

STANDARD BID CONDITIONS

H-16-334H

1. **ACCEPTANCE AND REJECTION:** The Arkansas State Highway and Transportation Department (AHTD) reserves the right to reject any or all bids, to accept bids in whole or in part (unless otherwise indicated by bidder), to waive any informalities in bids received, to accept bids on materials or equipment with variations from specifications where efficiency of operation will not be impaired, and to award bids to best serve the interest of the State.
2. **PRICES:** Unless otherwise stated in the Bid Invitation, the following will apply: (1) unit prices shall be bid, (2) prices should be stated in units of quantity specified (feet, each, lbs., etc.), (3) prices must be F.O.B. destination specified in bid, (4) prices must be firm and not subject to escalation, (5) bid must be firm for acceptance for 30 days from bid opening date. In case of errors in extension, unit prices shall govern. Discounts from bid price will not be considered in making awards.
3. **BID BONDS AND PERFORMANCE BONDS:** If required, a **Bid Bond** in the form of a cashier's check, certified check, or surety bond issued by a surety company, in an amount stated in the Bid Invitation, must accompany bid. **Personal and company checks are not acceptable as Bid Bonds.** Failure to submit a Bid Bond as required will cause a bid to be rejected. The Bid Bond will be forfeited as liquidated damages if the successful bidder fails to provide a required Performance Bond within the period stipulated by AHTD or fails to honor their bid. Cashier's checks and certified checks submitted as Bid Bonds will be returned to unsuccessful bidders; surety bonds will be retained. The successful bidder will be required to furnish a **Performance Bond** in an amount stated in the Bid Invitation, as a guarantee of delivery of goods/services in accordance with the specifications and within the time established in the bid. **Personal and company checks are not acceptable as Performance Bonds.** In some cases, a cashier's check or certified check submitted as a Bid Bond will be held as the Performance Bond of the successful bidder. Cashier's checks or certified checks submitted as Performance Bonds will be refunded shortly after payment has been made to the successful bidder for completion of all terms of the bid; surety bonds will be retained. Surety bonds must be issued by a surety company authorized to do business in Arkansas, and must be signed by a Resident Local Agent licensed by the Arkansas State Insurance Commissioner to represent that surety company. Resident Agent's Power-of-Attorney must accompany the surety bond. Certain bids involving labor will require Performance Bonds in the form of surety bonds only (no checks of any kind allowed). In such cases, the company issuing the surety bond must comply with all stipulations herein and must be named in the U. S. Treasury listing of companies holding Certificates of Authority as acceptable sureties on Federal Bonds and as acceptable reinsuring companies. Any excess between the face amount of the bond and the underwriting limitation of the bonding company shall be protected by reinsurance provided by an acceptable reinsuring company. Annual Bid and Performance Bonds on file with E & P Division must have sufficient unencumbered funds to meet current bonding requirements, or the bid will be rejected, unless the balance is submitted as set forth above, prior to bid opening.
4. **TAXES:** The AHTD is not exempt from Arkansas State Sales and Use Taxes, or local option city/county sales taxes, when applicable, and bidders are responsible to the State Revenue Department for such taxes. These taxes should not be included in bid prices, but where required by law, will be paid by the AHTD as an addition thereto, and should be added to the billing to the AHTD. The AHTD is exempt from Federal Excise Taxes on all commodities except motor fuels; and excise taxes should not be included in bid prices except for motor fuels. Where applicable, tax exemption certificates will be furnished by the AHTD.
5. **"ALL OR NONE" BIDS:** Bidders who wish to bid "All or None" on two or more items shall so stipulate on the face of bid sheet; otherwise, bid may be awarded on an individual item basis.
6. **SPECIFICATIONS:** Complete specifications should be attached for any substitution or alternate offered, or where amplification is necessary. Bidder's name must be placed on all attachments to the bid.
7. **EXCEPTIONS TO SPECIFICATIONS:** Any exceptions to the bid specifications must be stated in the bid. Any exceptions to manufacturer's published literature must be stated in the bid, or it will be assumed that bidder is bidding exactly as stated in the literature.
8. **BRAND NAME REFERENCES:** All brand name references in bid specifications refer to that commodity or its equivalent, unless otherwise stated in Bid Invitation. Bidder should state brand or trade name of item being bid, if such name exists.
9. **FREIGHT:** All freight charges should be included in bid price. Any change in common carrier rates authorized by the Interstate Commerce Commission will be adjusted if such change occurs after the bid opening date. Receipted common carrier bills that reflect ICC authorized rate changes must be furnished.
10. **SAMPLES, LITERATURE, DEMONSTRATIONS:** Samples and technical literature must be provided free of any charge within 14 days of AHTD request, and free demonstrations within 30 days, unless AHTD extends time. Failure to provide as requested within this period may cause bid to be rejected. Samples, literature and demonstrations must be substantially the same as the item(s) being bid, unless otherwise agreed to by AHTD. Samples that are not destroyed will be returned upon request at bidders expense. Samples from successful bidders may be retained for comparison with items actually furnished.
11. **GUARANTY:** Unless otherwise indicated in Bid Invitation, it is understood and agreed that any item offered or shipped on this bid shall be newly manufactured, latest model and design, and in first class condition; and that all containers shall be new, suitable for storage or shipment and in compliance with all applicable laws relating to construction, packaging, labeling and registration.
12. **BACKORDERS OR DELAY IN DELIVERY:** Backorders or failure to deliver within the time required may constitute default. Vendor must give written notice to the AHTD, as soon as possible, of the reason for any delay and the expected delivery date. The AHTD has the right to extend delivery if reasons appear valid. If reason or delivery date is not acceptable, vendor is in default.
13. **DEFAULT:** All commodities furnished will be subject to inspection and acceptance by AHTD after delivery. Default in promised delivery or failure to meet specifications authorizes the AHTD to cancel award or any portion of same, to reasonably purchase commodities or services elsewhere and to charge full increase, if any, in cost and handling to defaulting vendor. Applicable bonds may be forfeited.
14. **ETHICS:** *"It shall be a breach of ethical standards for a person to be retained, or to retain a person, to solicit or secure a State contract upon an agreement of understanding for a commission, percentage, brokerage, or contingent fee, except for retention of bona fide employees or bona fide established commercial selling agencies maintained by the contractor for the purpose of securing business."* (Arkansas Code, Annotated, Section 19-11-708).

