THE CITY OF ROCKFORD ILLINOIS, USA

Carrie Eklund
Central Services Manager
Finance Department

INVITATION TO BID
DUMP TRUCKS
BID NO.: 712-PW-093

7/30/12

Name of Bidding Firm: _____

Address _____ City: _____ State: ____ Zip: _____

Phone: _____ Fax: _____

E-Mail: _____

Bid Opening Time and Date 11:00 a.m., Local Time, Thursday, August 16, 2012

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, 4th Floor
Rockford, Illinois 61104
Telephone: (815) 987-5560

BIDS SUBMITTED BY FASCSIMILE 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

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.

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, 5, 6, AND 7, 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

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.

CONTRACTOR OR VENDOR WORKFORCE DATA FORM

BIDDERS NAME:

NUMBER OF ALL EMPLOYEES MUST BE ENTERED FOR EACH CATEGORY ---
(No Check Marks Or Bid Will Not Be Accepted)

	MALES					FEMALES				
ALL JOB CLASSIFICATIONS	**W**	**B**	**H**	**A**	**I**	**W**	**B**	**H**	**A**	**I**

W - WHITE B - BLACK H – HISPANIC A - ASIAN OR PACIFIC ISLANDER I - AMERICAN INDIAN

ILLINOIS DEPARTMENT OF HUMAN RIGHTS CERTIFICATION

Our Illinois Department of Human Rights Number is:

Must Provide Expiration Date:

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 _____ City-Certified? Yes ____ No ____

Women Business Enterprise _____ City Certified? Yes ____ No ____

Neither _____

(Revised 12/21/09)

1.0 Purpose

It is the purpose of these specifications to describe six (6) tandem axle, four (4) single axle patrol trucks, and three (3) 14' x 12 yard dump trucks required by the City of Rockford. Vehicles shall meet all 2010 engine emissions requirements.

In addition, the City has included specifications for vehicles required by Winnebago County and Rockford Township. Bidders may choose to bid on any or all of the specific vehicle types included in these specifications.

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, as well as representatives from Winnebago County and Rockford Township 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, within sixty (60) to ninety (90) working days from the date of written approval given by the agency.

2.7 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).

2.8 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.

2.9 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 Sqln 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 Sqln
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 3.0' 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
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 Sqln Core and 648 Sqln Charge Air Cooler and 342 Sqln 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 3500_RDS_P} 4th Generation Controls; Wide 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 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

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 3.0' 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

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 3500_RDS_P} 4th Generation Controls; Wide 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 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
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 7500 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
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
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 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
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

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	Meet Specifications (Y/N)	Exceptions
Multi-Purpose Dump Body		
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 ¼" thick material.		
Longsills shall be joined at bottom flange with 4" x 1 1/2" x ¼" channel crossmembers welded every 24" on centers the full length of the longsill.		
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 ¼" 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.		

