



Carrie Eklund  
Central Services Manager  
Finance Department

**INVITATION TO BID  
DUMP TRUCKS  
BID NO.: 413-PW-054**

4/16/13

Name of Bidding Firm: \_\_\_\_\_

Address \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

E-Mail: \_\_\_\_\_

**Bid Opening Time and Date 11:00 a.m., Local Time, Wednesday, May 8, 2013**

*Bids will be accepted until the specified opening time and date. Any bidder attempting to deliver after the opening time and date will be refused.*

Bid Deposit/Bid Bond: NO  
Prevailing Wage NO  
Performance Bond: NO

**PLEASE MARK THE RETURN SEALED ENVELOPE:**

1. Bid Opening Date and Time
2. Title of Job
3. Bid Number

**RETURN BIDS TO:**

City of Rockford  
Central Services Manager  
425 East State Street, 4<sup>th</sup> Floor  
Rockford, Illinois 61104  
Telephone: (815) 987-5560

***BIDS SUBMITTED BY FASCIMILE OR E-MAIL WILL NOT BE ACCEPTED***

**BID RESULTS:**

Bid results may be obtained by telephone at (815) 987-5560, by fax at (800) 380-7174, or at [www.rockfordil.gov](http://www.rockfordil.gov)

## CITY OF ROCKFORD, ILLINOIS—BIDDING GENERAL CONDITIONS

1. Pricing. The bidder shall insert price for all bid items and all other information requested in these specifications. The price shall be the *full, delivered cost* to the City of Rockford with no additions.
2. Total versus "Per Item" Awards. The City generally awards contracts based on a lump sum basis to the lowest responsible and responsive bidder. However, the City may choose to award on a per item basis. Therefore, each bidder must submit pricing for each item indicated on the bid forms. Bidders must clearly indicate which items are bid and which are not.
3. Delivery of Merchandise. Delivery terms will always be Freight On Board (FOB)—Destination. The City of Rockford accepts no responsibility for the condition of any merchandise purchased prior to acceptance by City Personnel. Failure to comply with this requirement may constitute rejection of the bid.
4. Acceptance of Merchandise at Delivery. The City of Rockford reserves the right to refuse acceptance of delivered merchandise that differs substantially from the specifications in this invitation to bid or as otherwise permitted by Illinois law.
5. Prompt Payment Act. The City of Rockford intends to comply with the governmental prompt payment act. The awarded vendor will be paid upon submission of invoices to: City of Rockford Accounts Payable, 425 East State Street, Rockford, IL 61104.
6. W-9 Request for Taxpayer Identification Number. Prior to issuance of a purchase order, the successful bidder will be required to supply the City of Rockford with a federal W-9 Request for Taxpayer Identification Number and Certification. Failure to comply with this requirement will be considered a violation of contract terms, for which the City may bar the vendor from bidding for a period of up to three years.
7. Legal Compliance. The vendor awarded this contract will comply with all Federal, State, County, and City laws, ordinances, rules and regulations, which in any manner affect the product or service placed for bid herein. Lack of knowledge on the part of the awarded vendor of applicable law will in no way be cause for release of this obligation. If the City becomes aware of violation of any laws, ordinances, rules and regulations on the part of the awarded vendor, it reserves the right to reject any bid, cancel any contract, and pursue any other legal remedies deemed necessary.
8. Legal Requirements. This contract sets forth the entire final agreement between the City of Rockford and the bidder and shall govern the respective duties and obligations of the parties. The validity of this contract, and any disputes arising from the contract, shall be governed by the laws of the State of Illinois. Any litigation under this agreement shall be resolved in the trial courts of Winnebago County, State of Illinois. Should a provision of this contract be declared invalid by a court of competent jurisdiction, it shall not affect the validity of the remaining provisions of the contract.
9. Safety. Prevention of accidents at any project is the sole responsibility of the awarded vendor and its subcontractors, agents, and employees. The awarded vendor, its subcontractors, agents, and employees shall be fully and solely responsible for the safety of this project. The awarded vendor shall retain exclusive and direct control over the acts or omissions of its subcontractors, agents and employees, and any other persons performing portions of the work and not directly employed by the awarded vendor.

10. Criminal Background Check. When necessary for the protection of citizens and/or City staff, the City may require an awarded vendor to conduct a criminal background check on all of its personnel who will have direct contact with City facilities or residents/businesses served under this contract. Personnel are defined as representatives, agents, employees, subcontractors, or anyone else who will be utilized to fulfill obligations under this contract. Criminal background checks, at a minimum, shall consist of a county level felony and misdemeanor check for each county in which the personnel resided in the last 10 years. The awarded vendor shall notify the City of any of its personnel who have been convicted of a felony or misdemeanor prior to commencing any work under this contract. At the City's discretion, personnel with any felony or misdemeanor convictions which raise a concern about the safety of building, property, or City staff/resident's personal security, or is otherwise job related (as determined by the City) shall not perform work under this contract. Once given notice that a background check(s) will be required, it must be completed within 14 calendar days so as to not delay work to be completed.

11. Control of the Work. With respect to the awarded vendor's own work, the City shall not have contractual, operational, and/or supervisory control over and/or charge of the work and shall not be responsible for construction means, methods, techniques, sequences, procedures, and programs in connection with the awarded vendor's work, since these are solely the vendor's responsibility under the agreement. The City shall not be responsible for the awarded vendor's failure to carry out the work in accordance with the agreement's terms and conditions. The City shall not have control over and/or charge of acts or omissions of the awarded vendor, its subcontractors, and/or their agents or employees, or any other person performing portions of the work not directly employed by the awarded vendor. The awarded vendor shall be considered to be an "independent contractor" pursuant to Illinois law.

12. Bid Bond. When required on the cover sheet, a bid bond for not less than 5 percent of the bid amount must accompany all bids as a guarantee that if the bid is accepted, the bidder will execute and file the proper contract. A bank cashier's check, bank draft, or certified check equal to the amount specified is acceptable in lieu of a bid bond. Bid bonds of the two lowest firms will be retained until the contract is awarded.

13. Performance Bond. When required by the specifications herein, the awarded vendor shall furnish a performance bond equal to the amount of the contract, acceptable to the City, within 14 calendar days after notification of contract award. Failure to furnish the required bond within the time specified may be cause for rejection of the bid and any bid deposit may be retained by the City as liquidated damages and not as a penalty.

14. Taxes. No charge will be allowed for taxes from which the City of Rockford, Illinois is exempt. The City of Rockford, Illinois is not liable for the Illinois Retailers' Occupation Tax, the Service Occupation Tax or the Service Use Tax. The City is exempt from the Federal Excise and Transportation Tax.

15. Withdrawal of Bids. Firms may withdraw or cancel their bids at any time prior to the advertised invitation to bid opening. After the opening time, no bid shall be withdrawn or cancelled. All bids shall be firm and valid for a period of sixty (60) calendar days. If a bidder to whom a contract is awarded refuses to accept the award, the City may, at its discretion, suspend the bidder for a period of time up to three (3) years.

16. Subcontracting. The bidder shall provide information for all subcontractors, leased operators/equipment, and suppliers and all other information requested in the Subcontractor and Supplier Detail Forms attached. Requests for deviations from the completed detail forms submitted must be made in writing, and reviewed and approved by the City's Diversity Procurement Officer and the Central Services Manager or designee. The awarded vendor may not subcontract any portion of the contract after award without written consent of the City of Rockford

Central Services Manager. When subcontractors are used, the awarded vendor is required to pay subcontractors promptly after completion of work. Delay of payment is prohibited.

17. Termination of Contract. The City of Rockford reserves the right to terminate the contract in its entirety or in portions, upon written notice to the awarded vendor, if the Rockford City Council does not appropriate sufficient funds to complete the contract or in the event of default by the awarded vendor. Default is defined as failure of the awarded vendor to perform any of the provisions of this contract or failure to make sufficient progress so as to endanger performance of this contract in accordance with its terms. In the event of default, the City may purchase the product(s) and/or service(s) from other sources and hold the defaulting company responsible for any excess costs occasioned thereby. The City may require payment of liquidated damages for non-performance. Should default be due to failure to perform or because of a request for a price increase, the City reserves the right to remove the firm from the City's bidder list for a period of up to three years.

18. Late Bids and Proposals. Regardless of cause, late bids and proposals will not be accepted and will automatically be disqualified from further consideration. It shall be solely the vendor's risk to ensure delivery at the designated office by the designated time. Late bids and proposals will not be opened and may be returned to the awarded vendor at their request and expense.

19. EEO Forms. Each firm shall be required to submit with its bid information all EEO forms included in the invitation to bid package. Any bid which fails to include the properly completed compliance items will not be read and will not be considered. All subcontractors shall also be required to comply with the same EEO forms as the firm.

20. Restrictive or Ambiguous Specifications. It is the responsibility of the bidding firm to review the invitation to bid specifications and to notify the Central Services Manager if the specifications are formulated in a manner that would unnecessarily restrict competition. Any such protest or question regarding the specifications or invitation to bid procedures must be received by the Central Services Division not less than seventy-two hours prior to the time set for the opening. In the event a contract term is not defined within the contract document, the term will be given its ordinary dictionary definition.

21. Bid Protest. Firms wishing to protest bids or awards shall notify the Central Services Manager in writing within 7 days after the invitation to bid opening. The notification should include the bid number, the name of the firm protesting, and the reason why the firm is protesting the bid. The Central Services Manager will respond to the protest within seven (7) calendar days. A successful protest may result in the reversal of a previously awarded contract.

22. Disputes. In case of disputes as to whether or not an item or service quoted or delivered meets specifications, the decision of the Central Services Manager, or authorized representative shall be final and binding to all parties. The Central Services Manager has the right to waive technicalities as they see fit. The Central Services Manager may request a written recommendation from the head of the department using the equipment or service being procured.

23. Exceptions. Any deviations from these specifications shall be noted and submitted with the bid. Failure to address deviations from specifications may result in bid rejection.

24. Acceptance/Rejection of Bids. The City of Rockford reserves the right to accept or reject any or all bids or proposals at any time, for any reason, including but not limited to the Rockford City Council not appropriating

sufficient funds to purchase equipment or complete the contract. The City may make awards in any manner deemed in the best interest of the City.

25. **Prevailing Wage.** When indicated on the cover page of this document, this contract calls for the construction of a "public work," within the meaning of the Illinois Prevailing Wage Act, 820 ILCS 130/.01 *et seq.* ("the Act"). The Act requires awarded vendors and subcontractors to pay laborers, workers, and mechanics performing services on public works projects no less than the "prevailing rate of wages" (hourly cash wages plus fringe benefits) in the county where the work is performed. When required, awarded vendors are responsible for paying current prevailing wage rates, as posted on the Illinois Department of Labor's website at: <http://www.state.il.us/agency/idol/rates/rates.HTM>. It is the awarded vendor's responsibility to verify current wage rates, as they are updated monthly. All awarded vendors and subcontractors rendering services under this contract must comply with all requirements of the Act, including but not limited to, all wage, notice, and record keeping duties.

26. **Certified Payroll.** All Certified Payroll reports required to be submitted under the Prevailing Wage Act, 820 ILCS 130, must be submitted monthly via email, in Excel or some format compatible with Excel, to [certified.payroll@rockfordil.gov](mailto:certified.payroll@rockfordil.gov).

27. **Substance Abuse Prevention.** When required by Illinois State Statutes, awarded vendors must have in place and file with the City a written program for prevention of substance abuse among its employees. This program must include pre-hire, random, reasonable suspicion, and post-accident drug and alcohol testing, as required by the Substance Abuse Prevention on Public Works Projects Act.

28. **Apprenticeship Requirement.** For construction contracts over \$50,000, awarded vendors must participate in apprenticeship and training programs approved and registered with the United States Department of Labor's Bureau of Apprenticeship and Training for all Trades that will be in the awarded vendor's (or his subcontractor's) employment, with each worker receiving the required apprenticeship/training appropriate to his trade. Owners or work performed by owners is not exempt from the apprenticeship and training requirement.

29. **Indemnification.** To the fullest extent permitted by law, the awarded vendor shall indemnify and hold harmless the City, its officers, representatives, elected and appointed officials, agents, and employees from and against all claims, damages, losses and expenses, including but not limited to attorney's fees, arising out of or resulting from the awarded vendor's performance of work under this agreement, and indemnifies and agrees to defend and hold harmless the City against any and all losses, claims, damages, and expenses arising from the work performed hereunder of the erection, construction, placement, or operation of any scaffold, hoist, crane, stay, ladder, support, or other mechanical contrivance in connection with such work including but not limited to losses, claims, damages, and expenses arising pursuant to claims asserted against the City pursuant to theories premised upon section 414 of the Restatement (Second) of Torts and section 343 of the Restatement (Second) of Torts.

This indemnification agreement shall not be limited in any way by any limitations on the amount or type of damages, compensation, or benefits payable by or for the awarded vendor under Worker's Compensation Acts, disability benefit acts, or other employee benefit acts, and serves as an express agreement to waive the protection of *Kotecki v. Cyclops Welding Corp.*, 146 Ill.2d 155, 585 N.E.2d 1023 (1991) in Illinois.

