



REQUEST FOR BID

Equipment:	4 Wheel Drive Super Crew Cab Chassis with Service Body and Associated Equipment
Bid Opening Date & Time	December 7, 2020 @ 1PM Mountain Standard Time
Purchaser:	Water Utilities Department
Address of bid acceptance and opening:	City of Dickinson Public Works Facility 3411 Public Works Boulevard Dickinson, ND 58601
Contact:	Greg Stack Utilities Manager (701) 456-7003 gregory.stack@dickinsongov.com
Clarifications, Bid Changes, Waivers and Questions Deadline	November 30, 2020

ADVERTISEMENT FOR PROPOSALS
FOR
WATER UTILITIES DEPARTMENT

4 WHEEL DRIVE SUPER CREW CAB CHASSIS WITH SERVICE BODY AND ASSOCIATED
EQUIPMENT

CITY OF DICKINSON
NORTH DAKOTA
November 2020

Sealed proposals will be received by the City of Dickinson, North Dakota at the Public Works Facility, 3411 Public Works Boulevard, until 1PM Mountain Standard Time, December 2, 2020 for the purchase of One (1) 4 Wheel Drive Super Crew Cab Chassis with Service Body and Associated Equipment. The opening of bids will commence on Monday, December 7, 2020 at 1pm at the PW Works Facility, 3411 Public Works Boulevard, Dickinson, ND at which time the proposals will be opened and read. Any proposal received after this time will be returned, unopened, to the bidder. After staff review, the proposals will be considered for approval at a subsequent regular meeting of the Dickinson City Commission.

Proposals may be submitted for 1) Cab and Chassis; 2) Utility Body and Associated Equipment including installation; or 3) Complete Unit.

Bids must be submitted on the forms and pursuant to the specifications furnished by the City of Dickinson and in accordance with all terms and conditions contained therein.

All proposals will be on the basis of cash payment for the items provided and accepted as stipulated under the bid documents and minimum specifications. Cash payment will be made within sixty (60) days of delivery. Copies of the bid documents and specifications may be obtained from Casey Hellinger, Administrative Assistant, at the Public Works Facility, 3411 Public Works Boulevard, (701) 456-7979.

Each bid must be accompanied by a Bid Bond or Cashier's Check payable to the owner for five percent (5%) of the total amount of the bid. The bond or Cashier's Check will be held as a guarantee of good faith and terms of the bid, if accepted.

The City of Dickinson reserves the right to reject any and all bids, to waive informalities in any bid, to hold bids under consideration for a period of not to exceed sixty (60) days from said date of opening of bids, and to accept the bid that is deemed to be in the best interest of the City of Dickinson.

Dated this 18th day of November, 2020

Published (November 18 and November 25, 2020 in the Dickinson Press)

General Specifications

1. Proposals may be rejected if they show additions not called for, conditional or alternate bids, incomplete bids, irregularities of any kind or if they contain a clause in which the bidder reserves the right to accept or reject a contract awarded to them.
2. No proposal will be considered unless accompanied by a bidder's bond or a certified check of the bidder on a solvent North Dakota bank in an amount equal to five (5) percent of the bid, made payable to the City of Dickinson, which bond or check will be forfeited to the City of Dickinson should the bidder fail to effect a contract. The Bid Bond or Cashier's Check must be enclosed in a separate sealed envelope attached to the outside of the sealed envelope containing the bid. Any proposal submitted without the bond envelope attached to the outside of the bid envelope shall be returned unopened to the bidder. Each bid must be submitted in a separate envelope and be clearly marked as to which bid is enclosed.
3. The total price is to include all discounts and deductions and is to be less federal excise tax for which exemption certificate will be furnished upon request. Proposals may contain factory or dealer incentives.
4. Purchases by the City of Dickinson are not subject to the North Dakota State Sales Tax for which exemption certificate will be furnished upon request. The City of Dickinson's sales tax exemption number is E-4132.
5. The City of Dickinson reserves the right to waive any of the specifications as is deemed necessary for the best interest of the City of Dickinson or are found not to comply with government regulations.
6. Awards will be made based on the best value offered based upon the City's evaluation of all accepted bids, including any factory or dealer incentives. Clauses requiring specific guarantees to cover parts delivery, total repairs, and resale value may be included. The quality of the articles to be supplied, their conformity with the specifications, their suitability to requirements, delivery terms, and guarantee clauses shall be taken into consideration.
7. The City of Dickinson reserves the right to reject any and all bids, to waive technicalities or informalities in any bid and to hold bids under consideration for a period of not to exceed sixty (60) days from said date of opening of bids, and to accept the bid that is deemed to be in the best interest of the City of Dickinson.
8. The right is reserved to cancel any and all awards under this letting for the failure to make delivery by the date quoted in the bid.
9. Delivery shall be a maximum of 180 days from the date the City places the order, unless a longer period is approved by the City in writing prior to awarding the bid.
10. The bidder shall submit Detailed Manufacturer's Specifications, sales literature, and warranty details along with this proposal and upon acceptance, same shall become a part of these specifications as if originally contained herein, in so far as they don't conflict with these specifications. In the event of a conflict between the General Specifications, Detailed Manufacturer's Specifications, and the Detailed Specifications, the latter will govern.
11. Where it is not readily determinable to the City as to the accessories included or not included, the bidder shall attach to the proposal a complete statement listing this information.