Material door shall be screw adjustable with infinite positions		
Material door shall include door opening height indicator		
The tailgate shall have 1" x 4" bar stock upper hinge		
Lower tailgate pins shall be 1-1/4" stainless		
The tailgate latches shall be flame cut stainless and be 1" thick		
Each latch is adjustable with threaded ¾" clevis and keeper pins.		
The latch shall be an over center type.		
The latch must be air release and air latch utilizing two 3.5" air cylinders one in each rear corner post of body.		
Air cylinders and shall be accessible through a bolt on access panel		
Tailgate latch rear pivot points shall be a greaseable sealed bearings		
Tailgate latch pivot points inside of the rear posts shall be greaseable		
The body conveyor shall be 34" wide		
The conveyor chain must be United States manufactured AL667XH		
Bar flights are 1-1/2" wide x ½" thick on 2 ¼" centers		
Chain shall ride on 8 tooth case hardened sprockets		
Drive and idler shafts shall be minimum 2" diameter		
The rear shaft bearings shall have heavy duty, dust sealed self-aligning four bolt flange bearings		
Conveyor shall be driven by Two (2) 6:1 spur gearboxes with low speed high torque hydraulic motors		
Street side motor shall have 100 pulse/rev integral speed sensor		
Gearboxes and motors must be easily accessible		
Entire rear drive system including the shaft, bearings, sprockets, and gearboxes shall be removable as an assembly out of the longsill		
There shall be two heavy-duty bearing/ idler assemblies to adjust conveyor chain tension by use of slide rail style adjusters.		
Slide rail assembly including 1 ¼" adjusting bolt shall be stainless steel		
Adjusting bolt easily accessible at front of the body outside longsill		
All grease points for the body hoist, tailgate latch, and bearings will be provided with grease lines that terminate at a remote zerk manifold		
A sub-floor kit of 3/8" poly sheet shall be installed between the body longsills under the conveyor to contain material carry over		
The body shall include an upper and lower rubber wiper assembly at the rear of the body to clean chain bar flights		
The body shall have a ½ cabshield fully welded to the front bulkhead		
Cabshield will be 84" wide and will extend a minimum of 22" forward		
Cabshield shall fabricated from 10 ga 201 SS material minimum		
The body will have tandem length fenders welded to the longsills		
Fenders shall be flat to accommodate mounting of liquid tanks		
Fenders shall be 31" wide and 110" long for tandem axle, 31" wide and 69" long for single axle.		
Fenders will be fabricated from minimum 201 SS 7 ga material		
A stainless steel ladder will be installed on the driver side front		

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 ¼" 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 ¼" wall tube bolted to the support angles and span the width of the body	_____	_____
Center beam is 3 ½" 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 ¼" x 1-1/2" flat steel and 2" angle iron with edge supports reinforced with ¼" 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 shell 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 ½" 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 ½" 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 ½" angle where support arms attach

Three additional horizontal moldboard supports are 3" x 3" x ¼".

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 ¼" 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, ¾" square wire of 4140 material

Springs have a diameter of 3-3/4" OD, 2 ¼" ID.

Each trip spring rotates on individual 1 ¼" hinge rod

Trip springs individually removable without use of special tools	_____	_____
Trip springs can be replaced without being under tension load	_____	_____
Three section 5/8" x 8" x 4' top punch cutting edge, 1084 carbon	_____	_____
The push frame shall be heavy duty tubular design.	_____	_____
The semi-circle of the plow is fabricated from 5" x 3/8" square tube.	_____	_____
Boxed, ½" positive stops set to allow 35 degree swing of moldboard	_____	_____
Cylinder attachment plates of ½" steel	_____	_____
Two 4" bore double acting cylinders	_____	_____
2" diameter nitrated rod and pin eyes to accept 1 1/4" pins	_____	_____
Cylinder ports to accept O-ring hydraulic fittings	_____	_____
Abrasion resistant, 3000 psi ½" hydraulic hoses with couplers.	_____	_____
30 GPM double relief cushion valve set at 1,800 PSI.	_____	_____
Cushion valve to be mounted on truck hitch to mate existing fleet	_____	_____
The push tube shall be 5" x 5" x 3/8" A36 steel, minimum of 84" long	_____	_____
Eight 1" moldboard attaching ears with triangular ½" gussets.	_____	_____
Two jack support channels to mate Sno-Wheels	_____	_____
The A-frame shall have upper and lower flame cut 5/8" and ½" plates	_____	_____
The A-frame shall have four 4" x 2" x ¼" tubes reinforced by 5/8" plate and ½" plate gussets.	_____	_____
A-frame shall have 1" x 6" hitch push/oscillating plate.	_____	_____
The "A" frame shall encapsulate the push frame semi-circle.	_____	_____
Push frame pivot pin must be Greaseable with 1 ½" diameter grade 8 pin	_____	_____
Two moldboard stabilizer arms constructed of 1-1/4" schedule 80 pipe	_____	_____
Stabilizer arms shall be kept in place with 1" stress proof pins.	_____	_____
Plow hitch attachment shall be 2" thick round stock that forms a loop.	_____	_____
Plow hitch must mate existing City fleet	_____	_____
All hardware and fasteners are plated and corrosion resistant.	_____	_____
Plow shall include two lift chains attached to push frame	_____	_____
All fasteners shall be grade 8, both cap-screw and nut.	_____	_____
Plow shall include a 12" rubber snow deflector with steel retainer strap bolted to top angle of moldboard.	_____	_____
Plow shall include a removable screw adjustable parking jack	_____	_____
Wheel mounting brackets of ½" steel plate to accommodate both Monroe Style caster wheels and Sno-Wheel brand caster wheels.	_____	_____
Plow shall include one pair of Sno-Wheel brand caster wheels.	_____	_____
Plow shall include plastic blade markers.	_____	_____
100% welded construction throughout	_____	_____
The entire plow assembly shall be shot blasted to remove scale, rust, etc.	_____	_____
Plow shall be powder coat paint finish	_____	_____
Powder coat shall be electrostatically 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, 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 ½" X 1" formed top channel	_____	_____
7 vertical ½" 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 ½" 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, ¾" square wire of 4140 material	_____	_____
Springs have a diameter of 3-3/4" OD, 2 ¼" ID.	_____	_____
Each trip spring rotates on individual 1 ¼" 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 ¾" and ½" 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 ¼" wall; 2 7/8" solid rod inner	_____	_____
Spring cushioned with safety shear pin	_____	_____
Rear Mount:		
Single push arm rear mount; under frame mounted	_____	_____
Two ½" steel side plates bolted to chassis frame		_____
4" x 6" x ½" wall structural cross tube extended through side plates	_____	_____
Minimum 3" x 4" x ½" 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 ½" 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 OMFB 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 mille-amps.