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

NOTICE OF NONDISCRIMINATION

The Arkansas State Highway and Transportation Department (Department) complies with all civil rights provisions of federal statutes and related authorities that prohibit discrimination in programs and activities receiving federal financial assistance. Therefore, the Department does not discriminate on the basis of race, sex, color, age, national origin, religion (not applicable as a protected group under the Federal Motor Carrier Safety Administration Title VI Program), disability, Limited English Proficiency (LEP), or low-income status in the admission, access to and treatment in the Department's programs and activities, as well as the Department's hiring or employment practices. Complaints of alleged discrimination and inquiries regarding the Department's nondiscrimination policies may be directed to Joanna P. McFadden Section Head – EEO/DBE (ADA/504/Title VI Coordinator), P. O. Box 2261, Little Rock, AR 72203, (501)569-2298, (Voice/TTY 711), or the following email address: joanna.mcfadden@ahtd.ar.gov

Free language assistance for Limited English Proficient individuals is available upon request.

This notice is available from the ADA/504/Title VI Coordinator in large print, on audiotape and in Braille.

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
LITTLE ROCK, ARKANSAS
EQUIPMENT & PROCUREMENT DIVISION
BID SHEET

Bid No. **H-16-334H**
Page 1 of 1

BIDDER: _____

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1. 1 - Cab and Chassis, Diesel, Automatic Transmission with Service Body, & Hydraulic Crane and Integrated Power System to meet AHTD Spec. **16-58.**

FOB - AHTD Equipment and Procurement, 11302 West Baseline Road, Little Rock, AR 72209

Cab and Chassis proposed to furnish:

Make _____ Model _____ Warranty _____

Crane proposed to furnish:

Make _____ Model _____ Warranty _____

Service Body proposed to furnish:

Make _____ Model _____ Warranty _____

Integrated Power System to furnish:

Make **EnPak** _____ Model _____ Warranty _____

Bid Price (Do not include any Local, State or Federal Taxes)