Further, the awarded vendor agrees that it is solely responsible for compliance with all safety laws applicable to the work performed hereunder, including but not limited to the Occupational Safety and Health Act of 1970 and the Construction Safety Act of 1960 and all standards and regulations which have been or shall be promulgated by the agencies which administer the Acts.

Under no circumstances shall the awarded vendor, its subcontractors, agents, and employees be required to indemnify the City for its own negligence.

30. Officers. Each bidder affirms, by submission of a response to this bid or request for proposals, that no officer of the City of Rockford, Illinois, is directly or indirectly interested in the proposal for any reason of personal gain.

31. Non-Waiver. The failure by the City to require performance of any provision shall not affect the City's right to require performance at any time thereafter, nor shall a waiver of any breach or default of this contract constitute a waiver of any subsequent breach or default or a waiver of the provision itself.

32. Professional Services Selection Act. The City of Rockford intends to comply with 50 ILCS 510/5 governing the selection of professional services. Any reference in these terms and conditions to supplying pricing or price as a determining factor in selection do not apply for services covered by said act.

33. The City of Rockford reserves the right to accept or reject any and all proposals and to waive technicalities in submitted bids.

**BID REQUIREMENTS FOR  
EQUAL EMPLOYMENT OPPORTUNITY**

All bidders seeking to do business with the City of Rockford are **REQUIRED** to submit with any formal, sealed bid all of the following documents and information, attached herewith, completed and signed:

1. Equal Employment Opportunity Affirmative Action Plan Statement of Policy.
2. The Statement of Non-Compliance and Certificate of Non-Segregated Facilities.
3. The Contractor or Vendor Workforce Data Form listing all current employees, by classification, directly employed by the bidder. All categories of information requested must be supplied.  
*Note: The number of employees must be entered under each category (no check marks)*

Below are the Federal definitions of the following racial groups accepted as minorities by the City of Rockford:

Black: A person having origins in any of the Black racial groups of Africa, not of Hispanic origin.

Hispanic: A person of Spanish or Portuguese culture with origins in Mexico, South or Central America, or the Caribbean Islands, regardless of race.

Asian: A person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands. This area includes for example, China, Japan, Korea, the Philippine Republic and Samoa.

American Indian or Alaskan Native: A person having origins in any of the original peoples of North America.

4. Your State of Illinois Pre-Qualification Certification Number, issued by the Illinois Department of Human Rights for the Illinois Department of Human Rights Act, **must provide expiration date entered in the place provided therefore.**
5. Certificate of Non-Barred Bidding
6. All executed Subcontractor/Leased Operator and Supplier forms.

**If you have not obtained your State of Illinois Pre-Qualification Number (item #4), by signing these documents you agree to make application for this number within 30 days from the date of bid opening.**

**ANY BID WHICH FAILS TO INCLUDE THE CITY OF ROCKFORD EEO PAGES 2, 4, AND 5, COMPLETED AND SIGNED WITH YOUR SEALED BID WILL NOT BE READ AND WILL NOT BE CONSIDERED – NO EXCEPTIONS.**

Falsification of any required Equal Employment Opportunity or Affirmative Action information on the part of the bidder could result in rejection of the bid submitted or in the case where a contract has already been awarded, in the cancellation of said contract.

Any questions pertaining to E.E.O. requirements should be addressed to Ron Moore, Diversity Procurement Officer, Legal Department, 425 East State Street, Rockford, Illinois 61104, Phone: (815) 987-5622 or [ron.moore@rockfordil.gov](mailto:ron.moore@rockfordil.gov)

**EQUAL EMPLOYMENT OPPORTUNITY**  
**AFFIRMATIVE ACTION PLAN**  
**STATEMENT OF POLICY**

It is the policy of this company, \_\_\_\_\_ to provide equal employment opportunity without regard to race, religion, color, national origin, handicap, age or sex through a program of positive action affecting all employees. In this program, our company carries out the requirements of Federal Executive orders 11246 and 11375, Civil Rights Act of 1964, Equal Employment Act of 1972, and all other applicable laws, and indicates its active support of the principle of equal opportunity in employment.

At present, \_\_\_\_\_ % of our work force are minorities and \_\_\_\_\_ % of our work force are females, and we will attempt to utilize minorities and females through a positive, continuing program in all jobs for which we contract in the future. Our company will utilize referrals from the City of Rockford's Diversity Procurement Officer for use of minorities and females regarding any future job vacancies.

It is also our intent to make efforts to purchase supplies or equipment from small business concerns located in the City of Rockford or counties of Winnebago or Boone and owned in substantial part (at least 51 per cent) by minorities or females.

\_\_\_\_\_ is the official who will be responsible for implementing this policy statement.

\_\_\_\_\_ will be designated as the Equal Opportunity Officer in our company, responsible for submission of all required equal employment opportunity documents.

In addition, \_\_\_\_\_ is hereby authorized to sign payroll as well as this company's officers. (NOTE: If only officers will be authorized to sign payrolls, please fill in "No One" in this space.)

## **STATEMENT OF NONCOMPLIANCE**

If the equal employment opportunity hearing committee determines that a contractor, subcontractor/leased operator of equipment or bidder is not in compliance with this chapter, (also known as Chapter 11, Article III the City of Rockford Equal Opportunity Employment Ordinance), the hearing committee shall issue and serve upon such person a written statement of noncompliance setting forth the manner in which it finds such person has violated this chapter, and imposing and/or requiring appropriate sanctions, including, but not limited to any and/or all of the following:

- a. Denying, suspending or revoking qualifications, or declaring the contractor or subcontractor irresponsible and ineligible for future contracts or subcontracts until such time as the contractor or subcontractor shall demonstrate to the equal employment opportunity hearing committee that it is in compliance;
- b. Withholding or delaying payment on the contractor or;
- c. Suspending, avoiding or canceling contract work.

## **CERTIFICATION OF NON-SEGREGATED FACILITIES**

The bidder certifies that he/she does not maintain or provide for his/her employees any segregated facilities at any of his/her establishments, and that he/she does not permit his/her employees to perform their services at any location, under his/her control, where segregated facilities are maintained. The bidder agrees that a breach of this certification will be a violation of the Equal Opportunity clause in any contract resulting from acceptance of this bid.

The bidder agrees that (except where he/she has obtained identical certification from proposed subcontractors/leased operators of equipment for specific time periods) he/she will obtain identical certification from proposed subcontractors/leased operators of equipment from the provisions of the Equal Opportunity clause, and that he/she will retain such certification in his/her files.



**CERTIFICATE OF NON-BARRED BIDDING**

The undersigned certifies that it is not barred from bidding on this contract as a result of a conviction for the violation of State laws prohibiting bid rigging or bid rotating. The undersigned also certifies that current or prospective employees, contractors, and subcontractors/leased operators of equipment are not listed as Excluded Individuals/Entities with the US Government, as maintained by the US General Services Administration.

By signing below, the firm agrees that all information provided in the previous pages is accurate, and that if the firm below does not currently have a Department of Human Rights number they will apply for one within thirty days with the State of Illinois.

\_\_\_\_\_  
Authorized Signature

\_\_\_\_\_  
Title

\_\_\_\_\_  
Firm

Our firm is a:

Minority Business Enterprise \_\_\_\_\_

Women Business Enterprise \_\_\_\_\_

Neither \_\_\_\_\_

City-Certified? Yes \_\_\_ No \_\_\_

City Certified? Yes \_\_\_ No \_\_\_

(Revised 12/21/09)

**Dump Trucks**  
**Bid Number 413-PW-054**

1.0 Purpose

It is the purpose of these specifications to describe six (6) tandem axle patrol trucks, four (4) single axle patrol trucks, and two (2) 14' x 12 yard dump trucks required by the City of Rockford. Vehicles shall meet all 2010 engine emissions requirements.

2.0 General Requirements

2.1 Evaluation of Bid: Each bid shall be evaluated to determine whether the proposed product or service complies with the specifications detailed in this document. If this evaluation determines that a bid does not comply with the specifications set forth in this invitation to bid, then that bid shall be eliminated from consideration.

2.2 Evaluation Team: A team composed of staff from the Finance and Public Works departments shall evaluate each bid.

2.3 Evaluation Criteria: The evaluation team will evaluate bids based on total bid price and the ability of the bidder to comply with specifications.

2.4 Basis of Award: The City will award this contract to the lowest responsive and responsible bidder that is able to meet the requirements and criteria set forth in this document. A "responsive" bidder is able to provide a product or service that conforms in all material respects to the specifications detailed in this document. A "responsible" bidder is a corporation, company, or person who has the ability in all respects to provide the product or service desired at the highest possible standards of quality. A responsible bidder has the integrity and reliability to fully perform all contract requirements and assure good faith performance.

2.5 Questions: All questions regarding these specifications should be directed to Carrie Eklund, Central Services Manager, at (815)-987-5565 or carrie.eklund@rockfordil.gov.

2.6 Delivery Date: The successful bidder must deliver all trucks complete with all equipment specified in this document. All trucks and equipment must arrive to the ordering agency in good working order by November 1, 2013. Exceptions from this delivery date must be listed in the bidder's response and may be grounds for eliminating a bidder as non-responsive. Should circumstances arise during manufacture of the vehicles which affect the delivery date, the vendor shall contact the Equipment Services Supervisor to request a change in the delivery date. Changes will be approved at the discretion of the City of Rockford.

2.7 Liquidated Damages: Failure to deliver the completed vehicles within the time frame outlined in the vendor's bid response will result in the assessment of liquidated damages. Damages will accrue in the amount of \$50 per business day beyond the delivery date. Damages will be deducted from payment issued by the City from the final invoice submitted for payment.

2.8 Manuals. A line setting sheet and manual(s) containing operating and servicing instructions for the equipment shall be provided with each unit. The manual(s) shall be as detailed as possible outlining all necessary operating and servicing instructions for the equipment, including its components. Necessary warnings and safety precautions shall be included. In addition, technical (shop) manual(s) containing illustrated parts lists and a complete set of technician repair manuals for the entire unit including wiring diagrams and hydraulic schematics supplied with the equipment shall be provided. This can be supplied in paper manuals or in electronic format (on CD in Microsoft Word or PDF format).

2.9 Vendor's Warranty. At a minimum, the successful bidder shall provide a one-year "bumper-to-bumper" warranty. Wherever referenced in this section and on this document's Bid Form, "one-year" and "additional year" mean "12 months or 10,000 miles, whichever comes first." The bidder may propose an additional warranty beyond the minimum, provided said additional warranty is included at no charge to the agency.

2.10 Exceptions. Please list all exceptions.

3.0 Minimum Requirements, Tandem Axle

Base Chassis, 6X4 with 183.00 Wheelbase, 108.00 CA, and 79.00 Axle to Frame.

TOW HOOK, FRONT (2) Frame Mounted

FRAME RAILS Heat Treated Alloy Steel (120,000 PSI Yield); 10.866" x 3.622" x 0.433"  
(276.0mm x 92.0mm x 11.1mm); 456.0" (11582mm) Maximum OAL

BUMPER, FRONT Steel, Swept Back

Includes: BUMPER, FRONT Powder Coated Gray (Argent) Color

FRAME EXTENSION, FRONT Integral; 20" In Front of Grille

WHEELBASE RANGE 177" (450cm) Through and Including 226" (575cm)

AXLE, FRONT NON-DRIVING {Meritor MFS-18-133A} Wide Track, I-Beam Type, 18,000-lb Capacity

SHOCK ABSORBERS, FRONT

SPRINGS, FRONT AUXILIARY Rubber

SUSPENSION, FRONT, SPRING Multileaf, Shackle Type; 18,000-lb Capacity; Less Shock Absorber

BRAKE SYSTEM, AIR Dual System for Straight Truck Applications

Includes : BRAKE LINES Color and Size Coded Nylon

DRAIN VALVE Twist-Type

DUST SHIELDS, FRONT BRAKE

DUST SHIELDS, REAR BRAKE

GAUGE, AIR PRESSURE (2) Air 1 and Air 2 Gauges; Located in Instrument Cluster

PARKING BRAKE CONTROL Yellow Knob, Located on Instrument Panel

PARKING BRAKE VALVE For Truck

QUICK RELEASE VALVE Bendix On Rear Axle for Spring Brake Release: 1 for 4x2, 2 for 6x4

SLACK ADJUSTERS, FRONT Automatic

SLACK ADJUSTERS, REAR Automatic

SPRING BRAKE MODULATOR VALVE R-7 for 4x2, SR-7 with relay valve for 6x4

BRAKES, FRONT, AIR CAM 16.5" x 6", Includes 24 SqIn Long Stroke Brake Chambers

DRAIN VALVE {Berg} Manual; With Pull Chain, for Air Tank

AIR BRAKE ABS {Bendix AntiLock Brake System} Full Vehicle Wheel Control System (4-Channel)

AIR DRYER {Bendix AD-IP} With Heater

Includes: AIR DRYER LOCATION Inside Left Rail, Back of Cab

BRAKE CHAMBERS, FRONT AXLE {Haldex} 24 SqIn

BRAKE CHAMBERS, REAR AXLE {Haldex GC3030LHDHO} 30/30 Spring Brake

SLACK ADJUSTERS, FRONT {Haldex} Automatic

SLACK ADJUSTERS, REAR {Haldex} Automatic

BRAKES, REAR, AIR CAM S-Cam; 16.5" x 7.0"; Includes 30/30 Sq.In. Long Stroke Brake Chamber  
and Spring Actuated Parking Brake