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 ingression.

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 ½" 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 ¾" EPDM.
All pressure hoses shall be ½" EPDM.
A ¾" 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

Clear work light for wing		
Body up warning light		
Low oil warning light		
Electric back up alarm, 97 Db		
Manuals:		
Parts and service manuals for all items shall be provided in bound book upon delivery of the completed unit. Two complete lists of part numbers of items used in building the truck will be included		
Training:		
Equipment installer to provide training on operation and calibration of all equipment upon delivery of completed unit		
Warranty:		
One full winter season parts and labor on all equipment		
Warranty statements must be included with quotations		
Installation, Parts, and Service:		
All proposed equipment is subject to inspection and approval of the city		
All installations are subject to inspection and approval of the city		
Bidder must be factory authorized distributor for proposed equipment		
Bidder must have parts and service facility located within a 50 mile radius of the City of Rockford Garage		
Installation of all equipment onto trucks must be performed within a 50 mile radius of the City of Rockford Garage		
Installation facility must have 3 year record of similar installation work and can provide local municipality references		
Install must be performed by A.S.E. Certified Technicians		
Installations must be completed by equipment manufacturer		

CITY OF ROCKFORD **14' x 12 YARD DUMP TRUCKS**	**Meets Specifications (Y/N)**	**Exceptions**
Body shall be of the Sloped Sided design, ruggedly built to be used as a Dump body. (NO EXCEPTION). Steel add-on side boards are not acceptable.		
The body shall be 14 feet in length, top inside width shall be 87", and with the total outside width being 96"		
The side height at the front of body shall be 52", with the rear height 42". The front height is 52"		
The body capacity shall be 12 cubic yards, water level full		
The dump body shall be continuously welded 100% inside and out		
The sides, front and tailgate shall be manufactured of 3/16 AR 400		

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	_____	_____
Rear flaps 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, pump and 28 gallon hydraulic 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	_____	_____

WINNEBAGO COUNTY/ROCKFORD TOWNSHIP VEHICLES

SINGLE AXLE DUMP TRUCK CHASSIS: The following is intended to provide the minimum specifications required for a single axle dump truck chassis. Each chassis is to be constructed for use with dump body, front mounted snow plow, passenger side mounted wing plow, tailgate mounted spreader, and liquid dispensing system.