General Specifications

12. The Detailed Specifications list all items/features desired by the City of Dickinson. In the event that a manufacturer or bidder cannot or will not furnish any items/features as called for by the City, the City will assess a specific value on this item or feature and add this amount to the bid price of the equipment bid to determine the total cost of the vehicle.
13. The successful bidder will be required to provide on the job type training for up to two days to instruct City personnel in proper safe operation, lubrication and maintenance for the new vehicle/equipment purchased.
14. The unit to be bid under this advertisement shall be a new current production model of the latest design meeting the specifications provided herein. Bidder may bid a new, unused prior-year model upon written pre-approval of the purchasing agent.
15. The bidder shall list on a separate sheet of paper any variations from, or exceptions to, the conditions and specifications of this bid. This sheet shall be labeled "Exception(s) to Bid Conditions and Specifications," and shall be attached to the bid.
16. All components must be new.
17. The successful bidder must furnish operator's manual, parts manual with exploded views and complete service and repair manual for all components. All manuals shall be paper hard copy or on digital media. If on-line manuals are also available, access must be at no cost to the City of Dickinson for the life of the equipment.
18. Vehicle must be delivered to the City of Dickinson Public Works Facility at 3411 Public Works Boulevard during normal business hours clean and ready to operate. The successful bidder shall schedule the delivery date and time at least one (1) working day in advance with the contact person listed on the cover page.
19. Vehicle/equipment must be test driven and all functions must be tested to make sure they work properly, and that there are no fluid leaks. All vendor installed attachments to be greased/lubricated. Vehicle must pass a final inspection performed by City employees before acceptance.
20. All fluid levels shall be filled to normal operating levels.
21. Fuel tank shall be full.
22. A Certificate of Origin shall be delivered to the City at the same time the vehicle is delivered to the City.
23. A list of all consumables and common wear parts must be provided with the vehicle. This must have all filters or other consumable parts listed in a table format listing the part number along with a description of the part and what component or system it is related to.
24. All testing and certification documents shall be delivered to the City with the vehicle.
25. Any irregularities, lack of clarity, requested bid changes, and all questions regarding this bid and the procurement process must be addressed to the contact listed on the cover page no

General Specifications

later than the end of the business on the date listed on the cover page. If a bid amendment is required it will normally be issued after this date.