AIR COMPRESSOR {Bendix Tu-Flo 550} 13.2 CFM Capacity

STEERING COLUMN Tilting

STEERING WHEEL 2-Spoke, 18" Diam., Black

STEERING GEAR (2) {Sheppard M-100/M-80} Dual Power

DRIVESHAFT SYSTEM {Dana Spicer} SPL170XL with SPL170XL Inneraxle Shaft in lieu of  
1710 Driveshaft with 1710 Inneraxle Shaft

EXHAUST SYSTEM Single, Horizontal, Aftertreatment Device Frame Mounted Outside Right Rail  
Under Cab; Includes Vertical Tail Pipe and Guard

Includes: EXHAUST HEIGHT 10' Exhaust Height - Based on Empty Chassis with Standard Components (+  
or - 1" Height)

MUFFLER/TAIL PIPE GUARD Non-Bright Finish

TAIL PIPE (1) Turnback Type, Non-Bright, for Single Exhaust

ELECTRICAL SYSTEM 12-Volt, Standard Equipment

Includes :

BATTERY BOX Steel with Plastic Lid  
DATA LINK CONNECTOR For Vehicle Programming and Diagnostics In Cab  
FUSES, ELECTRICAL SAE Blade-Type  
HAZARD SWITCH Push On/Push Off, Located on Top of Steering Column Cover  
HEADLIGHT DIMMER SWITCH Integral with Turn Signal Lever  
HEADLIGHTS (2) Sealed Beam, Round, with Chrome Plated Bezels  
HORN, ELECTRIC Single  
JUMP START STUD Located on Positive Terminal of Outermost Battery  
PARKING LIGHT Integral with Front Turn Signal and Rear Tail Light  
RUNNING LIGHT (2) Daytime, Included With Headlights  
STARTER SWITCH Electric, Key Operated  
STOP, TURN, TAIL & B/U LIGHTS Dual, Rear, Combination with Reflector  
TURN SIGNAL SWITCH Self-Cancelling for Trucks, Manual Cancelling for Tractors, with Lane Change Feature  
TURN SIGNALS, FRONT Includes Reflectors and Auxiliary Side Turn Signals, Solid State Flashers; Flush Mounted  
WINDSHIELD WIPER SWITCH 2-Speed with Wash and Intermittent Feature (5 Pre-Set Delays), Integral with Turn Signal Lever  
WINDSHIELD WIPERS Single Motor, Electric, Cowl Mounted  
WIRING, CHASSIS Color Coded and Continuously Numbered  
CIGAR LIGHTER Includes Ash Cup  
POWER SOURCE Cigar Type Receptacle without Plug and Cord  
ALTERNATOR {Bosch LH160} Brush Type, 12 Volt 160 Amp. Capacity, Pad Mount  
BODY BUILDER WIRING Back of Standard Cab at Left Frame or Under Extended or Crew Cab at Left Frame;  
Includes Sealed Connectors for Tail/Amber Turn/Marker/Backup/Accessory Power/Ground and Sealed Connector for Stop/Turn  
BATTERY SYSTEM {International} Maintenance-Free, (2) 12-Volt 1850CCA Total  
2-WAY RADIO Wiring Effects; Wiring With 20 Amp Fuse Protection, Includes Ignition Wire with 5 Amp Fuse, Wire Ends Heat Shrink and Routed to Center of Header Console in Cab  
RADIO {International} AM/FM Stereo with Weatherband, Clock, Auxiliary Input, Includes Multiple Speakers  
BACK-UP ALARM Electric, 102 dBA  
AUXILIARY HARNESS 5.0' for Auxiliary Front Head Lights and Turn Signals for Front Plow Applications  
STOP, TURN, TAIL & B/U LIGHTS {Truck Lite} Super 44, with LED Bulbs for Stop, Turn & Tail Lights and Truck Lite Super 40 for Backup lights, With Power Module, "International" Termination and Less Junction Box  
SWITCH BODY CIRCUITS, MID for Bodybuilder, 6 Momentary Switches in instrument panel; one power Module with 6 channels, 20 Amp Max. per channel, 80 amp Max Output, Switches Control Power Module through Multiplex Wiring, Mounted in Cab Behind Driver Seat  
JUMP START STUD Remote Mounted  
HORN, AIR Black, Single Trumpet, Air Solenoid Operated  
HEADLIGHTS Long Life Halogen; for Two Light System  
CLEARANCE/MARKER LIGHTS (5) {Truck Lite} Amber LED Lights, Flush Mounted on Cab or Sunshade  
ENGINE SHUTDOWN Automatic; With 30 Second Delay  
HEADLIGHTS ON W/WIPERS Headlights Will Automatically Turn on if Windshield Wipers are turned on  
STARTING MOTOR {Delco Remy 39MT} 12 Volt; Gear Reduced, With Thermal Over-Crank Protection  
INDICATOR, LOW COOLANT LEVEL With Audible Alarm  
CIRCUIT BREAKERS Manual-Reset (Main Panel) SAE Type III With Trip Indicators, Replaces All Fuses Except For 5-Amp Fuses  
HOOD, HATCH (01) for Servicing  
GRILLE Stationary, Chrome  
FRONT END Tilting, Fiberglass, With Three Piece Construction; for 2007 & 2010 Emissions

PAINT SCHEMATIC, PT-1 Single Color, Design 100  
 PAINT TYPE Base Coat/Clear Coat, 1-2 Tone  
 KEYS - ALL ALIKE Fleet - Includes Ignition and Cab Door Keys  
 KEYS - ALL ALIKE, ID Z-250  
 CLUTCH Omit Item (Clutch & Control)  
 BLOCK HEATER, ENGINE {Phillips} 120 Volt/1250 Watt  
 ENGINE, DIESEL {MaxxForce 10} EPA 10, 310 HP @ 2000 RPM, 1050 lb-ft Torque @ 1200 RPM, 2200 RPM  
 Governed Speed or Equivalent  
Includes : AIR COMPRESSOR AIR SUPPLY LINE Naturally-Aspirated (Air Brake Chassis Only)  
 ANTI-FREEZE Red Shell Rotella Extended Life Coolant; -40 Degrees F/ -40 Degrees C; for MaxxForce  
 Engines  
 COLD STARTING EQUIPMENT Intake Manifold Electric Grid Heater with Engine ECM Control  
 CRUISE CONTROL Electronic; Controls Integral to Steering Wheel  
 ENGINE OIL DRAIN PLUG Magnetic  
 ENGINE SHUTDOWN Electric, Key Operated  
 FUEL FILTER Included with Fuel/Water Separator  
 FUEL/WATER SEPARATOR Fuel/Water Separator and Fuel Filter in a Single Assembly; With Water-in-Fuel  
 Sensor; Engine Mounted : GOVERNOR Electronic  
 OIL FILTER, ENGINE Spin-On Type  
 WET TYPE CYLINDER SLEEVES  
 FAN DRIVE {Horton Drivemaster} Direct Drive Type, Two Speed With Residual Torque Device for Disengaged Fan  
 Speed  
 RADIATOR Aluminum, Cross Flow, Series System; 1228 SqIn Core and 648 SqIn Charge Air Cooler and 342 SqIn  
 Low Temperature Radiator  
 FEDERAL EMISSIONS for 2010; MaxxForce DT Engines or Equivalent  
 AIR CLEANER Single Element, with Integral Snow Valve and In-Cab Control  
 THROTTLE, HAND CONTROL Engine Speed Control; Electronic, Stationary, Variable Speed; Mounted on  
 Steering Wheel  
 ENGINE CONTROL, REMOTE MOUNTED Provision for; Includes Wiring for Body Builder Installation of PTO  
 Controls; With Ignition Switch Control for Electronic Engines  
 EMISSION COMPLIANCE Federal, Does Not Comply With California Clean Air Idle Regulations  
 TRANSMISSION, AUTOMATIC {Allison 3000\_RDS\_P} 4th Generation Controls; Close Ratio, 6-Speed, With double  
 Overdrive; On/Off Hwy; includes Oil Level Sensor, With PTO Provision, Less Retarder, With 80,000-lb  
 GVW & GCW Max.  
 OIL COOLER, AUTO TRANSMISSION {Modine} Water to Oil, for Allison or CEEMAT Transmission  
 TRANSMISSION DIPSTICK TUBE Located on the right side  
 TRANSMISSION SHIFT CONTROL {Allison} Push-Button Type; for Allison 3000 & 4000 Series Transmission  
 TRANSMISSION OIL Synthetic; 29 thru 42 Pints  
 ALLISON SPARE INPUT/OUTPUT for Rugged Duty Series (RDS); General Purpose Trucks, Construction  
 TRANSMISSION TCM LOCATION Located Inside Cab  
 PTO control dash mounted for customer provided PTO; includes switch, electrical/air solenoid, piping' and  
 wiring  
 AXLE, REAR, TANDEM {Meritor RT-46-160} Single Reduction, 46,000-lb Capacity, With Driver Controlled Main  
 Locking Differential in Forward Rear and Rear-Rear Axle and 200 Wheel Ends . Gear Ratio: 7.17  
 SUSPENSION, REAR, TANDEM {Hendrickson HMX-460-54} Walking Beam Type 54" Axle Spacing; 46,000lb  
 Capacity, With Rubber End Bushings, Transverse Torque Rods, Less Shock Absorbers  
 SUSPENSION/REAR-AXLE IDENTITY for Meritor Tandem Rear Axles With Bar-Pin Beam Attachment Type  
 Suspensions  
 AXLE, REAR, LUBE {EmGard 75W-90} Synthetic Oil; 65 thru 89.99 Pints  
 FUEL/WATER SEPARATOR With Thermostatic Fuel Temperature Controlled Electric Heater, and Filter  
 Restriction/Change Indicator, Includes Standard Equipment Water-in-Fuel Sensor

FUEL TANK Top Draw; D Style, Non Polished Aluminum, 19" Deep, 70 U.S. Gal., 265 L Capacity, With Quick Connect Outlet, Mounted Left Side, Under Cab

CAB Conventional

Includes :

ARM REST (2) Molded Plastic; One Each Door

CLEARANCE/MARKER LIGHTS (5) Flush Mounted

COAT HOOK, CAB Located on Rear Wall, Centered Above Rear Window

CUP HOLDERS Two Cup Holders, Located in Lower Center of Instrument Panel

DOME LIGHT, CAB Rectangular, Door Activated and Push On-Off at Light Lens, Timed Theater Dimming, Integral to Console, Center Mounted

GLASS, ALL WINDOWS Tinted

GRAB HANDLE, CAB INTERIOR (1) "A" Pillar Mounted, Passenger Side : GRAB HANDLE, CAB INTERIOR (2) Front of "B" Pillar Mounted, One Each Side

INTERIOR SHEET METAL Upper Door (Above Window Ledge) Painted Exterior Color

STEP (4) Two Steps Per Door

GAUGE CLUSTER English With English Electronic Speedometer

Includes :

GAUGE CLUSTER (6) Engine Oil Pressure (Electronic), Water Temperature (Electronic), Fuel (Electronic), Tachometer (Electronic), Voltmeter, Washer Fluid Level

ODOMETER DISPLAY, Miles, Trip Miles, Engine Hours, Trip Hours, Fault Code Readout

WARNING SYSTEM Low Fuel, Low Oil Pressure, High Engine Coolant Temp, and Low Battery Voltage (Visual and Audible)

GAUGE, OIL TEMP, ALLISON TRAN

GAUGE, AIR CLEANER RESTRICTION {Filter-Minder} With Black Bezel Mounted in Instrument Panel

SEAT, DRIVER {National 2000} Air Suspension, High Back With Integral Headrest, Cloth, Isolator, 1 Chamber Lumbar, 2 Position Front Cushion Adjust, -3 to +14 Degree Back Angle Adjust

SEAT, PASSENGER {Gra-Mag} Non Suspension, High Back, Fixed Back, Integral Headrest, Cloth

MIRRORS (2) {Lang Mekra} Rectangular, 7.44" x 14.84" & 7.44" sq. Convex Both Sides, 102" Inside Spacing, Breakaway Type, Black Heads, Brackets & Arms

GRAB HANDLE Chrome; Towel Bar Type With Anti-Slip Rubber Inserts; for Cab Entry Mounted Left Side Only at "B" Pillar

INSTRUMENT PANEL Center Section, Ergonomic Panel

HEATER {International Blend-Air} With Defroster

HVAC FRESH AIR FILTER

STORAGE POCKET, DOOR Molded Plastic, Full Width; Mounted on Passenger Door

CAB INTERIOR TRIM Deluxe

Includes :

"A" PILLAR COVER Molded Plastic

CAB INTERIOR TRIM PANELS Cloth Covered Molded Plastic, Full Height; All Exposed Interior Sheet Metal is Covered Except for the Following: with a Two-Man Passenger Seat or with a Full Bench Seat the Back Panel is Completely Void of Covering

