications in order to purchase what is best for the City from a standpoint of quality, price and service to be rendered.

Standard Equipment

To protect the interest of the City, the bidder guarantees that the equipment bid is standard equipment with parts regularly used for equipment offered. There must be no parts or attachments substituted or applied contrary to the manufacturer's recommendations and standards unless expressly called for in the specifications.

Warranty

In submitting a bid, the bidder warrants that all goods furnished shall be free from all defects and shall conform in all respects to the Technical Specifications established herein. Unless otherwise specified, all items shall be guaranteed for a minimum of one (1) year against defects in material and workmanship. At any time during that period, if a defect should occur in any item, that item shall be repaired or replaced by the seller at no cost to the buyer except where it can be shown that the defect was caused by misuse. The bidder expressly warrants that all items bid are fit and sufficient for their intended purpose. If the specifications contain a statement of the particular

purpose for which the goods will be used, the goods offered by bidder shall be fit for this purpose.

Shipping

All prices are to be quoted f.o.b. Concord N.C. delivered unless otherwise specified. Risk of loss and/or damage shall be upon the seller until such time as the goods have been physically delivered and accepted by the buyer.

Unit Prices to Prevail

Prices shall be submitted on per unit basis by line item. In the event of a disparity between the unit price and the extended price, the unit price shall prevail.

Bid Price Corrections

All prices and notations shall be written in ink or typed. Changes or corrections made on the bid form must be initialed by the individual signing the bid. No corrections will be permitted once bids have been opened.

Withdrawal of Bids

Bids may be withdrawn at any time prior to the time specified for the bid opening upon written or personal request of the bidder. No bid may be withdrawn for a period of sixty (60) days after the scheduled bid opening time and date. Negligence on the part of the bidder shall not constitute a right to withdraw the bid subsequent to such bid opening.

Use of Brand Names and References

Unless otherwise stated, the use of manufacturer's names and product numbers are for descriptive purposes and establishing general quality levels only. They are not intended to be restrictive. Bidders are required to state exactly what they intend to furnish; otherwise it is fully understood that they shall furnish all items as stated.

Alternate Bids

Bid submitted as alternate which do not meet or exceed the minimum specifications shall be rejected except that minor deviations may be acceptable. The City shall be the sole judge of what is considered a minor deviation.

Time For Delivery

The time for delivery must be stated in calendar days on the Proposal Sheet and may be a factor in making awards, price notwithstanding.

Rejection of Bids

The City reserves the right to reject any and all bids.

Bonds

A 5% bid bond is waived for the purchases of apparatus, supplies, materials or equipment as stated in the cover section. A 100% performance bond is also waived.

Award

Award shall be made to the lowest responsible, responsive bidder, taking into consideration quality, performance, time specified in the bids for the performance of the contract.

Brochures and Literature

The proposal must be accompanied by descriptive literature marked, indicating the exact item(s) bid upon. The term "as specified" will not be acceptable.

Addendums

The City shall not be responsible for any oral instructions made by its employees or officers of the City with regard to bidding instructions, drawings, specifications or contract documents. Any changes to the specifications will be in the form of an Addendum, which will be mailed to all bidders who are listed with the Purchasing Department as having received the invitation or any other bidder who requests an Addendum.

Responsibility of Compliance With Legal Requirements

The bidder's products, service and facilities shall be in full compliance with any and all applicable state, federal, local, environmental and safety laws, regulations, ordinances and standards, or any standard adopted by nationally recognized testing facilities regardless of whether or not they are referred to in the invitation.

Taxes

The City of Concord is subject to 7.00% N.C. Sales & Use tax. Tax will not be shown on the proposal; however, invoices will indicate all applicable sales tax. The city is exempt from Federal Excise Tax and will provide a Federal Exemption number.

Terms and Conditions

Payment will be made by the City in full for all equipment delivered as soon after complete delivery and receipt of a correct invoice as can be processed in accordance with these specifications.

Any company submitting a "No Bid" response to a bid invitation should clearly mark the outside of the envelope.

Terms and Conditions attached to the bid by the bidder and made a condition of purchase may render the bid non-responsive and may be rejected by the City.

Terms and Conditions included herein are an integral part of the bid document and shall prevail, unless changes or attachments are agreed to and initialed by the City prior to the bid opening.