Specifications of Warranty Coverage

1. The successful bidder will be fully responsible for the total cost of all repairs (parts and labor) to the vehicle and equipment during the warranty period, which will begin on the date of delivery. Bidder shall include all warranty details as part of their bid proposal. The successful bidder shall provide their own mechanic and tools for such work as they may desire to do in the field, in the bidder's shop, or in the City of Dickinson Fleet Maintenance Shop if it has space available to accommodate the vehicle. The City will promptly notify the successful bidder or an authorized agent of their firm when repairs are necessary.
 - a) Chassis – warranty shall be for the manufacturer's standard warranty or 5 years, whichever is longer.
 - b) Body – warranty shall cover the following items for a minimum of five (5) years:
 - i) No rust-through.
 - ii) Door hinges.
 - iii) Latches and lock cylinders.
 - iv) Shelves - guaranteed not to fail in bending under maximum 250 lb. rated load.
 - c) Body warranty shall cover the following for a minimum of two (2) years:
 - i) Structural warranty for crane compartment and understructure.
 - d) Crane – Parts and labor shall be covered for a minimum of two (2) years.
2. The City of Dickinson will assume, at its expense, all costs to repair or replace all parts and components normally consumed in day-to-day operations such as lubricating oil, filters of all types, grease, cleaning, lights, cab window glass, tires and tire repair.
3. Any mileage, zone, or other travel expenses shall be fully covered by warranty.
4. The City of Dickinson will maintain the 4 Wheel Drive Super Crew Cab Chassis with Service Body and Associated Equipment in accordance with manufacturer's recommendations.
5. The successful bidder will perform all major periodic inspections and adjustments prescribed in the maintenance schedule, with all costs covered by the bidder.
6. The successful bidder has the right to inspect the 4 Wheel Drive Super Crew Cab Chassis with Service Body and Associated Equipment during normal City of Dickinson working hours and make recommendations for repairs, improved maintenance, etc. in keeping with the requirements stated by the manufacturer in the shop manual for the maintenance and repair of the equipment.
7. Specific warranty requirements may appear in the Detailed Specifications.
8. Rules governing repairs and maintenance performed under warranty:
 - a) Costs of transportation of the vehicle to and from the repair site will be a part of the dealer cost. Repair parts shall be Original Equipment Manufacturer's.
 - b) Repairs may be made in service departments other than that of the successful bidder or the City of Dickinson; however, the successful bidder and the City of Dickinson must agree to repairs being made in other service departments and the service department chosen must be agreeable to both parties. All costs are

Specifications of Warranty Coverage

to be covered by the successful bidder as if the repairs were completed by the bidder.

9. The City of Dickinson shall have the right to sell, lease, trade or otherwise dispose of the vehicle; however, if such action is taken, the successful bidder shall not be further bound by the provisions of this contract

SPECIFICATIONS

4 WHEEL DRIVE SUPER CREW CAB CHASSIS WITH SERVICE BODY AND ASSOCIATED EQUIPMENT

BIDDERS INSTRUCTIONS:

- Bids must be submitted on City of Dickinson form only.
- Indicate Make and Model being bid in the space provided.
- Indicate compliance to the specifications on the "YES/NO" space.
- Indicate any deviations from the specifications in the "OFFERED" space.
- Attach "Exception(s) to Bid Conditions and Specifications" if needed.
- Initial in ink EACH page of the specifications, including General Specifications, Specifications of Warranty Coverage, and Detailed Specifications.
- Include Delivery Date on line provided.
- Sign the proposal page in ink.
- Place bid in sealed envelope as described in General Specifications.
- Electronic or Facsimile Bids will not be accepted unless prior written authorization is obtained from the contact person listed on the cover page.
- RETURN THIS ENTIRE BID PACKAGE WITH BID RESPONSE SHEET.
- Bid proposals must be received at the Public Works Facility, 3411 Public Works Boulevard, Dickinson, ND 58601 prior to the bid opening time. Late proposals will not be considered.

Vehicles shall be equipped with all advertised standard factory equipment unless otherwise specified, meet Federal Government requirements, and include, but not be limited to the following:

General Information:

All equipment and installation by the successful bidder must be complete in every aspect of the following specifications. The painting of all installed components and accessories shall be complete and absolute, including primer. All minor items including, but not limited to, conduit, connectors, tape, paint, fittings, fuses, etc. are the responsibility of the bidder. When specifications do not clearly identify the proper installation or it is obvious there is an error, the contact person listed on the contact page must be contacted for direction. A plan for mounting locations of dealer-mounted components or accessories must be submitted to the City of Dickinson for approval. It shall be the responsibility of the installer to relocate OEM and non-OEM components to accommodate the accessories if required. Frame modifications to accommodate components or accessories are not acceptable. Any systems such as hydraulic or system controls are to be from one common supplier or source. No additional monetary amount will be allowed.