CONSOLE, OVERHEAD Molded Plastic; With Dual Storage Pockets with Retainer Nets and CB Radio Pocket

DOOR TRIM PANELS Molded Plastic; Driver and Passenger Doors

FLOOR COVERING Rubber, Black

HEADLINER Soft Padded Cloth

INSTRUMENT PANEL TRIM Molded Plastic with Black Center Section

STORAGE POCKET, DOOR (1) Molded Plastic, Full-Length; Driver Door

SUN VISOR (2) Padded Vinyl with Driver Side Toll Ticket Strap, Integral to Console

CAB REAR SUSPENSION Air Bag Type

WHEELS, FRONT DISC; 22.5" Painted Steel, 5 Hand Hole, 10-Stud (285.75MM BC) Hub Piloted, Flanged Nut,

Metric Mount, 9.00 DC Rims; With Steel Hubs.  
WHEELS, REAR DUAL DISC; 22.5" Painted Steel, 2 Hand Hole, 10-Stud (285.75MM BC) Hub Piloted, Flanged Nut,  
Metric Mount, 8.25 DC Rims; With Steel Hubs  
PAINT IDENTITY, FRONT WHEELS {Accuride} Disc Front Wheels; With Vendor Applied (PKWHT21) White Powder  
Coat Paint  
PAINT IDENTITY, REAR WHEELS {Accuride} Disc Rear Wheels; With Vendor Applied (PKWHT21) White Powder  
Coat Paint  
WHEEL GUARDS, REAR {Accuride} for Metric Hub Piloted Wheels with Flanged Mounting Nuts, Mounted  
Between Hub & Wheel and Between Dual Wheels  
WHEEL BEARING, FRONT, LUBE {EmGard 50W} Synthetic Oil  
(8) TIRE, REAR 11R22.5 HDR1 (CONTINENTAL) 495 rev/mile, load range H, 16 ply  
(2) TIRE, FRONT 315/80R22.5 HSU2 (CONTINENTAL) 481 rev/mile, load range L, 20 ply Steel  
surcharge

4.0 Minimum Requirements, Single Axle  
Base Chassis, 4X2 with 160.00 Wheelbase, 85.00 CA, and 79.00 Axle to Frame.  
TOW HOOK, FRONT (2) Frame Mounted  
FRAME RAILS Heat Treated Alloy Steel (120,000 PSI Yield); 10.866" x 3.622" x 0.433"  
(276.0mm x 92.0mm x 11.1mm); 456.0" (11582mm) Maximum OAL  
BUMPER, FRONT Steel, Swept Back  
Includes: BUMPER, FRONT Powder Coated Gray (Argent) Color  
FRAME EXTENSION, FRONT Integral; 20" In Front of Grille  
WHEELBASE RANGE 146" (370cm) Through and Including 195" (495cm)  
AXLE, FRONT NON-DRIVING {Meritor MFS-18-133A} Wide Track, I-Beam Type, 18,000-lb Capacity  
SHOCK ABSORBERS, FRONT  
SPRINGS, FRONT AUXILIARY Rubber  
SUSPENSION, FRONT, SPRING Multileaf, Shackle Type; 18,000-lb Capacity; Less Shock Absorber  
BRAKE SYSTEM, AIR Dual System for Straight Truck Applications  
Includes : BRAKE LINES Color and Size Coded Nylon  
DRAIN VALVE Twist-Type  
DUST SHIELDS, FRONT BRAKE  
DUST SHIELDS, REAR BRAKE  
GAUGE, AIR PRESSURE (2) Air 1 and Air 2 Gauges; Located in Instrument Cluster  
PARKING BRAKE CONTROL Yellow Knob, Located on Instrument Panel  
PARKING BRAKE VALVE For Truck  
QUICK RELEASE VALVE Bendix On Rear Axle for Spring Brake Release: 1 for 4x2, 2 for 6x4  
SLACK ADJUSTERS, FRONT Automatic  
SLACK ADJUSTERS, REAR Automatic  
SPRING BRAKE MODULATOR VALVE R-7 for 4x2, SR-7 with relay valve for 6x4  
BRAKES, FRONT, AIR CAM 16.5" x 6", Includes 24 SqIn Long Stroke Brake Chambers  
DRAIN VALVE {Berg} Manual; With Pull Chain, for Air Tank  
AIR BRAKE ABS {Bendix AntiLock Brake System} Full Vehicle Wheel Control System (4-Channel)  
AIR DRYER {Bendix AD-IP} With Heater  
Includes: AIR DRYER LOCATION Inside Left Rail, Back of Cab  
BRAKE CHAMBERS, FRONT AXLE {Haldex} 24 SqIn  
BRAKE CHAMBERS, REAR AXLE {Haldex GC3030LHDHO} 30/30 Spring Brake  
SLACK ADJUSTERS, FRONT {Haldex} Automatic  
SLACK ADJUSTERS, REAR {Haldex} Automatic  
BRAKES, REAR, AIR CAM S-Cam; 16.5" x 7.0"; Includes 30/30 Sq.In. Long Stroke Brake Chamber  
and Spring Actuated Parking Brake  
AIR COMPRESSOR {Bendix Tu-Flo 550} 13.2 CFM Capacity

STEERING COLUMN Tilting  
 STEERING WHEEL 2-Spoke, 18" Diam., Black  
 STEERING GEAR (2) {Sheppard M-100/M-80} Dual Power  
 DRIVESHAFT SYSTEM {Dana Spicer} SPL170XL with SPL170XL Inneraxle Shaft in lieu of  
 1710 Driveshaft with 1710 Inneraxle Shaft  
 EXHAUST SYSTEM Single, Horizontal, Aftertreatment Device Frame Mounted Outside Right Rail  
 Under Cab; Includes Vertical Tail Pipe and Guard  
Includes: EXHAUST HEIGHT 10' Exhaust Height - Based on Empty Chassis with Standard Components (+  
 or - 1" Height)  
 MUFFLER/TAIL PIPE GUARD Non-Bright Finish  
 TAIL PIPE (1) Turnback Type, Non-Bright, for Single Exhaust  
 ELECTRICAL SYSTEM 12-Volt, Standard Equipment  
Includes :  
 BATTERY BOX Steel with Plastic Lid  
 DATA LINK CONNECTOR For Vehicle Programming and Diagnostics In Cab  
 FUSES, ELECTRICAL SAE Blade-Type  
 HAZARD SWITCH Push On/Push Off, Located on Top of Steering Column Cover  
 HEADLIGHT DIMMER SWITCH Integral with Turn Signal Lever  
 HEADLIGHTS (2) Sealed Beam, Round, with Chrome Plated Bezels  
 HORN, ELECTRIC Single  
 JUMP START STUD Located on Positive Terminal of Outermost Battery  
 PARKING LIGHT Integral with Front Turn Signal and Rear Tail Light  
 RUNNING LIGHT (2) Daytime, Included With Headlights  
 STARTER SWITCH Electric, Key Operated  
 STOP, TURN, TAIL & B/U LIGHTS Dual, Rear, Combination with Reflector  
 TURN SIGNAL SWITCH Self-Cancelling for Trucks, Manual Cancelling for Tractors, with Lane Change  
 Feature  
 TURN SIGNALS, FRONT Includes Reflectors and Auxiliary Side Turn Signals, Solid State Flashers; Flush  
 Mounted  
 WINDSHIELD WIPER SWITCH 2-Speed with Wash and Intermittent Feature (5 Pre-Set Delays), Integral  
 with Turn Signal Lever  
 WINDSHIELD WIPERS Single Motor, Electric, Cowl Mounted  
 WIRING, CHASSIS Color Coded and Continuously Numbered  
 CIGAR LIGHTER Includes Ash Cup  
 POWER SOURCE Cigar Type Receptacle without Plug and Cord  
 ALTERNATOR {Bosch LH160} Brush Type, 12 Volt 160 Amp. Capacity, Pad Mount  
 BODY BUILDER WIRING Back of Standard Cab at Left Frame or Under Extended or Crew Cab at Left  
 Frame; Includes Sealed Connectors for Tail/Amber Turn/Marker/Backup/Accessory Power/Ground and  
 Sealed Connector for Stop/Turn  
 BATTERY SYSTEM {International} Maintenance-Free, (2) 12-Volt 1850CCA Total  
 2-WAY RADIO Wiring Effects; Wiring With 20 Amp Fuse Protection, Includes Ignition Wire With 5 Amp Fuse,  
 Wire Ends Heat Shrink and Routed to Center of Header Console in Cab  
 RADIO {International} AM/FM Stereo With Weatherband, Clock, Auxiliary Input, Includes Multiple Speakers  
 BACK-UP ALARM Electric, 102 dBA  
 AUXILIARY HARNESS 5.0' for Auxiliary Front Head Lights and Turn Signals for Front Plow Applications  
 SWITCH, BODY CIRCUITS, MID for bodybuilder, 6 momentary switches in instrument panel; one power module  
 with 6 channels, 20 amp max. per channel, 80 amp max output, switches control power through  
 multiplex wiring mounted in the cab behind driver seat  
 STOP, TURN, TAIL & B/U LIGHTS {Truck Lite} Super 44, With LED Bulbs for Stop, Turn & Tail Lights and Truck Lite  
 Super 40 for Backup lights, With Power Module, "International" Termination and Less Junction Box  
 JUMP START STUD Remote Mounted

HORN, AIR Black, Single Trumpet, Air Solenoid Operated  
HEADLIGHTS Long Life Halogen; for Two Light System  
CLEARANCE/MARKER LIGHTS (5) {Truck Lite} Amber LED Lights, Flush Mounted on Cab or Sunshade  
ENGINE SHUTDOWN Automatic; With 30 Second Delay  
HEADLIGHTS ON W/WIPERS Headlights Will Automatically Turn on if Windshield Wipers are turned on  
STARTING MOTOR {Delco Remy 39MT} 12 Volt; Gear Reduced, With Thermal Over-Crank Protection  
INDICATOR, LOW COOLANT LEVEL With Audible Alarm  
CIRCUIT BREAKERS Manual-Reset (Main Panel) SAE Type III With Trip Indicators, Replaces All Fuses Except For 5-Amp Fuses  
HOOD, HATCH (01) for Servicing  
GRILLE Stationary, Chrome  
FRONT END Tilting, Fiberglass, With Three Piece Construction; for 2007 & 2010 Emissions  
PAINT SCHEMATIC, PT-1 Single Color, Design 100  
PAINT TYPE Base Coat/Clear Coat, 1-2 Tone  
KEYS - ALL ALIKE Fleet - Includes Ignition and Cab Door Keys  
KEYS - ALL ALIKE, ID Z-250

CLUTCH Omit Item (Clutch & Control)  
BLOCK HEATER, ENGINE {Phillips} 120 Volt/1250 Watt  
ENGINE, DIESEL {MaxxForce 10} EPA 10, 310 HP @ 2000 RPM, 1050 lb-ft Torque @ 1200 RPM, 2200 RPM Governed Speed or Equivalent  
Includes : AIR COMPRESSOR AIR SUPPLY LINE Naturally-Aspirated (Air Brake Chassis Only)  
ANTI-FREEZE Red Shell Rotella Extended Life Coolant; -40 Degrees F/ -40 Degrees C; for MaxxForce Engines  
COLD STARTING EQUIPMENT Intake Manifold Electric Grid Heater with Engine ECM Control  
CRUISE CONTROL Electronic; Controls Integral to Steering Wheel  
ENGINE OIL DRAIN PLUG Magnetic  
ENGINE SHUTDOWN Electric, Key Operated  
FUEL FILTER Included with Fuel/Water Separator  
FUEL/WATER SEPARATOR Fuel/Water Separator and Fuel Filter in a Single Assembly; With Water-in-Fuel Sensor; Engine Mounted : GOVERNOR Electronic  
OIL FILTER, ENGINE Spin-On Type  
WET TYPE CYLINDER SLEEVES

FAN DRIVE {Horton Drivemaster} Direct Drive Type, Two Speed With Residual Torque Device for Disengaged Fan Speed  
RADIATOR Aluminum, Cross Flow, Series System; 1228 SqIn Core and 648 SqIn Charge Air Cooler and 342 SqIn Low Temperature Radiator  
FEDERAL EMISSIONS for 2010; MaxxForce DT Engines or Equivalent  
AIR CLEANER Single Element, with Integral Snow Valve and In-Cab Control  
THROTTLE, HAND CONTROL Engine Speed Control; Electronic, Stationary, Variable Speed; Mounted on Steering Wheel  
ENGINE CONTROL, REMOTE MOUNTED Provision for; Includes Wiring for Body Builder Installation of PTO Controls; With Ignition Switch Control for Electronic Engines  
EMISSION COMPLIANCE Federal, Does Not Comply With California Clean Air Idle Regulations  
TRANSMISSION, AUTOMATIC {Allison 3000\_RDS\_P} 4th Generation Controls; Close Ratio, 6-Speed, With double Overdrive; On/Off Hwy; Includes Oil Level Sensor, With PTO Provision, Less Retarder, With 80,000-lb GVW & GCW Max.  
OIL COOLER, AUTO TRANSMISSION {Modine} Water to Oil, for Allison or CEEMAT Transmission  
TRANSMISSION SHIFT CONTROL {Allison} Push-Button Type; for Allison 3000 & 4000 Series Transmission  
TRANSMISSION DIPSTICK TUBE Located on the right side.  
TRANSMISSION OIL Synthetic; 29 thru 42 Pints