Total for 1 Vehicle

\$ _____

Guaranteed Delivery Date _____

Additional units may be purchased
at this price through _____

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

SPECIFICATION 16-58

FOR

CAB AND CHASSIS

33,000 POUNDS GVWR

AUTOMATIC TRANSMISSION

WITH SERVICE BODY, CRANE AND

INTEGRATED POWER SYSTEM

General Conditions:

- A. **Current Model:** Units furnished under this specification shall be the latest improved model in current production, as offered to commercial trade, built for the U.S. market, and shall be of quality workmanship and material. Units manufactured for foreign markets will not be accepted. All equipment offered under this specification shall be new. Used, reconditioned, shopworn, demonstrator, prototype or discontinued models are not acceptable. Manufacturers of the units supplied must have been in the business of producing operational units for at least two years and must have recently sold similar units to domestic governmental agencies. The model furnished must have been in production for a minimum of one year, or be the latest version of a previous model. Bidder(s) will be required to submit documentation substantiating the aforementioned requirements. A list of user references may also be required.
- B. **Literature:** Manufacturers literature, verifying adherence of proposed unit to each line item addressed in this specification, shall be submitted with the bid. If any literature and/or specifications of items conflict with AHTD specifications, the conflict(s) shall be specifically noted, corrected and submitted with the bid.
- C. Any deviations from specifications and requirements herein must be clearly pointed out by bidder. Otherwise it will be considered that equipment offered is in strict compliance with these specifications and requirements, and successful bidder will be held responsible therefor. Deviations must be explained in detail on an attached sheet. However, no implication is made by the Arkansas State Highway and Transportation Department that deviations will be acceptable.
- D. Units shall be assembled, adjusted and made ready for continuous operation at time of delivery.
- E. **Manuals:** The successful bidder shall furnish one (1) Operator's Instruction Manual with each unit delivered and one (1) copy each of Shop Repair Manual and Parts Book to each FOB point.
- The successful bidder may provide Shop Repair Manuals and Parts Manuals on computer media (CD, DVD, USB Drive, etc.) in lieu of printed manuals.
- F. All parts, accessories and tools necessary for satisfactory operation of unit shall be furnished whether or not they are specifically mentioned in this specification (including standard equipment as regularly furnished by manufacturer as shown on printed literature and specifications - unless specifically excluded by this specification).
- G. **Parts Inventory & Service Facilities:** The successful bidder shall maintain a representative inventory of replacement parts and service facilities for servicing equipment bid on.
- H. **Demonstration:** The Arkansas State Highway & Transportation Department reserves the right to require a demonstration, under actual working conditions, of equipment bid under this specification before award is made. The demonstration would be performed (free of any charge) by the bidder or an authorized representative at a mutually acceptable location. If requested, the bidder should be prepared to demonstrate the equipment within thirty (30) days after notification. Failure of the bidder to perform a satisfactory demonstration within the specified time may be grounds for rejection of the bid.
- I. **Drawings:** Professional quality drawings which depict the layout of the chassis will be provided with the bid.
- J. **Inspection:** The AHTD reserves the right to inspect bodies during manufacture, or prior to their installation, for compliance with specifications and to inspect hydraulics installation during work in progress. Location of hoists on truck chassis shall be approved by AHTD prior to installation. All workmanship shall be first class (no welding on truck frame to install dump body hoist). Any unit delivered under this specification is subject to rejection if there is evidence of poor workmanship by either the vendor, upfitter or the original manufacturer.
- K. Due to the nature of work performed by AHTD, body-hoist combinations furnished under this specification may be subject to use under adverse conditions such as dumping on road shoulders at a slight angle and spot dumping of loads. The design and strength characteristics of the entire dump unit shall be such that the unit structural members and the hoisting system shall suffer no deformation, damage or structural failure resulting from raising a full payload under these conditions.