MINIMUM BID SPECIFICATIONS

This specification describes the 4 Wheel Drive Super Crew Chassis with Service Body and Associated Equipment desired.

All equipment furnished under this contract shall be manufactured in the United States, new, unused, and the same as the manufacturer's current production model unless pre-approved. Accessories not specifically mentioned but necessary to furnish a complete unit ready to use shall also be included. The 4 Wheel Drive Super Crew Chassis with Service Body and Associated Equipment shall conform to the best practices known to the manufacturing trade in design and quality of materials.

This specification describes the desired Super Crew 4x4 19,500 lb. GVW chassis with an 11' crane body, 7,500 lb. hydraulic crane with 30' of horizontal reach, an all-in-one air compressor, generator, welder, battery charger and boost combo unit, and miscellaneous equipment as specified below.

Non-proprietary components shall be used.

Yes No Offered

CAB AND CHASSIS

General:

- | | | | |
|--|--------------------------|--------------------------|--|
| Cab and chassis shall be minimum 19,500 lb. GVW. | <input type="checkbox"/> | <input type="checkbox"/> | |
| 192" Wheelbase and 84" cab-to-axle dimensions. | <input type="checkbox"/> | <input type="checkbox"/> | |
| Chrome front bumper. | <input type="checkbox"/> | <input type="checkbox"/> | |
| Rear view camera & prep kit including cab wiring, frame wiring to the rear-most cross member and video display. Upfitter's kit shall include camera with mounting bracket and 14" jumper wire. | <input type="checkbox"/> | <input type="checkbox"/> | |
| Backup alarm. | <input type="checkbox"/> | <input type="checkbox"/> | |
| External mirrors: outside high-visibility vertical camper style with manual folding, heated, and power adjust. Mirrors shall include heated convex spotter mirrors. | <input type="checkbox"/> | <input type="checkbox"/> | |
| Delivery of chassis to equipment upfitter must be included in pricing. | <input type="checkbox"/> | <input type="checkbox"/> | |
| Double leaf super spring installed on curb side rear axle to support additional weight of crane. | <input type="checkbox"/> | <input type="checkbox"/> | |
| Cab to be painted white. | <input type="checkbox"/> | <input type="checkbox"/> | |
| Snow Plow Prep | <input type="checkbox"/> | <input type="checkbox"/> | |
| Heavy Service Front Suspension | <input type="checkbox"/> | <input type="checkbox"/> | |

Engine

- | | | | |
|---|--------------------------|--------------------------|--|
| Minimum 8-cylinder naturally aspirated gasoline engine. | <input type="checkbox"/> | <input type="checkbox"/> | |
|---|--------------------------|--------------------------|--|

Minimum 350 horsepower. _____

Engine block heater. _____

240 Amp heavy duty alternator and (1) 78-AH 750 CCA battery with run down protection. _____

Drive Train

10-Speed automatic transmission. _____

Transmission Power-Take-Off provision to include transmission mounted live drive and stationary mode PTO. _____

Four wheel drive with electronic shift transfer case and automatic locking hubs. _____

Limited slip rear differential with 4.88 axle ratio. _____

225/70Rx19.5G BSW AS front and rear tires mounted on 19.5" argent painted steel wheels. _____

Trailer Tow Package. Cooler, Engine. Oil Cooler, Transmission Cooler. _____

Spare tire, wheel, & 6-ton jack to be included. _____

Interior

Interior color: Gray _____

Power windows. _____

Power door locks with keyless remote. _____

AM/FM radio with digital clock. _____

Steering wheel mounted cruise control. _____

Manual tilt/telescoping steering column. _____

Manual air conditioning. _____

- HD cloth 40/20/40 Split bench seat including center armrest, cup holder, storage, and driver's side manual lumbar. _____
- (2) 12V DC power outlets. _____
- 110v/400w outlet. _____
- Integrated trailer brake controller. _____
- Full dash gauge package to include speedometer, tachometer, engine coolant temperature, engine oil pressure, transmission oil temperature, volt meter, and fuel gauge _____
- Six (6) OEM chassis upfitter switches. _____
- Privacy glass. _____