ALLISON SPARE INPUT/OUTPUT for Rugged Duty Series (RDS); General Purpose Trucks, Construction

TRANSMISSION TCM LOCATION Located Inside Cab

PTO CONTROL, dash mounted for customer provided pto; includes switch, electrical/air solenoid, piping and wiring

AXLE, REAR, SINGLE{Meritor RS-23-160} Single Reduction, 23,000-lb Capacity, 200 Wheel Ends ,Driver Controlled Locking Differential Gear Ratio: 7.17

SUSPENSION, RR, SPRING , Single Vari-Rate;31,000lb Capacity, Includes 4500-lb Capacity Multileaf Auxiliary

AXLE, REAR, LUBE {EmGard 75W-90} Synthetic Oil; 65 thru 89.99 Pints

FUEL/WATER SEPARATOR With Thermostatic Fuel Temperature Controlled Electric Heater, and Filter Restriction/Change Indicator, Includes Standard Equipment Water-in-Fuel Sensor

FUEL TANK Top Draw; D Style, Non Polished Aluminum, 19" Deep, 70 U.S. Gal., 265 L Capacity, With Quick Connect Outlet, Mounted Left Side, Under Cab

CAB Conventional

Includes : ARM REST (2) Molded Plastic; One Each Door

CLEARANCE/MARKER LIGHTS (5) Flush Mounted

COAT HOOK, CAB Located on Rear Wall, Centered Above Rear Window

CUP HOLDERS Two Cup Holders, Located in Lower Center of Instrument Panel

DOME LIGHT, CAB Rectangular, Door Activated and Push On-Off at Light Lens, Timed Theater Dimming, Integral to Console, Center Mounted

GLASS, ALL WINDOWS Tinted

GRAB HANDLE, CAB INTERIOR (1) "A" Pillar Mounted, Passenger Side : GRAB HANDLE, CAB INTERIOR (2) Front of "B" Pillar Mounted, One Each Side

INTERIOR SHEET METAL Upper Door (Above Window Ledge) Painted Exterior Color

STEP (4) Two Steps Per Door

GAUGE CLUSTER English With English Electronic Speedometer

Includes : GAUGE CLUSTER (6) Engine Oil Pressure (Electronic), Water Temperature (Electronic), Fuel (Electronic), Tachometer (Electronic), Voltmeter, Washer Fluid Level

ODOMETER DISPLAY, Miles, Trip Miles, Engine Hours, Trip Hours, Fault Code Readout

WARNING SYSTEM Low Fuel, Low Oil Pressure, High Engine Coolant Temp, and Low Battery Voltage (Visual and Audible)

GAUGE, OIL TEMP, ALLISON TRAN

GAUGE, AIR CLEANER RESTRICTION {Filter-Minder} With Black Bezel Mounted in Instrument Panel

SEAT, DRIVER {National 2000} Air Suspension, High Back With Integral Headrest, Cloth, Isolator, 1 Chamber Lumbar, 2 Position Front Cushion Adjust, -3 to +14 Degree Back Angle Adjust

SEAT, PASSENGER {Gra-Mag} Non Suspension, High Back, Fixed Back, Integral Headrest, Cloth

MIRRORS (2) {Lang Mekra} Rectangular, 7.44" x 14.84" & 7.44" sq. Convex Both Sides, 102" Inside Spacing, Breakaway Type, Black Heads, Brackets & Arms

GRAB HANDLE Chrome; Towel Bar Type With Anti-Slip Rubber Inserts; for Cab Entry Mounted Left Side Only at "B" Pillar

INSTRUMENT PANEL Center Section, Ergonomic Panel

HEATER {International Blend-Air} With Defroster

HVAC FRESH AIR FILTER

STORAGE POCKET, DOOR Molded Plastic, Full Width; Mounted on Passenger Door

CAB INTERIOR TRIM Deluxe

Includes : "A" PILLAR COVER Molded Plastic

CAB INTERIOR TRIM PANELS Cloth Covered Molded Plastic, Full Height; All Exposed Interior Sheet Metal is Covered Except for the Following: with a Two-Man Passenger Seat or with a Full Bench Seat the Back Panel is Completely Void of Covering

CONSOLE, OVERHEAD Molded Plastic; With Dual Storage Pockets with Retainer Nets and CB Radio Pocket

DOOR TRIM PANELS Molded Plastic; Driver and Passenger Doors

FLOOR COVERING Rubber, Black  
 HEADLINER Soft Padded Cloth  
 INSTRUMENT PANEL TRIM Molded Plastic with Black Center Section  
 STORAGE POCKET, DOOR (1) Molded Plastic, Full-Length; Driver Door  
 SUN VISOR (2) Padded Vinyl with Driver Side Toll Ticket Strap, Integral to Console  
 CAB REAR SUSPENSION Air Bag Type  
 WHEELS, FRONT DISC; 22.5" Painted Steel, 5 Hand Hole, 10-Stud (285.75MM BC) Hub Piloted, Flanged Nut, Metric Mount, 9.00 DC Rims; With Steel Hubs.  
 WHEELS, REAR DUAL DISC; 22.5" Painted Steel, 2 Hand Hole, 10-Stud (285.75MM BC) Hub Piloted, Flanged Nut, Metric Mount, 8.25 DC Rims; With Steel Hubs  
 PAINT IDENTITY, FRONT WHEELS {Accuride} Disc Front Wheels; With Vendor Applied (PKWHT21) White Powder Coat Paint  
 PAINT IDENTITY, REAR WHEELS {Accuride} Disc Rear Wheels; With Vendor Applied (PKWHT21) White Powder Coat Paint  
 WHEEL GUARDS, REAR {Accuride} for Metric Hub Piloted Wheels with Flanged Mounting Nuts, Mounted Between Hub & Wheel and Between Dual Wheels  
 WHEEL BEARING, FRONT, LUBE {EmGard 50W} Synthetic Oil  
 (8) TIRE, REAR 11R22.5 HDR1 (CONTINENTAL) 495 rev/mile, load range H, 16 ply  
 (2) TIRE, FRONT 315/80R22.5 HSU2 (CONTINENTAL) 481 rev/mile, load range L, 20 ply Steel

5.0 Minimum Requirements, 14' x 12 yard dump trucks  
 Base Chassis, Model 7400 SFA 6X4 with 183.00 Wheelbase, 108.00 CA, and 79.00 Axle to Frame.  
 TOW HOOK, FRONT (2) Frame Mounted  
 FRAME RAILS Heat Treated Alloy Steel (120,000 PSI Yield); 10.866" x 3.622" x 0.433" (276.0mm x 92.0mm x 11.1mm); 456.0" (11582mm) Maximum OAL  
 BUMPER, FRONT Steel, Swept Back  
Includes: BUMPER, FRONT Powder Coated Gray (Argent) Color  
 WHEELBASE RANGE 177" (450cm) Through and Including 226" (575cm)  
 FRAME ADDITION, FRONT 1" Integral; Increases BBC, BA and OAL Vehicle Dimensions By 1"  
 AXLE, FRONT NON-DRIVING {Meritor MFS-18-133A} Wide Track, I-Beam Type, 18,000-lb Capacity  
 SHOCK ABSORBERS, FRONT  
 SPRINGS, FRONT AUXILIARY Rubber  
 SUSPENSION, FRONT, SPRING Multileaf, Shackle Type; 18,000-lb Capacity; Less Shock Absorbers  
 BRAKE SYSTEM, AIR Dual System for Straight Truck Applications  
Includes:  
 BRAKE LINES Color and Size Coded Nylon  
 DRAIN VALVE Twist-Type  
 DUST SHIELDS, FRONT BRAKE  
 DUST SHIELDS, REAR BRAKE  
 GAUGE, AIR PRESSURE (2) Air 1 and Air 2 Gauges; Located in Instrument Cluster  
 PARKING BRAKE CONTROL Yellow Knob, Located on Instrument Panel  
 PARKING BRAKE VALVE For Truck  
 QUICK RELEASE VALVE Bendix On Rear Axle for Spring Brake Release: 1 for 4x2, 2 for 6x4  
 SLACK ADJUSTERS, FRONT Automatic  
 SLACK ADJUSTERS, REAR Automatic  
 SPRING BRAKE MODULATOR VALVE R-7 for 4x2, SR-7 with relay valve for 6x4  
 BRAKES, FRONT, AIR CAM 16.5" x 6", Includes 24 SqIn Long Stroke Brake Chambers  
 TRAILER CONNECTIONS four wheel, with hand control valve and tractor protection valve for straight truck  
 DRAIN VALVE {Berg} Manual; With Pull Chain, for Air Tank  
 AIR BRAKE ABS {Bendix AntiLock Brake System} Full Vehicle Wheel Control System (4-Channel)  
 AIR DRYER {Bendix AD-IP} With Heater

Includes: AIR DRYER LOCATION Inside Left Rail, Back of Cab  
BRAKE CHAMBERS, FRONT AXLE {Haldex} 24 SqIn  
BRAKE CHAMBERS, REAR AXLE {Haldex GC3030LHDHO} 30/30 Spring Brake  
SLACK ADJUSTERS, FRONT {Haldex} Automatic  
SLACK ADJUSTERS, REAR {Haldex} Automatic  
BRAKES, REAR, AIR CAM S-Cam; 16.5" x 7.0"; Includes 30/30 Sq.In. Long Stroke Brake Chamber and Spring Actuated Parking Brake  
AIR COMPRESSOR {Bendix Tu-Flo 550} 13.2 CFM Capacity  
STEERING COLUMN Tilting  
STEERING WHEEL 2-Spoke, 18" Diam., Black  
STEERING GEAR (2) {Sheppard M-100/M-80} Dual Power  
EXHAUST SYSTEM Single, Horizontal, Aftertreatment Device Frame Mounted Outside Right Rail Under Cab; Includes Vertical Tail Pipe and Guard

Includes:  
EXHAUST HEIGHT 10' Exhaust Height - Based on Empty Chassis with Standard Components (+ or - 1"Height)  
: MUFFLER/TAIL PIPE GUARD Non-Bright Finish  
TAIL PIPE (1) Turnback Type, Non-Bright, for Single Exhaust  
ELECTRICAL SYSTEM 12-Volt, Standard Equipment

Includes:  
BATTERY BOX Steel with Plastic Lid  
DATA LINK CONNECTOR For Vehicle Programming and Diagnostics In Cab  
FUSES, ELECTRICAL SAE Blade-Type  
HAZARD SWITCH Push On/Push Off, Located on Top of Steering Column Cover  
HEADLIGHT DIMMER SWITCH Integral with Turn Signal Lever  
HEADLIGHTS (2) Sealed Beam, Round, with Chrome Plated Bezels  
HORN, ELECTRIC Single  
JUMP START STUD Located on Positive Terminal of Outermost Battery  
PARKING LIGHT Integral with Front Turn Signal and Rear Tail Light  
RUNNING LIGHT (2) Daytime, Included With Headlights  
STARTER SWITCH Electric, Key Operated  
STOP, TURN, TAIL & B/U LIGHTS Dual, Rear, Combination with Reflector  
TURN SIGNAL SWITCH Self-Cancelling for Trucks, Manual Cancelling for Tractors, with Lane Change Feature  
TURN SIGNALS, FRONT Includes Reflectors and Auxiliary Side Turn Signals, Solid State Flashers; Flush Mounted  
WINDSHIELD WIPER SWITCH 2-Speed with Wash and Intermittent Feature (5 Pre-Set Delays), Integral with Turn Signal Lever  
WINDSHIELD WIPERS Single Motor, Electric, Cowl Mounted  
WIRING, CHASSIS Color Coded and Continuously Numbered  
CIGAR LIGHTER Includes Ash Cup  
POWER SOURCE Cigar Type Receptacle without Plug and Cord  
ALTERNATOR {Bosch LH160} Brush Type, 12 Volt 160 Amp. Capacity, Pad Mount  
BODY BUILDER WIRING Back of Standard Cab at Left Frame or Under Extended or Crew Cab at Left Frame; Includes: Sealed Connectors for Tail/Amber Turn/Marker/ Backup/Accessory Power/Ground and Sealed Connector for Stop/Turn  
BATTERY SYSTEM {International} Maintenance-Free, (2) 12-Volt 1850 CCA 2-WAY RADIO Wiring Effects; Wiring With 20 Amp Fuse Protection, Includes Ignition Wire With 5 Amp Fuse, Wire Ends Heat Shrink and Routed to Center of Header Console in Cab  
RADIO {International} AM/FM Stereo With Weatherband, Clock, Auxiliary Input, Includes Multiple Speakers

BACK-UP ALARM Electric, 102 dBA

STOP, TURN, TAIL & B/U LIGHTS {Truck Lite} Super 44, With LED Bulbs for Stop, Turn & Tail Lights and Truck Lite Super 40 for Backup lights, With Power Module, "International" Termination and Less Junction Box

TRAILER CONNECTION SOCKET 7 WAY; mounted at rear of frame, wired for turn signals ,combined with stop, compatible with trailers that use combined stop, tail, turn lamps