1. Air Conditioning & Heating:
- Factory installed
- Fresh air heater/defroster
- Heavy blower motor
- Comply with TMC RP 408

2. Cab and Sheet Metal : (Conventional)
- Tilt hood with access hatch
- Two (2) Heated rectangular west coast mirrors
- Two (2) electrically controlled 8 inch convex mounted mirror mounted below primary mirrors
- Two (2) interior sun visors
- Air ride seat, driver and passenger
- Extra support brace for cab roof mounted emergency light package
- Bostrom Baja with cordura plus material or approved equal
- Cab insulation for extreme climate
- Horn single electric
- Two (2) horns, air, single pedestal
- Single color polyurethane paint (selected by purchasing agency)
- Intermittent heavy duty electric wiper system (artic blades)
- Optional crew cab configuration

  NOTE: Please provide the heaviest duty wiper system as the units will be used in snow plow operations; please provide <u>optional pricing for aluminum cab if available and for upgraded cab insulation or sound proofing option</u>.

3. Instruments, Gauges, Warnings:
- Standard OEM
- Electronic oil level sensor for transmission with shift control readout
- Comply with RCCC/TMC layout

4. Chassis Group:
- GVW rating (minimum) 35,000 lbs
- 8 ea 108 inch CA
- 1 ea 126 inch CA

5. Axles, Front, Non-driven:
- 20,000 lbs capacity
- HD front shocks

6. Front Suspension:
- Multi-leaf
- 18,000 lbs capacity minimum
- 20,000 lbs capacity preferred

7. Axle, rear, tandem, driven:
- Single reduction (0.433"(11mm) wall housing thickness 21,000 lbs (26,000 lbs preferred)

- Driver controlled locking differential
- Differential lock shall be programmed to automatically disengage at 7 mph
- 40,000 lbs capacity
- W/R wheel ends
- Gear ratio: 6.14
- Magnetic fill and drain plugs
- Synthetic lube

8. Rear Suspension:
- 23,000 lbs capacity minimum
- 40,000 lbs capacity preferred
- Multi-leaf
- With 4,500 lbs auxiliary rubber spring

9. Brakes:
- Air brakes with electronic stability program (4 channel) with automatic traction control
- Dual air system
- 13.2 CFM compressor
- Single anchor quick change linings
- Air dryer with heater
- FRONT: S-cam style 16.5 inch X 6.0 inch severe service linings
- 24 square inch chambers
- REAR: S-cam 16.5 inch X 7.0 inch severe service linings
- 30 square inch spring actuated parking brake chambers
- Automatic slack adjusters (Haldex or Gunite preferred)

10. Tires:
- Front: 315/80R22.5 load range L 20 ply
- Rear: 11R22.5 load range H 16 ply

11. Wheel Hubs, Rims, and Bearings:
- Piloted 10 hole
- Steel disc 8.25 X 22.5 drop center
- Oil lubricated front bearings
- Synthetic lube

12. Steering:
- Hydraulic power
- Dual steering gears
- With external filters

13. Frame:
- Heat treated steel 110,000 PSI yield
- Frame reinforcement full outer "C" channel (110,000 PSI yield)
- 20 inch integral frame extension with "C" channel reinforcement for snow plow application (110,000 PSI yield)
- Section modules 23.5
- Two (2) front frame mounted tow hook

14. Engine (Power Plant):
- Diesel, in line 6 – cylinder (Cummins preferred)

- wet sleeve (electronic)
- 270 HP @ 1,400 RPM, 300 HP preferred
- Electronic road speed type governor
- Throttle hand control electronic
- Current EPA/CARB emissions certification
- OPTIONAL: CNG engine

15. Engine Filters:
- Oil: full flow spin-on
- Hudgins model 60 spinner style preferred
- Rail mounted for easy servicing

16. Cooling System:
- HD radiator
- Spin-on filter non-conditioner type
- Long life coolant – minus 30 degree protection (ASTM D4985)
- Viscous fan clutch
- Optional "extra" heavy duty radiator if available

17. Exhaust System:
- Single horizontal muffler
- Vertical guard tail pipe

18. Transmission:
- Allison MD-3000 RDS P close ratio 6 speed with PTO gear and less retarder
- Synthetic transmission fluid
- Electronic oil sensor

19. Drive Shafts:
- U-joints shall have 180 degree opposed grease fittings
- Spicer 1710 HD

20. Fuel system:
- Steel 50 gallon tank
- Frame mounted
- Aluminum tank with stainless steel straps
- Fuel water separator
- OPTIONAL: CNG tanks as applicable to CNG engine option