UTILITY BODY

BODY CONSTRUCTION

- Compartment tops are to be constructed of heavy-duty aluminum extrusion. Extruded top to include dual mounting channel system and longitudinal external ribs. Holes drilled in the top of the compartments for top mounted accessories will not be accepted. No exceptions. _____
- Compartment backs are to be constructed of heavy-duty 1/8" aluminum. Compartment back to be encapsulated in extruded top for maximum strength. _____
- Compartment bottoms are to be constructed of heavy duty 1/8" aluminum. Compartment bottoms to be integral to compartment backs. Aluminum hat channel support shall be under compartment bottom running front to rear for maximum support. _____

BODY COMPARTMENTS

- Body to consist of three (3) compartments on street side and four (4) compartments on curb side, more fully described below. _____

Left (street) side first compartment:

Shall be 55 1/4" wide with internal bolt-in vertical divider and dual overlapping doors. Clear door opening shall be minimum 49 1/4" wide by 43 1/2" high. _____

Front section shall have one heavy duty aluminum drawer set, 35.5"H x 34"W X 18"D, with 3-3", 3-5", 1-7" drawers. _____

Rear section of compartment shall have one heavy duty aluminum drawer set, 37"H x 13 1/2"W X 17 1/4 "D, with 4-3", 3-5", 1-7" drawers _____

Inverter to supply 120v 400 Watts shall be mounted to the inside wall above drawer unit. Inverter shall be wired to the truck battery and powered only when the ignition switch is on. Two receptacles shall be provided. _____

Left (street) side second compartment: _____

Horizontal compartment over wheel well with dual overlapping doors. Compartment shall be 53 1/4" wide. Clear door opening shall be minimum 49" wide by 23 1/2" high. _____

Compartment shall have one heavy duty aluminum drawer set, 13.5"H x 48"W X 18"D, with 3-3" drawers. _____

Left (street) side third compartment: _____

Vertical compartment with single door to the rear of the wheel. Compartment shall be 24 3/4" wide. Clear door opening shall be minimum 19" wide by 43 1/2" high. _____

Shall have 3 adjustable shelves with dividers _____

Right (curb) side first compartment: _____

Shall be 34" wide with dual overlapping doors. Compartment shall be 34" wide. Clear door opening shall be minimum 28" wide by 43 1/2" high. _____

Shall have a 2-bottle holder for oxygen and acetylene bottles and a torch tip tray holder. _____

Shall have a compartment divider kit with 3 adjustable shelves. _____

Right (curb) side second compartment: _____

- Shall be 21 1/4" wide with single door. Clear door opening shall be minimum 17 1/4" wide by 43 1/2" high. _____
- Shall have one triple rack kit for chains or ropes _____
- Right (curb) side third compartment: _____
- Horizontal compartment over wheel well with dual overlapping doors. Compartment shall be 53 1/4" wide. Clear door opening shall be minimum 49" wide by 23 1/2" high. _____
- Shall have 2 adjustable shelves with dividers _____
- Right (curb) side fourth compartment: _____
- Vertical compartment with single door to the rear of the wheel. Compartment shall be 25 1/4" wide. Clear door opening shall be minimum 18 3/4" wide by 43 1/2" high. _____
- Shall have 1 shelf. _____
- Shall be rated to accept 44,840 ft. lb. corner mount crane. _____
- All side compartments shall be 22" deep and 52" high. _____
- Cargo floor area shall be 50" wide not counting wheel well boxes. _____
- Shelving system shall consist of 18ga. bright spangled galvanized shelves with slotted hemmed dividers on 4" centers. System must include three dividers and a maximum capacity rating of 250lb per shelf. _____
- Six (6) recessed D-ring tie-downs shall be mounted low on the rear compartment walls within the cargo area. Three (3) rings shall be mounted on each side at the front and rear corners and centered between the front and rear of cargo area. _____
- Successful bidder shall confer with City personnel to set final configuration of compartments. Any changes shall be invoiced at dealer cost. _____