JUMP START STUD Remote Mounted

JUMP START STUD Mounted to Battery Box

HORN, AIR Black, Single Trumpet, Air Solenoid Operated

HEADLIGHTS Long Life Halogen; for Two Light System

CLEARANCE/MARKER LIGHTS (5) {Truck Lite} Amber LED Lights, Flush Mounted on Cab or Sunshade

ENGINE SHUTDOWN Automatic; With 30 Second Delay

HEADLIGHTS ON W/WIPERS Headlights Will Automatically Turn on if Windshield Wipers are turned on

STARTING MOTOR {Delco Remy 39MT} 12 Volt; Gear Reduced, With Thermal Over-Crank Protection

INDICATOR, LOW COOLANT LEVEL With Audible Alarm

CIRCUIT BREAKERS Manual-Reset (Main Panel) SAE Type III With Trip Indicators, Replaces All Fuses Except For 5-Amp Fuses

GRILLE Stationary, Chrome

FRONT END Tilting, Fiberglass, With Three Piece Construction; for 2007 & 2010 Emissions

PAINT SCHEMATIC, PT-1 Single Color, Design 100

Includes:

PAINT SCHEMATIC ID LETTERS

PAINT TYPE Base Coat/Clear Coat, 1-2 Tone

CLUTCH Omit Item (Clutch & Control)

OIL FILTER, ENGINE {Hudgins Model 960 Spinner}

BLOCK HEATER, ENGINE {Phillips} 120 Volt/1250 Watt

ENGINE, DIESEL {MaxxForce 10} EPA 10, 350 HP @ 2000 RPM, 1150 lb-ft Torque @ 1200 RPM, 2200 RPM Governed Speed or Equivelant

Includes:

AIR COMPRESSOR AIR SUPPLY LINE Naturally-Aspirated (Air Brake Chassis Only)

ANTI-FREEZE Red Shell Rotella Extended Life Coolant; -40 Degrees F/ -40 Degrees C; for MaxxForce Engines

COLD STARTING EQUIPMENT Intake Manifold Electric Grid Heater with Engine ECM Control

CRUISE CONTROL Electronic; Controls Integral to Steering Wheel

ENGINE OIL DRAIN PLUG Magnetic

ENGINE SHUTDOWN Electric, Key Operated

FUEL FILTER Included with Fuel/Water Separator

FUEL/WATER SEPARATOR Fuel/Water Separator and Fuel Filter in a Single Assembly; With Water-in-Fuel Sensor; Engine Mounted

GOVERNOR Electronic

OIL FILTER, ENGINE Spin-On Type

WET TYPE CYLINDER SLEEVES

FAN DRIVE {Horton Drivemaster Polar Extreme} Direct Drive Type, Two Speed, With Residual Torque Device for Disengaged Fan Speed

RADIATOR Aluminum, Front to Back Cross Flow, Series System; 1663 SqIn Core and 885 SqIn Charge Air Cooler and 470 SqIn Low Temperature Radiator Down Flow

FEDERAL EMISSIONS for 2010; MaxxForce 9 & 10 Engines

AIR CLEANER Single Element

Includes: GAUGE, AIR CLEANER RESTRICTION Air Cleaner Mounted

THROTTLE, HAND CONTROL Engine Speed Control; Electronic, Stationary, Variable Speed; Mounted on Steering Wheel

ENGINE CONTROL, REMOTE MOUNTED Provision for; Includes Wiring for Body Builder Installation of PTO Controls; With Ignition Switch Control for MaxxForce post 2007 Emissions Electronic Engines

EMISSION COMPLIANCE Federal, Does Not Comply With California Clean Air Idle Regulations

TRANSMISSION, AUTOMATIC {Allison 3000\_RDS\_P} 4th Generation Controls; Close Ratio, 6-Speed, With Double Overdrive; On/Off Hwy; Includes Oil Level Sensor, With PTO Provision, Less Retarder, With 80,000 lb GVW & GCW Max

OIL COOLER, AUTO TRANSMISSION {Modine} Water to Oil, for Allison or CEEMAT Transmission

TRANSMISSION SHIFT CONTROL {Allison} Push-Button Type; for Allison 3000 & 4000 Series Transmission

TRANSMISSION DIPSTICK relocated to right side

TRANSMISSION OIL Synthetic; 29 thru 42 Pints

ALLISON SPARE INPUT/OUTPUT for Rugged Duty Series (RDS); General Purpose Trucks, Construction

TRANSMISSION TCM LOCATION Located Inside Cab

SHIFT CONTROL PARAMETERS Allison Performance Programming in Primary and Allison Economy Programming in Secondary

PTO dash mounted for customer provided PTO, includes switch electrical / air solenoid, piping and wiring

AXLE, REAR, TANDEM {Meritor RT-46-160} Single Reduction, 46,000-lb Capacity, With Driver Controlled Main Locking Differential in Forward Rear and Rear-Rear Axle and 200 Wheel Ends . Gear Ratio: 7.17

SUSPENSION, REAR, TANDEM {Hendrickson HMX-460-54} Walking Beam Type 54" Axle Spacing; 46,000lb Capacity, With Rubber End Bushings, Transverse Torque Rods, Less Shock Absorbers

SUSPENSION/REAR-AXLE IDENTITY for Meritor Tandem Rear Axles With Bar-Pin Beam Attachment Type Suspensions

AXLE, REAR, LUBE {EmGard 75W-90} Synthetic Oil; 65 thru 89.99 Pints

FUEL/WATER SEPARATOR With Thermostatic Fuel Temperature Controlled Electric Heater, and Filter Restriction/Change Indicator, Includes Standard Equipment Water-in-Fuel Sensor

FUEL TANK Top Draw; D Style, Non Polished Aluminum, 19" Deep, 70 U.S. Gal., 265 L Capacity, With Quick Connect Outlet, Mounted Left Side, Under Cab

CAB Conventional

Includes:

- ARM REST (2) Molded Plastic; One Each Door
- CLEARANCE/MARKER LIGHTS (5) Flush Mounted
- COAT HOOK, CAB Located on Rear Wall, Centered Above Rear Window
- CUP HOLDERS Two Cup Holders, Located in Lower Center of Instrument Panel
- DOME LIGHT, CAB Rectangular, Door Activated and Push On-Off at Light Lens, Timed Theater Dimming, Integral to Console, Center Mounted
- GLASS, ALL WINDOWS Tinted
- GRAB HANDLE, CAB INTERIOR (1) "A" Pillar Mounted, Passenger Side
- GRAB HANDLE, CAB INTERIOR (2) Front of "B" Pillar Mounted, One Each Side
- INTERIOR SHEET METAL Upper Door (Above Window Ledge) Painted Exterior Color
- STEP (4) Two Steps Per Door

GAUGE CLUSTER English With English Electronic Speedometer

Includes:

- GAUGE CLUSTER (6) Engine Oil Pressure (Electronic), Water Temperature (Electronic), Fuel (Electronic), Tachometer (Electronic), Voltmeter, Washer Fluid Level
- ODOMETER DISPLAY, Miles, Trip Miles, Engine Hours, Trip Hours, Fault Code Readout
- WARNING SYSTEM Low Fuel, Low Oil Pressure, High Engine Coolant Temp, and Low Battery Voltage (Visual and Audible)

GAUGE, OIL TEMP, ALLISON TRAN

GAUGE, AIR CLEANER RESTRICTION {Filter-Minder} With Black Bezel Mounted in Instrument Panel

IP CLUSTER DISPLAY On Board Diagnostics Display of Fault Codes in Gauge Cluster

SEAT, DRIVER {National 2000} Air Suspension, High Back With Integral Headrest, Cloth, Isolator, 1 Chamber Lumbar, 2 Position Front Cushion Adjust, -3 to +14 Degree Back Angle Adjust

Includes: SEAT BELT 3-Point, Lap and Shoulder Belt Type  
SEAT, PASSENGER National 2000} Air Suspension, High Back With Integral Headrest, Cloth, Isolator, 1 Chamber  
Lumbar, 2 Position Front Cushion Adjust, -3 to +14 Degree Back Angle Adjust

Includes: SEAT BELT 3-Point, Lap and Shoulder Belt Type  
MIRRORS (2) {Lang Mekra} Rectangular, 7.44" x 14.84" & 7.44" sq. Convex Both Sides, 102" Inside Spacing,  
Breakaway Type, Heated Heads Thermostatic Controlled, Black Heads, Brackets & Arms  
GRAB HANDLE Chrome; Towel Bar Type with Anti-Slip Rubber Inserts; for Cab Entry Mounted Left Side Only at  
"B" Pillar

WINDSHIELD Heated, Single Piece

AIR CONDITIONER Blend Air with Integral Heater and Defroster

INSTRUMENT PANEL Center Section, Ergonomic Panel

WINDOW, power(2) and power door locks, left and right doors includes express down feature

HVAC FRESH AIR FILTER

STORAGE POCKET, DOOR Molded Plastic, Full Width; Mounted on Passenger Door

CAB INTERIOR TRIM Deluxe

Includes:

"A" PILLAR COVER Molded Plastic

CAB INTERIOR TRIM PANELS Cloth Covered Molded Plastic, Full Height; All Exposed Interior Sheet Metal  
is Covered Except for the Following: with a Two-Man Passenger Seat or with a Full Bench Seat the Back  
Panel is Completely Void of Covering

CONSOLE, OVERHEAD Molded Plastic; With Dual Storage Pockets with Retainer Nets and CB Radio  
Pocket

DOOR TRIM PANELS Molded Plastic; Driver and Passenger Doors

FLOOR COVERING Rubber, Black : HEADLINER Soft Padded Cloth

INSTRUMENT PANEL TRIM Molded Plastic with Black Center Section

STORAGE POCKET, DOOR (1) Molded Plastic, Full-Length; Driver Door

SUN VISOR (2) Padded Vinyl with Driver Side Toll Ticket Strap, Integral to Console

CAB REAR SUSPENSION Air Bag Type

WHEELS, FRONT DISC; 22.5" Painted Steel, 5 Hand Hole, 10-Stud (285.75MM BC) Hub Piloted, Flanged Nut,  
Metric Mount, 9.00 DC Rims; With Steel Hubs

WHEELS, REAR DUAL DISC; 22.5" Painted Steel, 2 Hand Hole, 10-Stud (285.75MM BC) Hub Piloted, Flanged  
Nut, Metric Mount, 8.25 DC Rims; With Steel Hubs

PAINT IDENTITY, FRONT WHEELS {Accuride} Disc Front Wheels; With Vendor Applied (PKWHT21) White Powder  
Coat Paint

PAINT IDENTITY, REAR WHEELS {Accuride} Disc Rear Wheels; With Vendor Applied (PKWHT21) White Powder  
Coat Paint

WHEEL GUARDS, REAR {Accuride} for Metric Hub Piloted Wheels with Flanged Mounting Nuts, Mounted  
Between Hub & Wheel and Between Dual Wheels

WHEEL BEARING, FRONT, LUBE {EmGard 50W} Synthetic Oil

(8) TIRE, REAR 11R22.5 HDR1 (CONTINENTAL) 495 rev/mile, load range H, 16 ply

(2) TIRE, FRONT 315/80R22.5 HSU2+ (CONTINENTAL) 481 rev/mile, load range L, 20 ply Steel surcharge

**CITY OF ROCKFORD  
TANDEM AND SINGLE AXLE DUMP TRUCKS  
Multi-Purpose Dump Body**

**Meet  
Specifications  
(Y/N)**

**Exceptions**

Body shall be versatile with the ability to be used as a dump body or as a spreader body

Body shall have an integral center conveyor to discharge material through the tailgate onto a spinner assembly

Conveyor shall be capable of various aggregate type materials

The body shall be 13 feet inside length for tandem axle, 10 feet for single axle.

The body shall be 87" ID and 96" OD wide.

The side height of the body shall be 44 inches

The tailgate height of the body shall be 50 inches.

The body capacity shall be 9.6 cubic yards for tandem axle, 7.1 cubic yards for single axle, water level full.

The body shall be continuously welded 100% throughout.

Entire body shall be manufactured from 201 stainless steel, 2B finish.

The sides, front and tailgate shall be 3/16" thick material.

The longsills shall be 14" tall, fabricated from 1/4" thick material.

Longsills shall be joined at bottom flange with 4" x 1 1/2" x 1/4" channel crossmembers welded every 24" on centers the full length of the long sill.

Longsills shall be joined at the top by 3/16" x 3" x 3" angle welded every 12" on centers the full length of the conveyor.

The floor under the conveyor shall be 1/4" thick, bolt in, removable.

Chain shields shall be 3/16" thick, bolt in, removable.

Body sides shall be 3/16" brake formed to a radius of 43 inches

Boxed top rail shall be of 3/16" formed channel, dirt shedding.

Body shall have 6" high board pockets at front and rear of top rail

Front bulkhead shall be 3/16" and have a partial doghouse.

Lower portion of front bulkhead shall be sloped to the conveyor.

Front bulkhead shall conform to the radius of the body.