21. Air Intake:
- Single dry element severe service with Integral snow valve and in cab control
- Filter minder, restriction indicator cab mounted

22. Cranking System:
- Maintenance free HI cycling
- 3 batteries total 2,100 CCA
- Aluminum battery box
- HD starter with thermal over-crank protection

23. Electrical Group:

- Alternator Brush-less 140 AMP
- Battery disconnect switch mounted to the cab or in a weather tight box
- Extra dash switch package
- Additional cab wiring for two way radios

24. Ignition System:
- Key ignition shutoff
- Two (2) spare keys per chassis bid
- All bid vehicles keyed to same setting (universal key) – door locks included

25. Lighting System:
- Body builder wiring
- Plow light wiring for customer supplied lights
- All external cab lighting shall be LED

26. Electrical Accessories:
- AM/FM radio with electronic tuning and clock
- Radio package to include: 2 speakers, antenna, wiring harness, and noise suppression
- Electronic windows

27. General Accessories:
- Electric schematics attached permanently to the vehicle
- 2 rear frame mounted tow hooks
- Pintle hitch with 7 prong trailer plug
- Air brake connections to rear for trailer
- One (1) operator's manual per chassis bid and three (3) additional
- Service manuals: 3 per bid (current)
- Parts manual: 1 per bid (current)
- Please list media format available (i.e., CD, print, on-line)

Accessories to be added on the bid chassis, single axle version, which include all items as listed below.

1. Dump Body
   - 10 foot, 7-10 yard box or equivalent
   - Cab shield, tandem, 100% welded
   - Sides: 34 inch, 7 GA
   - Front: 46 inch, 7 GA
   - Rear : 44 inch, 7 GA
   - Floor: ¼ inch AR400, 9 inch radius
   - Western understructure
   - Painted one color

2. Hoist:
   - Inverted telescopic hoist or equivalent
   - 32 ton capacity
   - 2000 P.S.I.
   - Double acting

3. Body Options:
   - 3/8 inch x 1 ½ inch flat walk rail both sides
   - Poly access ladder and grab handle right side of body

- Reflective tape across the back of the cab and sides of body
- Self adjustable 87-107 db backup alarm
- Recessed LED S/T/T and backup lights with sealed wire harness
- Rubber rear flaps
- Vibrator, electric
- Air tailgate, electric, w/mounting brackets

4. Hydraulic Package:
   - Sectional valve w/spreader manifold
   - 30 gallon hydraulic tank
   - In-tank return filter w/pressure gauge
   - Morse controls, cables and control stand
   - Valve enclosure
   - Manifold, pintle plate mounted (Illinois specifications)
   - PTO, constant mesh
   - VPL-095-RH style pump
   - 5.8 cubic inch 90cc load sense
   - 48 GPM flow @ 2000 RPM
   - 5,000 PSI operating pressure

5. Spreader Controls:
   - Master on/off switch
   - Selectable groundspeed trigger or orientated
   - Controller face is back-lit for day/nighttime operation
   - 10 position incremented rotary dial with LED position
   - Indicators for application rate and lane width
   - Timed or momentary blast switch
   - Integral switch panel w/4 programmable switches (on/off or momentary)
   - Color coded and labeled cables
   - Mounted within easy reach of operator
   - Relay pack

6. Towing Options:
   - Pintle hook w/mounting, 50 ton
   - MC2075 quick hitch
   - 4 inch X 10 inch double-acting

7. Lighting Options:
   - Plow lights w/signals, hood mounted
   - Illinois D.O.T. state specification light package; 96 inches (Whelen style preferred)
   - 96 inch LED light bar mounted on roof
   - Rear body LED strobes mounted in corner post
   - LED S/T/T mounted in rear post, pintle plate and on top of cab shield
   - LED back up light mounted in pintle plate
   - Switch panel, wired rite, w/vibrator switch