Introduction in Use of Goods: Demonstration

A demonstration may be required of the goods bid upon. The demonstration shall be at no cost to the City. If the bidder cannot make a demonstration within twenty days of the request, his or her bid may be rejected. Performance of the equipment at the demonstration must be made with the exact equipment offered in the bid and may be completed at the same time as competitive demonstrations.

Trade-ins

Goods listed for trade-in, if any, may be examined after contacting the Purchasing Department. Goods listed for trade-in are represented "as is" and "where is". Such goods will be released to the successful bidder after receipt of the new equipment and in the same condition as when examined, excepting normal wear and tear.

The City reserves the right to retain goods listed as trade-in if it is deemed to be in the best interest to do so.

Training/Safety

When requested or required, a factory-trained representative shall be present at the time of delivery to train City personnel in the use of and/or safety aspect of the equipment or chemical. The factory representative shall effectively train the City personnel in all aspects, including assembly, disassembly, operating procedures, safety and any other training necessary for its safe and effective use. Items received without sufficient training when requested will be set aside and payment withheld until sufficient training can be completed.

Training shall include OSHA related training in the handling of hazardous materials.

MSDS sheets must be sent with each order. Failure to provide MSDS sheets prior to or at the time of delivery will result in withholding payment until such sheets are received.

Service

All vehicles furnished under a bid shall receive without additional cost whatsoever the usual check-up, guarantees and adjustment identical to that which is normally furnished on vehicles sold to the general public.

Manuals

One parts, one service, and one operators manual shall be furnished with each type vehicle delivered if applicable to this bid.

Bankruptcy

Successful bidders shall execute a contract that contains the following language:

If any bankruptcy or insolvency proceedings are commenced against the contractor
And are not dismissed within thirty (30) days after service of such proceeding on the
Contractor, or if the contractor shall file petition in bankruptcy or for reorganization or
To effect a plan or other arrangement with creditors, or be adjudicated bankrupt or make an assignment for the benefit of creditors, or be dissolved or liquidated, or shall
Admit in writing its inability to pay its debts generally as they become due, or a receiver, trustee or liquidator of the contractor or of all or substantially all of the property of the contractor is appointed in any proceeding brought by the contractor, or if any such receiver, trustee, or liquidator is appointed in any proceeding against the contractor, and any such receiver, trustee or liquidator is not discharged within (30) days after service of such appointment on the contractor, this agreement shall be null and void.

W-9 Form

Prior to the first payment by the City under any contract awarded to the successful bidder, the successful bidder shall submit a complete and accurate W-9 form to the Purchasing Manager.

Dissolution of Corporate Status

Successful bidders shall execute a contract that contains the following language:

Failure to register the agent of the corporation or other business entity, if any, with the N.C. Secretary of State or voluntary, judicial or administrative dissolution of the corporation or other business entity shall automatically terminate this contract or agreement unless the bidder or contractor notifies the City of Concord in writing within 72 hours of the dissolution or failure to register the agent and makes satisfactory arrangements and/or guarantees with the City Purchasing Officer and City Attorney to fulfill the contractors obligations under the contract or agreement.

Concord NC Licenses and Taxes

ALL BIDDERS SHOULD BE IN COMPLIANCE WITH THE CITY OF CONCORD PRIVILEGE LICENSE TAX ORDINANCE AND AWARD OF BID WILL BE CONTINGENT UPON RECEIPT OF COPY OF LICENSE.

It is the intent of the City of Concord to issue purchase orders for the Bid items to cover the Fiscal Year July 1, 2012 to June 30, 2013. Quantities are estimates only and the City reserves the right to purchase more or less for the entire fiscal year and extend pricing if mutually agreed upon with the vendor and the City of Concord.

CITY OF CONCORD
BID SPECIFICATIONS, FOR ONE (1) EACH, CONVENTIONAL CAB REAR-LOADING REFUSE TRUCK

The City of Concord desires to purchase one (1) each Conventional Cab Rear-loading Refuse Truck for the Solid Waste Department. Bidders are encouraged to thoroughly inspect the specification package, and apply for approved equals in areas of minor discrepancy from their vehicles.

Questions about the specifications and request for approved equals must be directed to Daniel Nuckolls, Fleet Services Director, City of Concord, P.O. Box 308, Concord, North Carolina 28026. Questions may be directed by phone to the above at 704-920-5431. All requests for approved equals must be in writing, and received at least ten working days before bid opening. Formal reply will be within three working days, with copies to all bidders.