Rear corner posts shall be 4" x 6" full box 3/16" plate

A 3/16" panel will extend from rear posts to the body side walls and will conform to the radius of the side wall

There shall be a 4" x 6" x 3/16" boxed tube welded to the rear posts and to the body longsills

The tailgate shall be manufactured from 3/16" 201 stainless steel with a boxed perimeter of 10 gauge formed channels.

The tailgate shall be six panel design full double acting

Tailgate shall fold down and be chained flat with the body floor

The material door shall extend 16" into the interior of the body

The door opening shall be 21" in width by 8-1/2" in height

Material door shall be manufactured of 3/16" 201 stainless steel.



Ladder will have a rigid upper section with fold down lower section  
Ladder rungs shall be grip strut material minimum 16" wide  
Ladder rungs will be spaced a maximum of 12" between rungs

**Rear Spinner:**

Spinner shall be Stationary receiver mount spinner style  
Spinner shall be mounted via means of two 2" receiver tubes one tube located on each side of the spinner assembly.

Spinner must be adjustable front to back via multiple holes in mounts  
Spinner body is manufactured from 12-gauge 201 stainless steel

There shall be three adjustable spinner deflectors, for directing material from the spinner disc.

Deflectors must be adjustable without the use of tools

The spinner motor shall be high torque/low speed mounted directly to the spinner disc with a cast hub.

The spinner disc shall be 24" in diameter and manufactured of polyurethane with six fins.

There shall be HD top grates, one piece bolt in lift out design

7" x 4.5" x 1/4" support angles shall rest on top rail and bolt to the board pockets of the dump body

Front and rear support beams are 4" x 2" x 1/4" wall tube bolted to the support angles and span the width of the body

Center beam is 3 1/2" schedule 80 pipe mounted on top of the support beams and spans the length of the body

Two lift loops are welded to the center beam

Screen sections are constructed of 3/8" rod welded to form a 2.5" square mesh pattern

Screen perimeter is fabricated of 1/2" x 1-1/2" flat steel and 2" angle iron with edge supports reinforced with 1/4" x 1" flat bar.

Each screen section shall be secured to the tubular center beam with non-freeze hinges.

Entire screen assembly shall be shot blasted and powder coated black

**Hoist:**

The hoist shall be of a telescopic design and have a trunion mounting.  
The hoist shall be NTEA class 80 with 25 ton capacity for tandem axle, class 60 with 16 ton capacity for single axle

The hoist shall operate up to 2,500 PSI, and shall be self-bleeding.

The cylinder shall be double acting in all stages.

The trunion collar shall be oscillating.

Each rod or pin eye shall have a grease zerk.

All cylinder surfaces shall be nitride finish

Two body safety props shall be provided and installed  
The hoist hinge shall have 2" stainless steel pins that are removable  
Hoist hinge shall incorporate greasable composite bushings.

**Body Finish:**

The body shall be provided with a bare stainless steel finish.  
The body shall pass through a phosphate wash, clear water rinse and shall then be oven dried  
Non-stainless components of the body and hoist package shall have a baked on powder coat black finish

**Miscellaneous:**

Heavy-duty rubber mud flaps mounted behind rear tires  
Heavy-duty rubber mud flaps with retainers ahead of rear wheels

**Front Plow and Hitch**

**Truck Portion Plow Hitch:**

A truck portion snow plow hitch shall be provided and installed  
Coupling device must be of the quick attach and detach design.  
Hitch receiver box is fabricated from ½" thick steel  
Hitch must incorporate a drop pin locking mechanism  
Drop pin shall be 2 1/2" diameter 1018 solid rod.  
Drop pin lever is fabricated from ½" x 1.5" bar stock.  
Lever must be able to be locked into both the open and closed position with a pin and keeper.  
Hitch is to be a bumper to frame design.  
Hitch shall be of a non-tilt design.  
Hitch shall have full backing plate 35" x 36.5" of 5/8" steel plate  
Hitch uprights shall be ½" x 6" hot rolled plate and are welded to the backing plate and receiver box  
Uprights shall be gusseted to the backing plate with four 5" x 5" x ½" triangular gussets  
There shall be a 6" x 4" x ½" angle welded between the uprights and at the top of the backing plate.  
There shall be two greaseable bushings of 3.25" diameter .344 wall tube that will support the lift arm pivot pin.  
One bushing shall be in the right upright and one in a ½" plate mounting ear that is welded to the upper angle.  
Two ½" plate cylinder mount ears shall be welded and gusseted to the backer backer plate.  
The hitch lift arm shall be offset design  
Lift arm shall consist of two ¾" x 4" side plates and 4" square 3/8" wall lift arm tube

Plates and tube will be joined with two 3.25" diameter .344 wall tubes, one tube will house the lift arm pivot pin.

The lift arm will attach to the hitch uprights with a 2" solid round pin

The inner lift arm extension tube shall be 3" square 3/8" wall square tube and will be retained with a 1" zinc plated pin

Extension will have a 3.5" x 1" thick plate ear mounting plate.

A 4" x 10" double acting lift cylinder shall be provided.

Lift cylinder rod shall be 2" diameter and nitrided.

Lift arm shall be designed to fold flat against the hitch when not in use.

Folding shall be accomplished without the use of tools.

Plow hitch shall include 1/2" thick steel cheekplate push reinforcement.

Hitch shall be powder coat black.

*Torsion trip spring cutting edge plow:*

Moldboard to be "C" style and constructed of 10 gauge A569 steel

Moldboard is to be 44" in height with and 8" cutting edge 12' in length.

Moldboard to include integral shield

Top moldboard angle is 2" x 3" x 3/8" A36 steel.

Moldboard is adjustable pitch with attack angles of 20, 10, and 5 degrees

Minimum six flame cut 1/2" vertical support ribs equally spaced

The ribs are to taper from 4" at the bottom angle to 2" at the top angle.

Ribs must be notched at the top angle to allow water to drain

Ribs have 1" bearing surface where push frame attaches to moldboard.

Two moldboard horizontal supports are to be 3" x 3" x 1/2" angle where support arms attach

Three additional horizontal moldboard supports are 3" x 3" x 1/4".

Bottom moldboard angle shall be 3/4" x 4" x 4" A36 steel

Bottom angle to have 1" thick trip hinge blocks welded to the angle.

Bottom angle boxed to moldboard with 4" x 1/4" steel plate between ribs

The trip section angle assembly shall be 3/4" x 4" x 4" A36 steel

Trip angle to have 1" thick trip hinge block welded to the angle.

Trip angle to have square bar stock welded to top front to function as zero tolerance cutting edge stops

Trip angles shall pivot on a piece of 1-1/4" cold rolled 1040 steel

Six torsion springs, 3/4" square wire of 4140 material

Springs have a diameter of 3-3/4" OD, 2 1/4" ID.

Each trip spring rotates on individual 1 1/4" hinge rod



Powder coat shall be oven cured for minimum 25 minutes at 400 degrees

Powder coat shall be TGIC polyester, mold board Omaha orange, push frame black

### Front Mount Patrol Wing

#### General:

Double function design, heel and toe operate independently

All welds to be 100% continuous welds

Wing shall be mounted so that it will fold closely to the truck and will provide sufficient tire clearance for turning left and right

#### Moldboard:

32" high x 107" long straight moldboard

3/16" moldboard sheet

Open back design, box formed moldboards not acceptable

2 1/2" X 1" formed top channel

7 vertical 1/2" thick one piece tapered ribs, 4" bottom and 2.5" top

The three push arm mounting angles will be 4" x 4" x 1/4" angle iron welded horizontally between the ribs

4" x 4" x 3/4" structural bottom angle, 1" hinge blocks welded to angle

4" x 4" x 3/4" structural trip angle, 1" hinge blocks welded to angle

Trip angle reinforced with 3" x 3" x 1/2" gussets between each bolt hole

Trip angle will be two sections; one 4' and one 5' section

Trip angles shall pivot on a piece of 1-1/4" cold rolled 1040 steel

Four torsion springs, 3/4" square wire of 4140 material

Springs have a diameter of 3-3/4" OD, 2 1/4" ID.

Each trip spring rotates on individual 1 1/4" hinge rod

Trip springs individually removable without use of special tools

Trip springs can be replaced without being under tension load

5/8" x 8" x 9' top punch 1084 cutting edge; two section, one 4' and one 5'

Wing moldboard shall bolt to mounting block with 1-1/2" bolt

The wing shall be operated by hydraulic lift. No cables or chains

4" ID x 10" stroke, nitrided rod, double-acting, heel cylinder

Heel cylinder to have combination lock/relief valve

Heel cylinder is pinned to moldboard's mechanical float linkage

36" fluorescent flexible marker at wing heel

#### Front Post Assembly:

Shall allow the toe of the wing moldboard to float freely over rough roads and road shoulders, thus reducing potential damage to the wing and cab/chassis

The wing shall be direct hydraulic lift. No cables or chains accepted  
Wing post shall be of a trailing link and parallel arm design  
Post design allows moldboard to float up a minimum of fourteen inches when in the plowing position  
The post front structure shall be no more than 28" high and 14" wide  
The front post shall be manufactured with 3/4" and 1/2" plate steel  
The upper and lower link arms shall be 3/4" radius bar and shall be reinforced with a 2 1/2" schedule 80 pipe  
Link arms shall have hardened bushings at all pivot points  
The lift/float link will be 1/2" bar reinforced with 2 1/2" schedule 80 pipe  
The rear of the lift link will be reinforced with 5/8" and 1" plate  
The rear lift weldment shall have an outer 1" and inner 1/2" bars  
Hinge pins shall be 1.500" OD, case hardened to Rc 55-60 and include grease zerks in ends of pins.  
Lift cylinder shall be 3" ID x 10" stroke with a 2.000" nitrated rod  
Wing lock to be incorporated into hydraulic cylinder to prevent drift  
36" fluorescent markers

**Push arm:**

Single rear heavy duty push arm; adjustable length  
3.5" round outer tube with 1/4" wall; 2 7/8" solid rod inner  
Spring cushioned with safety shear pin

**Rear Mount:**

Single push arm rear mount; under frame mounted  
Two 1/2" steel side plates bolted to chassis frame  
4" x 6" x 1/2" wall structural cross tube extended through side plates  
Minimum 3" x 4" x 1/2" thick mounting ears for push arm  
Cross tube will be braced to the chassis frame with a heavy duty pipe brace with cast iron balls and grade 8 bolts  
Heavy duty rear wing stop shall be fabricated at the rear push arm mount area to create a positive stop for the rear push arm  
The stop shall be located so that the wing moldboard can be folded closely to the truck cab but not contact the cab or mirrors.

The stop shall be fabricated from minimum 1/2" plate steel and be adequately braced to withstand the constant rigors of wing operation

**Preparation and Paint:**

The entire wing assembly shall be shot blasted to remove scale, rust, etc.  
The wing shall then pass through alkaline wash, clear water rinse, phosphate wash, clear water rinse and shall then be oven dried

The wing shall then be pre-heated to minimum 100 degrees Fahrenheit

Powder coat shall be electro statically applied in excess of 3 mils thick  
Powder coat shall be oven cured for minimum 25 minutes at 400 degrees

Powder coat shall be TGIC polyester, moldboard Omaha orange, post, mount, push arm, and hardware black

**Miscellaneous:**

Wing side front Timbren load booster kit installed

36" Marker and steel loop on front post assembly for height indicator

36" orange marker on heel of wing moldboard

Cable kit on wing pusharm to prevent tubes from separating

**Hydraulics and Control System**

**Hydraulic Pump and PTO:**

Hydraulic pump shall be an axial piston pressure and flow compensated load-sensing type.

The pump shall have a displacement of 5.61 cubic inches per revolution at maximum stroke which will deliver 23.7 GPM @ 1000 engine RPM.

The pump shall have a minimum 2" inch suction line and ½" control drain line plumbed directly back to the reservoir.

The pumps compensator shall have rear facing adjustments.

Pump shall be rated for 5800 PSI maximum and 4800 PSI continuous.

Pump shall have a Din type-mounting flange and a Din 5462 8-tooth shaft.

The pump shall be Force America TXV92 or prior approved equal.

An OMF8 series constant mesh PTO that is mounted to the transmission shall drive the pump.

**Hydraulic Control Valve:**

The hydraulic valve shall be of modular manifold design.

Each hydraulic function requires an individual manifold stacked together to form the manifold base.

The manifold base shall consist of an inlet section with SAE #16 inlet porting, SAE #20 outlet porting, and SAE #4 load sense porting.

There shall be a main system relief in the inlet section to protect the system from high pressure in case the pump compensators fail.

The dump body manifold shall be stacked next to the inlet section, and capable of 40 GPM with SAE #12 porting.

The hydraulic control valves shall be pulse-width modulated, proportionally controlled.

Each hydraulic valve segment shall be individually mounted to the manifold base assembly and be serviceable without removing any hydraulic hoses or any other hydraulic valve segments.

Each hydraulic valve segment shall have individual pressure compensation to achieve independent simultaneous operations.

All segments shall have heavy-duty continuous duty coils and connections shall be with Din connectors.

Coils shall operate at 12 VDC and require a maximum of 1400 milliamperes.

Each segment shall be equipped with a manual override except for the auger, liquid, and spinner sections.

The dump body segment shall be rated to 40 GPM, with all other segments rated to 20 GPM.