- L. Delivery Requirements: It will be the responsibility of the Successful Bidder to guarantee delivery of the cab & chassis as specified, including items or equipment installed by a third party contractor, within the quoted time.
- M. Cooperative Purchasing: Other tax-supported entities* in Arkansas (cities, counties, state agencies, school districts, etc.) may purchase from this Contract on an individual basis under the same specifications and conditions, and at the pricing set forth by each vendor, all at the discretion of each vendor in each case. Prices could be reduced by a vendor for minor alterations in conditions (changing order quantities, deleting options, etc.) as agreed by both parties, but could not be raised above the contract bid price except for any additional freight charges. Vendors would not be required to sell to any such entity under this contract, and those entities would not be obligated to purchase from the contract.

Each entity wishing to purchase from the contract must make contact directly with the appropriate vendor(s). The Highway Department shall remain "out of the loop" for such transactions: all contact, orders, invoices, payments, etc. regarding such transactions must take place exclusively between the tax-supported entity and the vendor. The Department shall be held harmless of any and all liability arising from such transactions.

* Tax-supported entities are defined as those receiving more than half of total funding from appropriated tax funds.

Unit Specifications:

- A. General: This specification is designed to provide the Arkansas State Highway and Transportation Department with single axle service trucks for equipment maintenance and repair operations. The truck's uses will consist of in field service work on equipment including oil change, mechanical repair, welding and hoisting of heavy objects.
- B. Cab & Chassis:
1. GVWR: No less than 33,000 pounds.
 2. Cab to Axle: Nominal effective CA of 90".
 3. Intended Use: Service Truck.
 4. Tires: Six (6) steel belted tubeless radials, no less than 11R22.5 - "G" Load Range; Single Front and Dual Rear.
 5. Wheels: Seven (7) 22.5" Diameter, tubeless type, hub piloted steel disc with 220 mm center hole, 285.75 mm 10 hole bolt circle diameter and not less than 8.25" rim section.
 6. Engine: Turbocharged 4 Cycle diesel with a minimum piston displacement of 7.6 liters developing no less than 250 SAE gross horsepower at rated RPM and no less than 800 lb. ft. SAE gross torque. Shall have a minimum governed speed of 2,200 RPM. Shall have full flow oil filter(s), fuel filters, dry type air cleaner, 12 volt electrical equipment with no less than 130 amp alternator and maintenance free batteries as regularly furnished with engine specified. Engine shall be equipped with a block heater rated at no less than 1,000 watts which will operate on 120 volts AC.
 7. Cooling System: As recommended and regularly furnished by the manufacturer for use with the engine size specified above with anti-freeze protection to -20° F, or lower.
 8. Exhaust System: Vertical exhaust stack with curved outlet. Exhaust stack shall be equipped with a heat shield. If the PDF is part of the exhaust stack, the clearance to the service body must be pre approved.
 9. Engine Shutdown: Engine safety shutdown system with manual or automatic override to include the following features: Low oil pressure - warning bell/buzzer plus shutdown, high coolant temperature - warning bell/buzzer plus shutdown and low coolant level - warning bell/buzzer plus light or shutdown.
 10. Throttle Control: Engine shall be equipped with an in-cab throttle control for use with PTO. Shall be electronic control type.
 11. Fuel Tank: Single fuel tank with instrument panel fuel gauge. Minimum fuel capacity of 80 gallons.
 12. Transmission: Allison 3500 RDS automatic with six (6) speed programming and PTO provision. Transmission shall have synthetic lubricant and be equipped with transmission oil cooler.
 13. Steering: Hydraulic actuated power steering as regularly offered by manufacturer.
 14. Front Axle: I Beam Type with wet seals, outboard mounted drums and a minimum capacity of 12,000 pounds.