8. Plow:
   - Push frame powder coated black
   - No hitch attachment or shoes

9. Additional Mounted Plow Options:

- QCP loop hitch (welded on type) plow portion; 80 lbs
- 12 inch carbide cutting edge w/cover blade; ¾ inch X 6 inch; N/A slot trip, TE installed
- 36 inch fluorescent orange flexible plastic markers, installed
- Screw adjustable park jack; S&I installed; 30 lbs
- 12 foot rubber snow deflector, 12 inch S/I installed

10. Material Spreader:
    - 9 inch one-way flight auger under-tailgate spreader
    - 7 GA trough
    - ¼ inch end plates
    - full top and bottom clean-out
    - 9 inch auger diameter
    - Quick detach mounting brackets
    - Tailgate shields
    - Bare 201 stainless steel (not painted)
    - Installed

11. Truck Mounted Liquid Dispensing System:
    - Hydraulic closed loop
    - Closed loop hydraulic plumbing kit
    - 4 GPM pump
    - No valve
    - Flow meter
    - One (1) 140 gallon poly tank with mild steel mounting hardware
    - Tailgate mount
    - Nozzle kit: Two (2) 2 GPM nozzles; 140 gal tailgate; 1 spinner

12. Additional pre-wet options:
    - Bulk fill kit and flusher kit; 140 gal tailgate
    - Flusher kit and bulk fill kit; 140 gal tailgate
    - Disconnect kit;
    - Spinner quick disconnect
    - Two (2) tailgate prop links; heavy duty Iowa style

TANDEM AXLE DUMP TRUCK CHASSIS: The following is intended to provide the minimum specifications required for a tandem axle dump truck chassis. Each chassis is to be constructed for use with dump body, front mounted snow plow, passenger side mounted wing plow, tailgate mounted spreader, and liquid dispensing system (with the possible option of a slide in V-box in lieu of the spreader and tailgate mounted liquid dispenser system).

1. Air Conditioning & Heating:
    - Factory installed
    - Fresh air heater/defroster
    - Heavy blower motor
    - Comply with TMC RP 408

2. Cab and Sheet Metal : (Conventional)
    - Tilt hood with access hatch
    - Two (2) Heated rectangular west coast mirrors
    - Two (2) electrically controlled 8 inch convex mounted mirror mounted below primary mirrors
    - Two (2) interior sun visors
    - Air ride seat, driver and passenger

- Extra support brace for cab roof mounted emergency light package
- Bostrom Baja with cordura plus material or approved equal
- Cab insulation for extreme climate
- Horn single electric
- Two (2) horns, air, single pedestal
- Single color polyurethane paint (selected by purchasing agency)
- Intermittent heavy duty electric wiper system (artic blades)
  NOTE: Please provide the heaviest duty wiper system as the units will be used in snow plow operations; please provide optional pricing for aluminum cab if available and for upgraded cab insulation or sound proofing option.

3. Instruments, Gauges, Warnings:
- Standard OEM
- Electronic oil level sensor for transmission with shift control readout
- Comply with RCCC/TMC layout

4. Chassis Group:
- GVW rating (minimum) 39,000 lbs
- 8 ea 108 inch CA
- 1 ea 126 inch CA

5. Axles, Front, Non-driven:
- 20,000 lbs capacity
- HD front shocks

6. Front Suspension:
- Multi-leaf
- 18,000 lbs capacity minimum
- 20,000 lbs capacity preferred

7. Axle, rear, tandem, driven:
- Single reduction (0.433"(11mm) wall housing thickness preferred) 26,000 lbs
- Driver controlled locking differential
- Differential lock shall be programmed to automatically disengage at 7 mph
- 40,000 lbs capacity
- W/R wheel ends
- Gear ratio: 6.14
- Magnetic fill and drain plugs
- Synthetic lube

8. Rear Suspension:
- 40,000 capacity
- Multi-leaf
- With 4,500 lbs auxiliary rubber spring

9. Brakes:
- Air brakes with electronic stability program (4 channel) with automatic traction control
- Dual air system
- 13.2 CFM compressor
- Single anchor quick change linings
- Air dryer with heater

- FRONT: S-cam style 16.5 inch X 6.0 inch severe service linings
- 24 square inch chambers
- REAR: S-cam 16.5 inch X 7.0 inch severe service linings
- 30 square inch spring actuated parking brake chambers
- Automatic slack adjusters (Haldex or Gunite preferred)