Delivery of all equipment will be completed within 90 days of contract award unless otherwise noted in the bid package, and a delivery penalty of twenty-five dollars per day per bid section shall apply after that point unless other arrangements are specified in the bid.

Specifications:

The specifications herein describe vehicles that shall be new, with no concealed damages, (unused), and equivalent in style, quality and appointments to those offered to the state government. The vehicles shall be supplied with all equipment and accessories indicated as standard equipment in the manufacturer's published literature, except for those accessories and equipment where furnishing such would conflict with a specific requirement otherwise called for herein. In such cases the specific requirement herein takes precedence. Optional equipment as necessary to meet the specifications shall also be installed. All such equipment shall be included in the bid price for each line item.

Note that it is possible that an item that is standard for the manufacturer may be listed as an option in this bid. In the cases, in accordance with the above paragraph, it is required that bidder still furnish such standard equipment in the base vehicle price; bidder is not to deduct this equipment from base vehicle offered herein in order to furnish and price it as an option (s). Such standard equipment so deducted from the base vehicle by bidder and priced herein as an option shall still be furnished with the base vehicle at the base vehicle price offered. All such equipment may be checked by the city using the manufacturers data book or other published literature as necessary.

All parts, accessories, and equipment specified herein are to be manufacturer's original equipment (unless otherwise allowed), and are to be furnished and installed by the manufacturer. Those items furnished by manufacturer but normally shipped loose for dealer installation, such as wheel covers, certain bulbs, antennas, license plate brackets, and certain clock installations, are exempted from the requirement to be manufacturer installed (but they still must be manufacturer furnished).

Any equipment that is vendor-furnished (when allowed in bid) is to be fully compatible with the specific vehicle on which it is furnished. In addition such equipment is to be typical of best industry practices with respect to design, quality, size, color, material, construction, and any other applicable characteristics. Final approval of vendor-furnished equipment is to be by the city, using the above criteria, at the time of delivery or before the vendor orders such equipment, whichever is more appropriate.

Substitutions:

Substitutions and standard equipment changes are not permitted without prior written approval of the Fleet Services Director, City of Concord.

CITY OF CONCORD
BID SPECIFICATIONS, FOR ONE (1) EACH, CONVENTIONAL CAB REAR-LOADING REFUSE TRUCK
Cab & Chassis (Freightliner M2-106, Kenworth 370, or equivalent)

	Specifications	Bidder Specifications
1.	**Engine:** Cummins ISC diesel, 280 HP @ 2200 RPM 800 LB/FT @ 1400 RPM with elec. eng. integral shut-down. (Emissions: SCR)	1. HP: _____ Torque: _____
2.	**Oil filter:** Full flow spin-on type, engine mounted.	2. _____ (yes/no)
3.	**Coolant Filter:** Spin-on type.	3. _____ (yes/no)
4.	**Air Compressor:** BW 15.5 CFM air compressor.	4. _____ (yes/no)
5.	**Cooling:** Radiator with 1100 sq.in. core area, antifreeze mix to –34 degrees protection. Horton Drivemaster on-off fan drive; hoses with stainless steel constant torque type hose clamps.	5. _____ (yes/no)
6.	**Air Intake:** Air cleaner, one-stage with air restriction/service indicator on air filter.	6. _____ (yes/no)
7.	**Exhaust:** Single horizontal muffler mounted opposite PTO with cab mounted vertical tailpipe and tailpipe shield.	7. _____ (yes/no)
8.	**Batteries:** Two (2), 12 volt Group 31, low maintenance type; theaded stud, with combined rating of 1,900 CCA; 950 CCA each.	8. _____ (yes/no)
9.	**Battery Box:** Frame mounted.	9. _____ (yes/no)
10.	**Starter:** 12 volt, negative ground.	10. _____ (yes/no)
11.	**Alternator:** 12 volt, negative ground; 130 amp	11. _____ (yes/no)
12.	**Fuel Tank:** Minimum 45-gallon capacity, frame mounted.	12. _____ (yes/no)
13.	**Transmission:** Allison 3500 RDS automatic transmission, including 10-bolt PTO mounting pad both sides. Water to oil transmission cooler. WTEC transmission programming, 6-speed Refuse/Construction (GRP 73).	13. _____ (yes/no)
14.	**Transmission Shifter:** Push-button electronic shift control, dash mounted.	14. _____ (yes/no)
15.	**Propshafts:** Meritor 1760HD main driveline w/half-round yokes, and 1710 interaxle driveline with full-round yokes.	15. _____ (yes/no)
16.	**Front Axle and Suspension:** 16,000# capacity.	16. _____ (yes/no)
17.	**Front Brakes:** Air operated 16-1/2" x 6" Q+, "S"-cam type, cast iron drums, dust shields, automatic slack adjusters, 24" brake chambers.	17. _____ (yes/no)