The dump body segment shall be equipped with a down side relief to protect the body down function.

This relief shall be set to the hoist manufacturer's specifications.

Valve segments shall be Force America Add-A-Fold® 4520 model or prior approved equal.

The valve is to be arranged as follows:

- Hoist: 4-way with 500 PSI down side work port relief valve
- Plow lift: 4-way
- Plow angle: 4-way
- Wing toe: 4-way with 500 PSI B-port relief
- Wing heel: 4-way with 500 PSI B-port relief
- Auger: 2 way
- Spinner: 2-way
- Liquid: 2-way

***Oil Reservoir/Valve Enclosure:***

201 stainless steel construction throughout

Combination oil tank and valve enclosure

The valve assembly shall be mounted in weather-tight compartment.

The oil reservoir shall be minimum 35 gallon capacity with internal baffles and mounted on the side of the chassis frame and shall include a basket type filler breather cap, magnetic drain plug, 2" NPT suction port with screen filter, and an external sight temperature gauge

An in tank 10-micron return line filter with condition gauge shall be mounted in the reservoir

There shall be a separate return line port for the pump control drain line

Hot oil, low oil and body up lights will display in spreader control

Tank/Enclosure shall be of 10 gauge stainless steel construction

The enclosure shall have integrated mounting brackets for attaching directly to the side of the truck frame.

Enclosure shall be designed to overlap so that road spray will not enter but not allow humidity to be trapped inside.

Valve shall be mounted with all ports coming out the bottom and holes allowing for hose adapter fitting.

The cover shall be held to the enclosure by four heavy rubber latches.

**Hydraulic and Spreader Controls:**

Controls for all valve functions and electronic spreader control will be integrated into a single, self-contained control center.

The control center shall be a padded armrest style that is ergonomically designed.

Control center shall be modular in design for ease of installation and service, and wiring and connectors shall be keyed and color-coded throughout.

All components must be durable for long life and trouble free operation.

Joystick shall communicate through a Can Buss communication system.

Joystick must have proportional control of hydraulic functions.

Joystick must be a single proportional joystick with X, Y, and option for Z axis movement.

Joystick must have three safety interlock zones activated by capacitive sensors.

Joystick must remain on until hand placement on the controller grip (interlock zone) is released.

All interlock zones must be programmable to control specific functions such as plow, wing plow, and hoist

Joystick shall have side cluster switches to control spreader standby, application rate, spinner speed, and blast on/off functions.

Joystick face includes five backlit, colored, programmable control switches.

The electronic spreader control shall be designed for precise, closed-loop control of granular and prewet liquid applications and operate on a CAN Bus protocol.

The Central Processing Unit (CPU) shall have keyed and color coded connections to prevent incorrect installation.

CPU shall be mounted in the cab with visual access to diagnostic LEDs.

Mounting of the CPU unit outside of the cab is unacceptable.

The unit shall have USB connectivity for file and data transfer, Ethernet connection, a J1939 communication port for connection to the vehicle bus, a second CAN bus communication port for spreader-only data use, a J1708 for AVL communication.

The CPU shall have on-board diagnostics, which provide real-time status of CAN bus communication, processor activity, and power

status.

The CPU shall have a built-in audible alarm for diagnostic purposes.

The CPU operating system shall NOT be Windows-based.

The spreader control interface shall have two, color-coded, continuous rotation encoders for granular and spinner control.

Encoders shall have integrated push buttons for blast mode and stand-by.

The controller shall have a third multifunction 4-way joystick that has an integrated rotary encoder and push button, that can be used for menu navigation, prewet liquid control, or an additional conveyor function.

There shall be four, two-way soft keys included in the interface that are generically-labeled and user-configurable for different functions depending on the equipment needs.

The controller shall also utilize iButton technology that is capable of using a Supervisor key to provide access to the calibration parameters without the access code.

The entire operator interface shall be backlit and encased in flexible silicone material with wear-limiting coating applied to the base silicone material.

The operator interface shall communicate on the spreader control system CAN bus.

The spreader control display shall be a remotely-mounted, 7" diagonal color TFT LCD, with a low-profile 16:9 widescreen format and minimum of 800X480 pixel resolution.

LCD shall have variable LED backlighting.

CCFL backlighting is unacceptable.

The display shall include a scratch-resistant polycarbonate lens with anti-glare coating.

A power status LED shall be immediately visible on the front of the display and shall report display diagnostics including loss of CAN communication.

Display unit shall have a built-in audible alarm.

To avoid driver distraction, the display shall have no integrated dials or pushbuttons and shall not be touch screen.

LCD shall communicate on the spreader control system CAN bus.

The operator menus shall be color-coded to match the encoder knobs on the operator interface.

The display shall be capable of displaying the following on-screen simultaneously: Granular material name, granular material set point and actual application rate including units of measure, prewet liquid name, prewet liquid set point and actual application rate including units of measure, spread width, road temperature, air temperature, material usage total, liquid usage total, vehicle speed, and current date and time.

The operator shall have the option of selecting five data items to be displayed onscreen during operation.

The display will also provide four warning light indicators for low oil level, body up, oil temp, and filter bypass.

These warning lights are to be functional regardless of spreader operation or status.

A proportional PWM driver and input module (Valve Module) shall be remotely-mounted inside the hydraulic valve enclosure for control of both spreader control and joystick control outputs.

The entire Valve Module shall be of rugged design for the mobile environment, and must meet IP68 requirements for dust and water ingress.

The Valve Module shall include a minimum of eight proportional PWM outputs with potted valve output connections.

All outputs shall be protected against short-circuits.

Outputs will be current-compensated and have adjustable PWM frequency.

There shall be a minimum of five switch-to-ground type inputs for monitoring hydraulic system inputs such as oil level, body up, Hi and Low filter bypass, and oil temperature warnings.

A minimum of two switch-to-ground type pulse train inputs shall be included in the Valve Module for connection of feedback sensors such as auger feedback and prewet liquid flowmeter feedback.

A keyed and color-coded connection shall be provided for CAN bus connection to the CPU module inside the cab.

A second CAN bus connection must be provided for daisy-chaining of multiple Valve Modules within the valve enclosure.

Diagnostic LED's shall be included for every input and output on the Valve Module, as well as a power status LED and CAN bus activity LED's.

The Valve Module shall be potted.

The Valve Module shall include a stainless steel legend plate with engraved text for easy cleaning and identification of Valve Module connections.

The integrated spreader control and joystick control system shall be equipped with a qualified ESTOP device that immediately disconnects battery power from all outputs.

All spreader control and joystick-operated outputs shall immediately cease to function and the system display shall inform the operator that the ESTOP device has been activated.

The ESTOP device must remove power from all output devices, while maintaining power to the display and CPU for diagnostic purposes.

Resetting of the ESTOP device shall not result in spreader control and joystick-operated outputs returning to an ON state without operator acknowledgement.

The Control Center shall be a Monroe / Force America I-Grip 6100.

**Hoses and Fittings:**

A low oil shutdown valve shall be mounted directly to the output of the pump and will automatically shut down via low-level sensor in hydraulic oil tank in order to minimize the possibility of pump damage due to lack of oil.

In-Cab Momentary switch for bypass of auto-shutdown shall be provided to facilitate movement of disabled equipment by service personnel.

Hoses must be sized accordingly to provide optimum performance of all hydraulic equipment. JIC and ORB fittings required.

All quick couplers for plow, wing & spreader system must have dust caps for protection.

Quick couplers for plow angle, wing heel, and spinner

30 gallon crossover relief valve for front plow angle circuit

**Liquid Prewet System**

System capable of dispensing measured amounts of calcium chloride, salt brine and / or other chemicals used in snow and ice control.

Components must be non-ferrous, austenitic and / or corrosion resistant.

System supplied shall be complete with pump, pump control, nozzles, hoses, tank fittings, wiring and mounting hardware as required.

A hydraulically driven positive displacement bronze gear pump

Gear pump will have a rated flow of 4 GPM

Pump is direct coupled a hydraulic motor.

Pump will have a stainless steel shaft, with carbon graphite bearings.

A flow meter for closed loop control mounted inside the pump enclosure.

The pump shall be mounted in a NEMA fiberglass enclosure.

The enclosure shall be mounted near liquid tanks and be easily accessible

Enclosure will not hinder normal spreader maintenance or operation.

Enclosure will protect the pump, motor assembly, and flow meter.

Electrical connections and wiring shall be hard wired within enclosure.

Wire harnesses will incorporate weather pak connectors.

Hydraulic connections with stainless steel tubing from motor to bulkhead style JIC connectors outside of the enclosure.

Liquid connections shall be made via threaded couplings and barbed fittings integral with the enclosure.

Two fender mounted 75 gallon capacity tanks with internal baffles.

Tanks shall have one 5" fill lid located on top front of tank.

Tanks shall be constructed of a rotationally molded and UV stabilized polypropylene material. (natural color)

Tanks will have a minimum .350" wall thickness.

The tank shall have (4) 1-1/4" molded threaded ports.

The threaded ports shall be located as close to the bottom as possible.

Tanks will be cross linked with 1 1/2" hose

Each tank will include a vent.

Tank shall be complete with necessary stainless steel mounting hardware including tank pans of 201 stainless steel.

(3) 2 gpm brass spray nozzles shall be located in the spinner disc area.

A 5-PSI check valve shall be installed as close to the nozzles as possible to prevent siphoning of the liquid chemical.

Nozzle kit shall include a cam lock coupler to allow nozzles to be easily removed with the spinner.

Plumbing components shall be constructed of heavy-duty glass reinforced polypropylene or brass, except check valves.

The hose for the suction line to the pump shall be 3/4" EPDM.

All pressure hoses shall be 1/2" EPDM.

A 3/4" suction filter with 304 stainless steel screen shall be installed

A two inch bulk fill with cam lock fittings and a two inch shut off valve shall be located in a convenient location for bulk filling the reservoirs.

A tank crossover kit consisting of 1/12" hose shall link the tanks.

A three way valve and suction hose shall be act as an on board flush system.

**Miscellaneous**

**Lighting and Electrical:**

All wiring is soldered, heat shrunk and in protective loom

Junction box must be mounted to crossmember at rear easily accessible

All FMVSS 108 lighting to be L.E.D

Stop/turn/tail lights mounted in box

Backup lights mounted in box

FS Target Tech Light Package

-Target Tech L.E.D. Self-contained rear strobes – model 607101

-Target Tech 360 degree amber strobe – model 651

-Target Tech wire branch guard

-North American self-leveling bracket

-L.E.D. Stop/Turn/Tail lights in rear corner posts

Hella plow lights with directional signals mounted to plow hitch with custom receiver tube mounting brackets



The longsills/frame shall be fabricated from ¼" A1011 steel, 8" deep tubular design

The dump body floor shall be 1/4" AR 400 Steel

The sides shall be double wall design with the outer panel of 12 gauge A1011

The rear pillar shall be 18" in width

Self-cleaning boxed top rail

Tailgate release shall be air operated latching design with 3-1/2" cylinder

The upper tailgate hinge material shall be 1-1/2" steel with a 7" offset

The tailgate thickness shall be 2-1/2". Tailgate bracing shall be full rib design and 100% welded

The body shall include a left front and left rear rigid mounted ladder and a passenger side rear ladder

The body shall include Banjo plates for rear tailgate chains and oval light cutouts at rear

The dump body hoist shall be a T3113 Turbo Telescopic Hoist Cylinder. Cylinder must be chrome plated

Hoist cylinder must be a self-bleeding design

Rear hinge shall have a composite type design

Body shall include a ½ cabshield of 7ga material with a width of 78"

Dump body shall include two steps inside front drivers side corner

Dump body shall be painted one color and undercoated

Mud flaps to be in front of duals and behind to protect tool box and hydraulic tank (Both Sides) and backup alarm installed

FMVSS108 lights and reflectors installed

Frame mounted 30" x 18" x 18" aluminum toolbox installed

Hoist shall include a hot shift PTO, with extended shaft drive fully enclosed, pump and 28 gallon hydraulic tank that shall be mounted the same height from the ground as the fuel tank

Pintle mount, 1" plate with ¾" d-rings

PH-400, air cushion pintle hook

Extend Air Lines and add Glad Hands at rear of frame

7 Way connector, round socket, flat pin, RV style

Light package, placement and type to be determined by the City of Rockford

Bid Form  
413-PW-054

Please submit pricing for any or all vehicles as outlined:

	Quantity	Unit Price	Total Price
<b>Items</b>			
Single Axle Dump Trucks	4	\$ _____	\$ _____
Tandem Axle Dump Trucks	6	\$ _____	\$ _____
14' x 12 yard Dump Trucks	2	\$ _____	\$ _____
<b>Total</b>			<b>\$ _____</b>

Option Price:

Combination Prewet/Anti-Ice System

- Dual 150 gallon fender mounted tanks in lieu of 75 gallon tanks
- 23 gpm liquid pump in lieu of 4 gpm liquid pump
- Add liquid selector valve and in cab switch to select between prewet and anti-ice
- Add stainless steel single lane spray bar with adjustable streamer nozzles
- Spray bar must be easily removable without the use of tools

\$ \_\_\_\_\_

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Person, Firm or Corporation

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Authorized Signature and Title