CRANE COMPARTMENT

- Crane Compartment Rating: Curb side rear compartment shall be rated to accept 44,840 ft. lb. corner mount crane. _____

Crane compartment walls are to be comprised of 1/4" steel with 3/4" top plate support. 4" x 1/2" top plate supports shall be used to provide structural integrity. _____

Crane compartment to be predrilled for crane outlined below. _____

Crane compartment to be isolated from the forward compartments by a minimum of 1/2" space to prevent side pack twisting while the crane is in operation. _____

Torsion box understructure of body to have 8" x 12ga. longitudinal torsion box and is to include 10 ga. smooth galvanized steel top floor and two 10" longitudinal reinforcements. Two 8" x 3" x 1/4" tube cross members attached to crane reinforcement. One 3" x 2" x 1/8" cross member is to be positioned at the front of the wheel well. _____

COMPARTMENT DOORS

Doors are to comprise of a 14ga. outer panel and an 18 ga. inner panel consisting of 5000 series aluminum. _____

Doors are to contain hat section reinforcements between panels to increase torsional rigidity. _____

Doors are to possess double spring, over-center, door retainers on all vertical doors to keep the door in positive open or closed position. _____

All door hinges are to be corrosion resistant and constructed entirely of stainless steel. Hinges shall be billet style with hidden fasteners and 5/16" stainless steel hinge pin. _____

All latches are to consist of polished stainless steel compression latch with a 3-point securing. _____

All latches are to be attached to door with hidden hardware. _____

All latches are to be secured with individual locks and a rotating master door locking mechanism with a single location on the curb side and a single location on the street side of the body. _____

Primary door seal to be an automotive 'bulb type' neoprene inner door seal. _____

A secondary door seal shall be installed on the outer door perimeter to provide additional seal and prevent door contact with body. _____

REAR BUMPER

- The rear workbench surface shall consist of a 21" x 76" x 1/4" steel smooth plate with 1-1/2" overhang at the rear to allow clamping. _____
- Thru compartment shall be located under workbench with access doors on each side. _____
- Workbench bumper to incorporate a stabilizer housing tube measuring 6" X 4" X 3/8" wall. _____
- Crane and body shall be made stable with a minimum of one set of hydraulic out/down rear outriggers. _____
- Outrigger hoses shall be installed internally. _____
- Wilton 5.5" Tradesman vise mounted to bumper. _____
- Bumper to incorporate 2" receiver hitch tube with safety chain eyes and 7-way RV style trailer socket. _____
- Mud flaps to be installed behind rear axle. _____

ELECTRICAL

- Wire harness system shall be preinstalled to accommodate crane and compressor installation and allow for the addition of compartment, flood, and emergency lighting options. _____
- Wiring harness shall be encased in woven loom. _____
- All wires are to be labeled for ease of installation/troubleshooting. _____
- All wire terminals shall use automotive type connections. _____
- LED compartment lights shall be installed to illuminate all compartments. _____
- Four (4) LED work lights shall be mounted on the body (1 on each side and 2 on the rear) and an LED work light on the boom tip. _____
- Work light switches shall utilize upfitter switches. _____
- All lighting shall be L.E.D type and meet all FMVSS-108 standards. _____
- 102 dB back up alarm to be provided. _____

- OEM chassis rear view camera installed at rear of body and connected to OEM dash mounted monitor. _____
- Whelen R1LPPF LED strobe light installed on cab guard and wired to chassis upfitter switch. Shall be visible for 360 degrees. _____
- (2) Whelen M2AC flush mount LED strobe lights at rear of bed and wired to chassis upfitter switch. _____

BODY PAINT

- Exterior prime paint of body to feature precoat spray cleaner and seal for additional corrosion protection. Prime paint must be oven cured to provide a hard, durable finish. _____
- Exterior paint to be hi-gloss baked-on polyurethane enamel to match cab. _____
- Interior paint to be mid-gloss, mar resistant white. _____
- Body to be completely undercoated using three (3) mils of petroleum base or equivalent material. _____
- Body cargo area floor, bumper, and walls to be lined with black bed liner product. _____

CRANE

General:

- 47,000 ft-lb rated minimum with a load chart (both in the quote and posted on the body) _____
- Crane shall have 30'of hydraulic horizontal reach. Crane must have two hydraulic extensions. _____
- Crane shall have 31'9" of vertical reach above the crane base. _____
- Crane must be capable of lifting 1,450lbs at full extension horizontally. _____
- Crane shall have 400 degree rotation system with a steel ball bearing ring gear, driven by a steel worm gear encased in a cast iron worm gear housing. Base assembly to be made of high strength cast iron. Worm gear to be powered by a high torque hydraulic motor. _____

Crane shall be capable of lifting 7,500 lbs. @ 5'10" from centerline of rotation. _____

Boom:

Boom shall be equipped with two hydraulic extensions. _____

Maximum reach to be 30'. _____

Boom elevation articulation shall be -10 degrees to + 80 degrees. _____

Crane shall incorporate a flip sheave horse head with bar style ATB device or low profile head. _____

Booms shall have high strength polymer wear pads between boom sections to ensure proper boom placement and functionality. _____

Metal on metal booms or metal boom wear pads are not acceptable. _____

Adjustable boom support to be installed to body. _____

Winch:

High efficiency planetary winch driven by a high torque hydraulic motor. _____

Winch to have stainless steel sleeves providing corrosion resistance for winch drum seals. _____

Drum seals to be rubber coated. _____

Winch to have maximum single part line capacity of 3,750 lbs., two-part line capacity of 7,500 lbs. _____

Maximum single-part line speed of 60 ft/min. _____

Wire rope shall be 3/8" 6X31 IWRC-DGXIP X 120'. _____

Snatch block must activate ATB device. Sheave must be specifically designed for 3/8" wire rope as per ANSI B30.5. Crane hook must meet ANSI B30.5. _____

Winch brake to be static/dynamic brake to eliminate counterbalance valve. _____

Internal check valve motor case drain and brake cooling oil, eliminating requirement for extra drain line. _____

Winch to have advanced graphite resin brake friction discs, endures exposure to water contamination without disintegrating, endures high temperatures in heavy-duty applications, starts smoothly and provides exceptional low speed control because of nominal differences between static and dynamic coefficients of friction. _____

Winch to have high performance Teflon brake shaft seal, which endures excessive back pressure and high operating speeds. _____

Control System:

Crane shall be equipped with a wireless hand-held controller with full proportional control. _____

Wireless Controller shall have separate toggle switch control for each function. _____

Wireless Controller shall have ability to ramp up engine speed. _____

Wireless Controller shall have a magnet on the back of the controller to allow storing the controller on a metal surface. _____

Wireless Controller shall incorporate an operator feedback system to inform the operator of the load on the crane via LCD screen and vibration on the handheld controller. _____

LCD Screen to show the following:

- Actual load on hook.
- Distance of reach from CL of crane.
- Additional distance allowed with load.
- Percent of maximum capacity at operators discretion.

Wireless Controller shall incorporate a boost feature to allow for momentary capacity increase via a "Boost" button on the handheld controller. _____

The load monitoring and handheld feedback control system shall incorporate a "Safe Mode". Safe mode will be entered automatically by the crane should a safety or load calculating device become inactive or operate incorrectly. _____

Crane shall be equipped with manual override controls on the body of the crane. _____

Safety System:

Crane shall offer overload shutdown system which prevents crane movement into a position that would increase load moment of the crane when it enters an overload situation. _____

All cylinders to have counter balance valves to prevent cylinder collapse in case of hose failure. _____

Paint:

Crane extension booms to be coated with a co-polymer that is chemically bonded to the steel for excellent corrosion resistance. _____

All other surfaces to be primed and finish coated with a two-part polyurethane paint to match the body and cab color. _____

MULTI-PURPOSE UNIT

General:

Unit to be a Vanair Air-N-Arc 300 Gas powered unit or pre-approved equal. _____

Basic specifications of multi-purpose unit are as follows:

Welder – DC; 270 Amp; 100% Duty Cycle; CC: 40-300 Amp; CV: 15-30 Volt.