CITY OF CONCORD
BID SPECIFICATIONS, FOR ONE (1) EACH, CONVENTIONAL CAB REAR-LOADING REFUSE TRUCK
(continued)

18.	**Shock Absorbers:** Front suspension to include two, (2) heavy duty "double-acting" type shock absorbers.	18. _____ (yes/no)
19.	**Steering Gear:** TRW TAS-65 or TAS-85 (as required). 2-quart power steering reservoir.	19. _____ (yes/no)
20.	**Rear Axles and Suspension:** Meritor RT-40-145 R-SRS Tandem Rear Axle @ 40,000# (axle ratio 5.86). Hendrickson RTE403 rear suspension @ 40,000#.	20. _____ (yes/no)
21.	**Rear Brakes:** Air operated 16-1/2" x 7" Q+, "S"-cam brakes, cast iron drums, dust shields, spring type "piggy-back" park brake chambers all rear wheels, anti-compound brake system, automatic slack adjusters; 30" brake chambers.	21. _____ (yes/no)
22.	**Tires:** Front: Qty (2) 315/80R22.5, 18 ply Michelin XZUS radial tubeless tires. Rear: Qty. (8), 11R22.5, 14 ply Michelin XDN2 radial tubeless tires.	22. _____ (yes/no)
23.	**Wheels:** Front – Iron hubs, 22.5x9.00 10-hub pilot, 5-hand steel disc wheels. Rear – Iron hubs, 22.5x8.25 10-hub pilot, 5-hand steel disc wheels.	23. _____ (yes/no)
24.	**Frame Construction:** Heavy duty, reinforced "C" channel steel frame, heat-treated , 110,000 psi. min. yield.	24. _____ (yes/no)
25.	**Wheelbase:** CT: 174" After frame: 26"	25. CT _____ inches AF _____ inches
26.	**Bumper:** 12" painted steel bumper; front tow hooks.	26. _____ (yes/no)
27.	**Air system:** Wabco 4S/4M ABS w/o traction control enhancement, reinforced nylon, fabric braid & wire braid chassis airlines. Standard brake system valves. BW AD-9 brake line air dryer w/heater. Steel air brake reservoirs. BW DV-2 auto drain valve w/o heater – all tanks.	27. _____ (yes/no)
28.	**Cab Construction:** Conventional steel cab. Grab handles LH/RH. Dual West Coast mirrors, door mounted w/8" convex LH/RH.	28. _____ (yes/no)
29.	**Windshield Wipers:** Electric two-speed intermittent wipers with 2-gallon fluid reservoir.	29. _____ (yes/no)
30.	**Cab Interior:** Mid-back air suspension driver's seat, 2-man mid-back tool box passenger seat, gray vinyl. Air conditioning, heater/ defroster, floor mats w/single insulation. Auto reset circuit breakers. All manufacturers standard instruments and controls. AM/FM stereo radio w/two speakers. Two power points in cab.	30. _____ (yes/no)
31.	**Colors:** Exterior – white. Wheels – white. Chassis – black.	31. _____ (yes/no)

CITY OF CONCORD
BID SPECIFICATIONS, FOR ONE (1) EACH, CONVENTIONAL CAB REAR-LOADING REFUSE TRUCK
(continued)

32.	Complete set of service manuals	32. _____ (yes/no)
33.	Extended warranties on engine and transmission	33. Eng: _____ Trans: _____

Cab & Chassis Mfr.: _____ Model No: _____ Model name _____

Cab & Chassis Price: $ _____

CITY OF CONCORD
BID SPECIFICATIONS, FOR ONE (1) EACH, CONVENTIONAL CAB REAR-LOADING REFUSE TRUCK
Refuse Body

The refuse body shall be a Loadmaster Excel series that meets the following specifications:

CAPACITY

1.	The minimum capacity of the body will be 25 cubic yards exclusive of the hopper.	1. _____ (yes/no)
2.	The minimum capacity of the hopper will be 3.5 cubic yards without the use of a hopper loading sill extension.	2. _____ (yes/no)
3.	The body will be designed to allow high-density compaction of up to 1050 lbs. per cubic yard of dry household refuse.	3. _____ (yes/no)

BODY DIMENSIONS

4.	The maximum overall width will be 96 inches.	4. _____ inches
5.	The maximum overall length will be 309 inches.	5. _____ inches
6.	The maximum height above the chassis frame will be 94 inches.	6. _____ inches
7.	The inside width of the body will be 90 inches at the widest point.	7. _____ inches
8.	The inside height of the body will be 82.5 inches at the highest point.	8. _____ inches
9.	The minimum weight of the body and the tailgate (less special options) will be 16,000 pounds.	9. _____ lbs.

BODY CONSTRUCTION

10.	The body will have a smooth floor without a trough. No cylinders, valves, or other hydraulic components will be exposed to refuse packed in the body.	10. _____ (yes/no)
11.	The body sides and roof will be fabricated from 10 gauge hi-tensile steel and will be of a curved design.	11. _____ (yes/no)
12.	A 28" x 34" body side door will be located on the driver's side. The door will be equipped with a spring loaded latch, access ladder and grab handles.	12. _____ (yes/no)
13.	The body floor will be fabricated from 7 gauge hi-tensile steel, full width of the body with no depression or trough to accommodate the ejector cylinder.	13. _____ (yes/no)
14.	The body longitudinal will be 8" tall, fabricated from 3/16" hi-tensile steel.	14. _____ (yes/no)
15.	The floor cross members will be fabricated from 7 gauge hi-tensile steel.	15. _____ (yes/no)

CITY OF CONCORD
BID SPECIFICATIONS, FOR ONE (1) EACH, CONVENTIONAL CAB REAR-LOADING REFUSE TRUCK
Refuse Body

TAILGATE DIMENSIONS

16. The hopper opening will be 75" wide and 62" high to permit unobstructed loading of the tailgate hopper. 16. _____ (yes/no)

17. The top of the loading sill will be 4" below the top of chassis frame to facilitate easy loading. 17. _____ (yes/no)

TAILGATE CONSTRUCTION

18. The tailgate sides will be fabricated from abrasion resistant 3/16" T-1, 150,000 p.s.i. yield strength steel plate. 18. _____ (yes/no)

19. The hopper floor and chute will be a one-piece design fabricated from ¼" T-1, 150,000 p.s.i. yield strength steel plate. 19. _____ (yes/no)

20. The tailgate side, hopper and chute floor will be reinforced with hi-tensile steel channels. 20. _____ (yes/no)

21. The tailgate will be secured to the body with heavy duty 1" diameter turnbuckles equipped with fast spin handles. 21. _____ (yes/no)

22. The tailgate seal will extend a minimum of 50" up the body side. 22. _____ (yes/no)

23. Two grab hadles will be located on each side of the tailgate. 23. _____ (yes/no)

24. The rear steps will be fabricated from open grip strut material with a minimum standing surface of 330 square inches per step. The steps will comply with A.N.S.I. standards. Steps will be of a bolt on design. 24. _____ (yes/no)

25. The hopper loading sill will be constructed of 3"x4"x3/8" wall structural tubing. 25. _____ (yes/no)

PACKING MECHANISM

26. The packing cycle will be controlled by a two lever control system that allows the operator to start, stop, and reverse the direction of any function at any point during the packing cycle. 26. _____ (yes/no)

27. The tailgate control valves will be located under the top covers. 27. _____ (yes/no)

28. The packing blade assembly will consist of two primary components: the slide blade and the sweep blade.

    a. The packing blade assemblies will be mounted on 4 wear shoe that travel on hardened steel wear tracks. The shoe assemblies will be replaceable without removing the packing blade assembly from the tailgate. The sweep blade and the slide blade will be attached by two 3" diameter alloy steel pins, which will also support the two lower wear block assemblies. 28a. _____ (yes/no)

b. The slide blade will be constructed from 3/16" hi-tensile steel plate. 28b. _____ (yes/no)

c. The sweep blade will be mounted to, and pivot on the slide blade. The sweep blade will be fabricated from 3/16" T-1 steel plate, varing in thickness. 28c. _____ (yes/no)