15. Front Springs: As required to meet axle capacity specified above.
16. Rear Axle: Single speed full-floating type with wet seals, outboard mounted drums and a minimum capacity of 21,000 pounds. Ratio of 6.14, 6.17, 6.43 or 6.50 to 1. Alternate ratio may be provided if approved by AHTD prior to delivery. (Axle ratio should provide a maximum theoretical geared speed of no less than 69 MPH and still provide acceptable startability under load.)
17. Rear Springs: As required to meet GVWR and axle ratings specified above. Rear springs shall consist of both main and auxiliary or overloads.
18. Air System: Air compressor shall have a minimum capacity of 13.2 cfm and draw air through the engine air cleaner. Air system shall be equipped with a heated air dryer.
19. Brakes: Factory installed full air operated two shoe type with automatic slack adjusters and dust shields on front and rear. Rear brakes shall have spring set parking brakes. Installation of the air tanks and/or dryer shall not inhibit the installation of the service body (clear frame).
20. Trailer Controls: Shall be equipped with electric trailer brake controls for use with utility type trailers. Shall include factory installed integrated trailer brake controller. Seven wire electric cable shall be routed to end of tail shelf and shall be equipped with 7-wire receptacle.
21. Frame: Section modulus and yield strength of frame material shall provide a minimum RBM of 1,210,000 in/lb.
22. Cab: Conventional extended cab as regularly furnished by manufacturer, complete with insulation and all interior trim. Cab glass shall include windshield, roll-up windows in doors and rear cab glass as a minimum. Shall have key type locks on right and left doors, factory installed fresh air heater-defroster unit, grab handle on each side, right and left sun shades and fitted rubber floor mats.
 - a. Cab Mounts: Air suspension type rear cab mounts.
 - b. Instruments: Shall include the following as a minimum:
 - 1) Speedometer/odometer
 - 2) Electric tachometer
 - 3) Ammeter or volt meter
 - 4) Oil pressure gauge
 - 5) Coolant temperature gauge
 - 6) Transmission oil temperature gauge or warning light
 - 7) Air brake pressure gauge.
 - c. Cruise Control: Factory installed electronic cruise control.
 - d. Air Conditioning: Factory installed air conditioning. Shall include tinted glass all around.
 - e. Tilt Steering Column: Factory installed.
 - f. Windshield Wipers: Dual electric intermittent windshield wipers with washers.
 - g. Auxiliary Switches: Shall be equipped with a minimum of six (6) rocker switches mounted in the instrument panel for use by bodybuilder or end user to supply power to work lights, warning lights and other auxiliary electrical devices.
 - h. Seats: Five (5) person seating consisting of an air suspension driver's seat, a non-suspension front passenger's seat and a full width rear bench seat with three (3) person seating capacity. Shall include seat belts for all seating positions.
 - i. Radio: Factory installed electronic AM/FM/ radio.
 - j. Heated Mirrors: Dual Heated West Coast Sr. type mirrors no less than 7" x 16" with adjustable brackets and auxiliary convex mirrors.

- k. Air Horn: Single or dual trumpet air horn.
 - 23. Hood: Tilting fiberglass or composite hood and fenders with stationary grill.
 - 24. Front Bumper: Swept back or similar type front bumper.
 - 25. Lights: Shall be equipped with dual beam headlights, parking lights, clearance lights, directional turn signals with column mounted switch and hazard flasher switch. Rear signals to be wired for stop and tail lights in addition to directional signals.
 - 26. Backup Alarm: Shall be equipped with an electric backup alarm meeting the requirements of SAE J994 with a minimum sound level output of 97 decibels.
 - 27. Color: Cab, hood, fenders and wheels shall be Sherwin Williams F8W2030 Frost White Acrylic Enamel, or equal. Grill, bumper and mirrors shall be as regularly furnished by manufacturer.
- C. Service Body: Shall be standard height service body normally designed to mount on a 33,000 pound GVWR cab and chassis with an 84" CA measurement.
- 1. Construction: Electrically welded all metal construction with edges rolled or folded. Body shall have longitudinal members and cross members welded for floor support. Body floor shall be constructed of no less than 12 gauge safety tread plate.
 - 2. Dimensions:
 - a. Body Length: No less than 132".
 - b. Body Width: No less than 98".
 - c. Body Height, Road Side: No less than 58".
 - d. Body Height, Curb Side: Front of wheel well forward, no less than 58". Wheel well rearward no less than 50".
 - e. Compartment Depth: 22", minimum.
 - f. Floor Width: 50" – 55".
 - 3. Compartments: Each side of the body shall have a minimum of two (2) vertical compartments in front of the rear wheels, one (1) horizontal compartment over the rear wheels and a minimum of one (1) vertical compartment behind the rear wheels. Vertical compartments shall be full height. All doors shall be protected from weather and have double panels with flush type handles and locks keyed alike. Doors shall have rubber seals to keep out water and dust.
 - a. Drivers Side Compartments Configuration:
 - 1) The larger of the two vertical compartments located in front of the rear wheels shall be equipped with a heavy duty, steel, mechanics tool box. Tool box shall be no less than 30" wide, 18" deep, 47" tall and contain a minimum of nine (9) drawers. Tool box shall be equipped with heavy duty drawer slides rated at a minimum of 250 pounds. Each drawer shall have a minimum of three dividers and be equipped with a latching system to prevent drawers from opening inadvertently. Tool box shall be securely mounted in the compartment and shall be painted manufacturers standard color.
 - 2) The smaller of the two vertical compartments located in front of the rear wheels shall be equipped with a minimum of three (3) adjustable shelves.
 - 3) The horizontal compartment shall be equipped with a minimum of one (1) adjustable shelf with dividers.
 - 4) The rear vertical compartment(s) behind the rear wheels shall be equipped with a minimum of three (3) adjustable shelves.
 - b. Curb Side Compartments Configuration:
 - 1) The larger of the two vertical compartments located in front of the rear wheels shall be a split compartment with one section designed to carry oxygen and acetylene bottles. Section shall have reinforced floor, vents, bottle retainer and mechanism to secure bottles in position. Second section of the compartment shall be equipped with a minimum of three (3) adjustable shelves.