10. Tires:
- Front: 315/80R22.5 load range L 20 ply
- Rear: 11R22.5 load range H 16 ply

11. Wheel Hubs, Rims, and Bearings:
- Piloted 10 hole
- Steel disc 8.25 X 22.5 drop center
- Oil lubricated front bearings
- Synthetic lube

12. Steering:
- Hydraulic power
- Dual steering gears
- With external filters

13. Frame:
- Heat treated steel 110,000 PSI yield
- Frame reinforcement full outer "C" channel (110,000 PSI yield)
- 20 inch integral frame extension with "C" channel reinforcement for snow plow application (110,000 PSI yield)
- Section modules 23.5
- Two (2) front frame mounted tow hook

14. Engine (Power Plant):
- Diesel, in line 6 – cylinder (Cummins preferred)
- wet sleeve (electronic)
- 300 HP @ 1,400 RPM
- Electronic road speed type governor
- Throttle hand control electronic
- Current EPA/CARB emissions certification
- OPTIONAL: CNG engine

15. Engine Filters:
- Oil: full flow spin-on
- Hudgins model 60 spinner style preferred
- Rail mounted for easy servicing

16. Cooling System:
- HD radiator
- Spin-on filter non-conditioner type
- Long life coolant – minus 30 degree protection (ASTM D4985)
- Viscous fan clutch
- Optional "extra" heavy duty radiator if available

17. Exhaust System:

- Single horizontal muffler
- Vertical guard tail pipe

18. Transmission:
- Allison MD-3000 RDS P close ratio 6 speed with PTO gear and less retarder
- Synthetic transmission fluid
- Electronic oil sensor

19. Drive Shafts:
- U-joints shall have 180 degree opposed grease fittings
- Spicer 1710 HD

20. Fuel system:
- Steel 50 gallon tank
- Frame mounted
- Aluminum tank with stainless steel straps
- Fuel water separator
- OPTIONAL: CNG tanks as applicable to CNG engine option

21. Air Intake:
- Single dry element severe service with Integral snow valve and in cab control
- Filter minder, restriction indicator cab mounted

22. Cranking System:
- Maintenance free HI cycling
- 3 batteries total 2,100 CCA
- Aluminum battery box
- HD starter with thermal over-crank protection

23. Electrical Group:
- Alternator Brush-less 140 AMP
- Battery disconnect switch mounted to the cab or in a weather tight box
- Extra dash switch package
- Additional cab wiring for two way radios

24. Ignition System:
- Key ignition shutoff
- Two (2) spare keys per chassis bid
- All bid vehicles keyed to same setting (universal key) – door locks included

25. Lighting System:
- Body builder wiring
- Plow light wiring for customer supplied lights
- All external cab lighting shall be LED

26. Electrical Accessories:
- AM/FM radio with electronic tuning and clock
- Radio package to include: 2 speakers, antenna, wiring harness, and noise suppression
- Electronic windows

27. General Accessories:

- Electric schematics attached permanently to the vehicle
- 2 rear frame mounted tow hooks
- Pintle hitch with 7 prong trailer plug
- Air brake connections to rear for trailer
- One (1) operator's manual per chassis bid and three (3) additional
- Service manuals: 3 per bid (current)
- Parts manual: 1 per bid (current)
- Please list media format available (i.e., CD, print, on-line)

Accessories to be added on the bid chassis, tandem axle version, which include all items as listed below.