Generator – 7 Kw peak; 6.8 Kw continuous; AC 60 Hz single phase; 120v and 240v outlets.

Air compressor: - 40 CFM at up to 175 PSI rotary screw with clutch.

Booster – 300 Amp 12V/24V boost; 50 Amp 12V charge.

Air tank – 4 gallon integrated.

Dual 75' spring rewind welding cable reels mounted to top of street side compartment _____

- Roller fairlead.
- 75' of 1/0 weld cable on each.
- Ground clamp and electrode holder.
- Connected to welder circuit of combination unit.

25' battery boost cables with connection to control panel and heavy duty alligator clamps. _____

A complete engine and compressor service kit with oil and filters for combination unit to be provided at time of delivery. _____

Air Filter/Dryer/Regulator shall be mounted in left side first compartment and plumbed between air tanks and hose reel. _____

Hose reel with 75' x 1/2" air hose, roller fairlead, mounted on top of street side compartment and plumbed to 1/2" FLR and air tank. _____

Minimum 22 gallon frame mounted air tank to be installed to chassis frame rail and connected to integrated air tank. _____

12/3 100' spring rewind cord reel rated for no less than 20 amps mounted on top of street side compartment and connected to power source. _____

Oxygen/acetylene reel _____
- 50' x 1/4' dual hose.
- Roller fairlead.
- Mounted on top of street side compartment and plumbed to right front compartment.
- Hoses shall be equipped with check valves and quick couplers.

PTO and Hydraulic System:

Hot shift PTO mounted to automatic transmission and hydraulic pump. _____

Single section hydraulic pump rated 8 GPM @ 3,000 PSI for crane. _____

20 gallon bulkhead mounted hydraulic reservoir. _____

10-micron in tank filtration system. _____

Electronic load-sensing speed control for chassis engine. _____

Miscellaneous Equipment:

Cab guard at front of body to protect cab and rear window. _____

Approximate 10 gallon aluminum water tank as follows: _____

- 12 volt heat blanket affixed to tank to prevent from freezing during cold weather use.
- Heat blanket to be wired to chassis upfitter switch.
- 12 volt water pump to be plumbed to tank and hose reel.
- Water pump rated at no less than 2.5 GPM @ 40 PSI.
- Hose reel with 50' of 1/2" hose, roller fairlead, and adjustable spray nozzle.
- Tank, pump, and reel mounted in crane compartment.
- Heat blanket to be protected from damage.
- Tank to be equipped with drain valve.

- (3) Folding hooks mounted on cargo area wall of body for ladder storage. _____
- Storage tubes for 10' valve exerciser tools below floor of cargo area. _____
- Basket to be mounted on top of curb side compartments (below stowed crane) to hold shovels and other hand tools. Size to be approximately 8" high, 75" long, and 20" wide. Consult with City for final design and dimensions. _____

PROPOSAL

4 Wheel Drive Super Crew Cab Chassis with Service Body and Associated Equipment
CITY OF DICKINSON

TO: City of Dickinson
Dickinson, North Dakota

We, the undersigned, agree to furnish the City of Dickinson the following 4 Wheel Drive Super Crew Cab Chassis with Service Body and Associated Equipment conforming to the General Specifications, the Detailed Specifications, and the attached Detailed Manufacturer's Specifications at the price listed below:

VEHICLE

MAKE _____ MODEL _____

SERVICE BODY

MAKE _____ MODEL _____

CRANE

MAKE _____ MODEL _____

MULTI-PURPOSE UNIT

MAKE _____ MODEL _____

ESTIMATED DELIVERY DATE: _____

	Option 1 – Cab and Chassis only	Option 2 - Utility Body and Associated Equipment including installation	Option 3 – Complete Unit
TOTAL COST:	\$ _____	\$ _____	\$ _____
Trade-in Allowance	\$ _____	\$ _____	\$ _____
FINAL COST	\$ _____	\$ _____	\$ _____

Deduct to supply and install Vanair Air-N-Arc 250 Light in lieu of 300 \$ _____

Warranty Details Attached

Yes No

FIRM: _____
(Please print or type)

ADDRESS: _____

BY: _____

DATE: _____ SIGNATURE _____