- 2) The smaller of the two vertical compartments located in front of the rear wheels shall be equipped with a minimum of three (3) adjustable shelves.
 - 3) The horizontal compartment shall be equipped with a minimum of one (1) adjustable shelf with dividers.
 - 4) The rear vertical compartment behind the rear wheels shall be equipped with crane reinforcement designed for mounting a 10,000 pound hydraulic crane. Compartment shall contain a closed center hydraulic manifold for operation of the crane; outriggers, accessory hydraulics tool circuit, hose reel with 50' of airline and air reel pay out at rear of body.
4. **Bumper:** Rear of body shall have a combination bumper and tail shelf which extends no less than 24" behind the service body. Shall have rear mounted grip strut steps on either side of tail shelf. Bumper shall be equipped with a tool storage compartment with access doors on either side. Doors shall include flush type handles and locks keyed alike.
 5. **Tailgate:** Body shall have a hinged tailgate no less than 9" high that opens to floor level with chain or arm support.
 6. **Outriggers:** Tail shelf shall be equipped with hydraulically operated out and down outriggers. Outriggers shall be of the size and type recommended by the manufacturer for the service truck described herein. When fully retracted the outriggers shall have a minimum width of 95" and at full extension shall be no less than 170" in width. Outrigger down cylinders shall have a minimum stroke of 23".
 7. **Mud Flaps:** Shall have mud flaps no less than 24" wide and 1/4" thick, without advertising, mounted behind rear wheels.
 8. **Lights:** Recess combination stop and tail lights in addition to directional signals and backup lights to meet ICC regulations.
 9. **Color:** Body shall be painted Sherwin Williams F8W2030 Frost White Acrylic Enamel, or equal.
- D. **Service Crane:** Hydraulically powered crane designed for mounting on the service body specified above. Unit shall have a minimum lifting capacity of no less than 10,000 ft. lbs. at 6' from centerline of rotation. Crane shall provide power elevation, power extension and power rotation of the boom.
1. **Hoisting Unit:** Hydraulically powered, reversible planetary winch with rated lifting capacity of 10,000 pounds at six (6) feet from centerline of rotation. Minimum single line feed rate shall be no less than 60 ft. per minute. Winch shall be equipped with at least 120' of no less than 7/16" aircraft type steel cable and be complete with swivel block with hook.
 2. **Boom:** Shall be designed from seamless steel tubing and mounted on a pedestal type base. Shall provide a minimum horizontal reach from centerline of rotation of 12', when retracted, to a maximum horizontal reach of no less than 24' when fully extended.
 - a. **Rotation:** 360° continuous power rotation.
 - b. **Boom Elevation:** Power boom elevation ranging from horizontal to no less than 70° above horizontal.
 - c. **Boom Extension:** Shall be equipped with hydraulically powered boom that extends and retracts the boom through its full range of travel.
 3. **Hydraulic System:** Shall be powered by the onboard EnPak unit.
 4. **Mounting:** Boom pedestal shall be designed to mount on the reinforced curbside rear corner of service body specified above. Mounting base shall be square or rectangular, approximately 20" long x 20" wide.
 5. **Lifting Capacity:** Shall have the following capacities with load over outrigger or to rear of truck and with boom retracted: no less than 5,100 pounds at 0° boom angle, no less than 5,900 pounds at 30° boom angle and no less than 10,000 pounds at 60° boom angle. Lifting capacity at maximum reach at 0° boom angle shall be no less than 2,300 pounds.
 6. **Boom Support:** A boom support shall be furnished with the service crane to hold and retain the boom during transport. Boom support shall be suitable for installation on a service body with 20" compartment depth. Mounting of the boom support shall be accomplished without making penetrations into the service body.
 7. **Boom Control:** Shall be a handheld radio remote control unit to operate all functions of the crane.