1. Dump Body:
   - 13 foot, 9-12 yard box or equivalent
   - Cab shield, tandem, 100% welded
   - Sides: 34 inch, 7 GA
   - Front: 46 inch, 7 GA
   - Rear : 44 inch, 7 GA
   - Floor: ¼ inch AR400, 9 inch radius
   - Western understructure
   - Painted one color

2. Hoist:
   - Inverted telescopic hoist or equivalent
   - 32 ton capacity
   - 2000 P.S.I.
   - Double acting

3. Body Options:
   - 3/8 inch x 1 ½ inch flat walk rail both sides
   - Poly access ladder and grab handle right side of body
   - Reflective tape across the back of the cab and sides of body
   - Self adjustable 87-107 db backup alarm
   - Recessed LED S/T/T and backup lights with sealed wire harness
   - Rubber rear flaps
   - Vibrator, electric
   - Air tailgate, electric, w/mounting brackets

4. Hydraulic Package:
   - Sectional valve w/spreader manifold
   - 30 gallon hydraulic tank
   - In-tank return filter w/pressure gauge
   - Morse controls, cables and control stand
   - Valve enclosure
   - Manifold, pintle plate mounted (Illinois specifications)
   - PTO, constant mesh
   - VPL-095-RH style pump
   - 5.8 cubic inch 90cc load sense
   - 48 GPM flow @ 2000 RPM
   - 5,000 PSI operating pressure

5. Spreader Controls:

- Master on/off switch
- Selectable groundspeed trigger or orientated
- Controller face is back-lit for day/nighttime operation
- 10 position incremented rotary dial with LED position
- Indicators for application rate and lane width
- Timed or momentary blast switch
- Integral switch panel w/4 programmable switches (on/off or momentary)
- Color coded and labeled cables
- Mounted within easy reach of operator
- Relay pack

6. Towing Options:
   - Pintle hook w/mounting, 50 ton
   - MC2075 quick hitch
   - 4 inch x 10 inch double-acting

7. Lighting Options:
   - Plow lights w/signals, hood mounted
   - Illinois D.O.T. state specification light package; 96 inches (Whelen style preferred)
   - 96 inch LED light bar mounted on roof
   - Rear body LED strobes mounted in corner post
   - LED S/T/T mounted in rear post, pintle plate and on top of cab shield
   - LED back up light mounted in pintle plate
   - Switch panel, wired rite, w/vibrator switch

8. Plow:
   - Push frame powder coated black
   - No hitch attachment or shoes

9. Additional Mounted Plow Options:
   - QCP loop hitch (welded on type) plow portion; 80 lbs
   - 12 inch carbide cutting edge w/cover blade; ¾ inch X 6 inch; N/A slot trip, TE installed
   - 36 inch fluorescent orange flexible plastic markers, installed
   - Screw adjustable park jack; S&I installed; 30 lbs
   - 12 foot rubber snow deflector, 12 inch S/I installed

10. Material Spreader:
    - 9 inch one-way flight auger under-tailgate spreader
    - 7 GA trough
    - ¼ inch end plates
    - full top and bottom clean-out
    - 9 inch auger diameter
    - Quick detach mounting brackets
    - Tailgate shields
    - Bare 201 stainless steel (not painted)
    - Installed

11. Truck Mounted Liquid Dispensing System:
    - Hydraulic closed loop
    - Closed loop hydraulic plumbing kit
    - 4 GPM pump

- No valve
- Flow meter
- One (1) 140 gallon poly tank with mild steel mounting hardware
- Tailgate mount
- Nozzle kit: Two (2) 2 GPM nozzles; 140 gal tailgate; 1 spinner

12. Additional pre-wet options:
    - Bulk fill kit and flusher kit; 140 gal tailgate
    - Flusher kit and bulk fill kit; 140 gal tailgate
    - Disconnect kit;
    - Spinner quick disconnect
    - Two (2) tailgate prop links; heavy duty Iowa style

Bid Form
712-PW-093

Please submit pricing for any or all vehicles as outlined:

	Quantity	Unit Price	Total Price
City of Rockford			
Single Axle Dump Trucks	4	$ _____	$ _____
Tandem Axle Dump Trucks	6	$ _____	$ _____
14' x 12 yard Dump Trucks	3	$ _____	$ _____
Total City of Rockford			**$** _____
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		$ _____	
Winnebago County			
Single Axle Dump Trucks		$ _____	$ _____
Tandem Axle Dump Trucks		$ _____	$ _____
Total Winnebago County			**$** _____
Rockford Township			
Single Axle Dump Trucks	1	$ _____	$ _____
Total Rockford Township			**$** _____

_____
Person, Firm or Corporation

_____
Authorized Signature and Title