29. Packing blade assembly will ride on 4 UHMW polyethylene shoe assemblies. Metallic type shoes or rollers are not acceptable. 29. _____ (yes/no)

30. The blades will operate without the use of linkage or linkarms. 30. _____ (yes/no)

31. The packing blades will be powered by two 5" bore x 2.5" rod x 23.5" stroke sweep cylinders and two 5" bore x 2.5" rod x 43" stroke slide cylinders. The cylinders will have hardened chrome plated rods, and be of cushioned design to reduce hydraulic shocks, noise, and impact related stress. 31. _____ (yes/no)

32. The packing blade will operate with a 19 second (or less) cycle time. 32. _____ (yes/no)

33. The sweeper blade will stop above the hopper sill to prevent a pinch point. 33. _____ (yes/no)

34. Material in the hopper will be compacted between the packing panel assembly and the ejector panel. The ejector panel will hold pressure against the compacted material and be automatically advanced by a hydraulic load control valve without operator assistance. 34. _____ (yes/no)

EJECTION SYSTEM

35. The load will be ejected by a double acting, telescopic hydraulic cylinder that will extend and retract the ejector panel the full length of the body without the use of clamp bars or related hardware. 35. _____ (yes/no)

36. The ejector cylinder will be four stage, 6.5" bore. 36. _____ (yes/no)

37. The ejector panel will have a 10 gauge hi-tensile steel face sheet that is reinforced by structural steel tubing and formed channels of hi-tensile steel. 37. _____ (yes/no)

38. The ejector panel will be mounted on 4 high-density polyethylene wear shoes that will be replaceable without removing the ejector panel from the body. Metallic type shoes are unacceptable. 38. _____ (yes/no)

39. The ejector panel will be guided in the body by two guide tracks located on the body side 8" above the body floor. The tracks will be 6" deep, fabricated from ¼" hi-tensile steel and full welded to the body sides. 39. _____ (yes/no)

40. The ejector cylinder will be mounted diagonally to the body floor and not require a trough or depression in the floor. Troughed floors are unacceptable. 40. _____ (yes/no)

CITY OF CONCORD
BID SPECIFICATIONS, FOR ONE (1) EACH, CONVENTIONAL CAB REAR-LOADING REFUSE TRUCK
Refuse Body

CONTROLS

41. The ejector and tailgate lift controls will be mounted at the left front of the body, and mounted directly to the valve spool. The throttle advance switch will be located convenient to the ejector and tailgate lift controls. 41. _____ (yes/no)

42. The tailgate controls will be located at the right rear of the tailgate. The two lever design will have positive control of movement of the packing mechanism at all times. The tailgate controls will comply with the applicable A.N.S.I. regulations. 42. _____ (yes/no)

43. An automatic throttle advance device will be incorporated with the tailgate controls. 43. _____ (yes/no)

HYDRAULIC SYSTEM

44. A heavy duty cast iron gear pump with a rated capacity of 40 G.P.M. at 1200 R.P.M. and will be driven a hot shift or air shift power take-off. 44. _____ (yes/no)

45. For safety and extended life of all hydraulic components, the maximum operating pressure will not exceed 2800 psi. 45. _____ (yes/no)

46. The hydraulic system will incorporate an adjustable relief in the body valve. 46. _____ (yes/no)

47. Hydraulic hoses and tubes will be secured by clamps as required to prevent damage from abrasion and vibration. Hydraulic hoses and tubes will use S.A.E. O-ring boss and JIC 37 degree flare ends for zero leaks. 47. _____ (yes/no)

48. Hydraulic hoses will comply with applicable S.A.E. standards for the designed specifications, and will have a 4:1 burst to working pressure safety factor. 48. _____ (yes/no)

49. The hydraulic oil reservoir will have a minimum capacity of 42 gallons. The reservoir will be equipped with filler, breather cap, sight glass, clean out cover, 100 mesh suction filter, magnetic tank drain plug, and gate valve at the suction outlet. The hydraulic reservoir will not be a structural member of the body or the mount for the ejector cylinder. 49. _____ (yes/no)

50. A 10 micron inline return line filter will be located on the hydraulic tank and be equipped with a condition indicator. 50. _____ (yes/no)

51. A suction screen filter of 100 mesh (141 micron) will strain all oil leaving the tank. Suction filter will be equipped with a 5 psi bypass valve. 51. _____ (yes/no)

52. All hydraulic valves will be sectional that will allow replacement of 52. _____ (yes/no)

defective sections without replacement of entire valve.

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53. All cylinders and valves will have S.A.E. O-ring boss ports. 53. _____ (yes/no)

HYDRAULIC CYLINDERS

54. All cylinders will have a working pressure rating of 3000 psi. 54. _____ (yes/no)

55. The sweep and slide cylinders will have hard chromed plated rods and be cushioned to reduce hydraulic shock at the end of the stroke. 55. _____ (yes/no)

56. The sweep and slide cylinders will carry a minimum full three year warranty. 56. _____ (yes/no)

57. Tailgate cylinders will have a minimum bore of 4", hardened chrome plate cylinder rods, and be equipped with restrictors to limit the speed of raising and lowering the tailgate. 57. _____ (yes/no)

58. All rod cylinders will have cast iron glands and pistons and be equipped with double wear bearings and premium seals. Aluminum glands and pistons are not acceptable. 58. _____ (yes/no)

59. elescopic cylinders will have chrome plated cylinder sleeves and plungers. 59. _____ (yes/no)

60. All cylinders are to operate without direct contact with the compacted load. 60. _____ (yes/no)

ELECTRICAL

61. All electrical wiring will be color coded and be in a braided harness or loom. 61. _____ (yes/no)

62. Electrical harnesses will be connected with a sealed aircraft type electrical connector. 62. _____ (yes/no)

63. Electrical wires will be stranded copper type with SXL covering to remain flexible and resist deterioration. 63. _____ (yes/no)

64. Electrical wires will have function printed on the wire for easy identification. 64. _____ (yes/no)

65. Body electrical system will be protected with its own fuse block. 65. _____ (yes/no)

66. All fuses will be ATO type. 66. _____ (yes/no)

67. All limit switches will be water-roof to prevent damage from the elements and pressure washing. 67. _____ (yes/no)

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68. All lights must meet D.O.T. standards and all be LED type. The Strobe/Turn signals must provide a strobe action when the turn signals are not on but go out when the turn signals are actuated. This functioning does not confuse drivers behind. This light system shall comprise of two 4" LED amber lights mounted to the outside of the upper light bar and two 4" LED amber lights mounted below the hopper at the outside corners. These lights shall not effect the emergency flasher lights. 68. _____ (yes/no)

69. A 112 Db backup alarm conforming to current standards must be provided. The alarm must also sound when the tailgate is not closed. 69. _____ (yes/no)

70. Dual 5" sealed worklights with switch in cab. 70. _____ (yes/no)

PAINTING

71. All burrs and rough areas are to be ground smooth and all welds peened to remove slag. 71. _____ (yes/no)

72. Prior to application of any coating, all surfaces will be thoroughly cleaned and conditioned to paint manufacturer's specifications. 72. _____ (yes/no)

73. The body will be coated with two (2) coats of a self-etching epoxy primer. 73. _____ (yes/no)

74. Two finish coats of polyurethane enamel (white) will be applied to produce a high gloss finish. 74. _____ (yes/no)

75. The body must carry a full two-ear warranty. 75. _____ (yes/no)

ACCESSORIES

76. One (1) tipper to be installed on center, hydraulic cylinder actuated. 76. Brand _____ Model _____

77. 2-10 Container Reeving System mounted on rear. 77. _____ (yes/no)

78. Camera System: The body supplier shall provide a two camera system to provide the operator a better means to safely perform his job. A 7" color monitor shall be provided with audio in the cab within the proximity to the driver so he may get a good view of the monitor plus be able to adjust any functions. Two cameras shall be mounted with one above the center hopper opening for view of rear and one mounted on the curb side rear view mirror to provide added visibility on the curb side. 78. _____ (yes/no)

Refuse Body Mfr.: _____ Model No: _____ Model name _____

Total Unit Price $ _____

Delivery _____ days