- E. Integrated Power System: An EnPak power system shall be installed on top of the vertical compartments on the roadside front of the service body. Mounting of the integrated power system shall be accomplished without making penetrations into the service body. Unit shall provide the following capabilities;
1. Engine: Shall be equipped with a minimum 24 horsepower diesel engine. Unit shall be wired to the battery of the chassis for electric power needs and fuel shall be provided from the chassis' fuel tank.
 2. Air Compressor: Shall be equipped with a variable speed rotary screw air compressor which produces a minimum of 60 cfm.
 3. Hydraulic System: Unit shall be equipped with a variable displacement hydraulic pump capable of producing a minimum of 20 gpm. Hydraulic system shall operate the crane, outriggers and auxiliary hydraulic circuit. Hydraulic tank shall be installed in front of the bed's front header. All necessary filters, lines and valves necessary for the efficient operation of the system shall be installed.
 4. Generator: Unit shall have a generator capable of producing a minimum of 120/240 volt, single phase, 60 cycle AC power supply of no less than 6,000 watts.
 5. All necessary components for the efficient use of the integrated power system shall be provided whether specifically mentioned or not.
- F. Welder/Generator: A diesel engine driven AC/DC arc welder and generator unit shall be furnished and installed on top of the horizontal and vertical compartments on the roadside rear of the service body. Unit shall be installed in such a way as to not create penetrations into the service body. Unit provided shall be a Miller Bobcat 250 Diesel and meet the following requirements as a minimum.
1. Engine: Liquid cooled diesel, with no less than three (3) cylinders, developing a minimum of 19 horsepower at rated RPM. Shall have 12 volt electrical system and include starter, alternator and battery. Shall be equipped with electric hour meter, automatic idle device, dry type air cleaner, oil filter, low oil pressure/high water temperature shutdown, fuel tank and muffler.
 2. Welder/Generator: Shall have a current output rating, at 100% duty cycle, of no less than 250 amps AC and no less than 225 amps DC. Shall have AC amperage range of not more than 50 amps at minimum setting to not less than 250 amps at maximum setting. Shall have DC amperage range of not more than 50 amps at minimum setting to not less than 225 amps at maximum setting. Shall have 120/240 volt, single phase, 60 cycle AC power supply of no less than 9,000 watts when used as a generator. Shall also have power output, while welding, of no less than 3,500 watts at welding output loads of up to 140 amps. Shall be enclosed in a weatherproof cabinet.
 3. Welding Accessories: A minimum of 50' of No. 1 ground cable, a minimum of 50' of No. 1 electrode cable, one (1) 200 amp electrode holder for 5/32 rod and one (1) 200 amp. ground clamp shall be provided. Ground cable and electrode cable shall be complete with terminals. Miller Digital Elite Series auto-darkening welding helmet and chipping hammer.
- G. Lube Skid: Service body shall be equipped with a Taylor Pump and Lift skid lube TPL-236-983. Skid lube system shall be designed for easy installation and removal from the service body. Unit shall be delivered installed in the service body and be connected to the air system of the EnPak unit by the use of quick couplers.
1. Tanks: Skid lube shall have two (2) 50 gallon new oil tanks and one (1) 60 gallon waste oil tank.
 2. Pumps: Unit shall have two (2) Alemite 5:1, new product oil pumps and an Alemite 1' diaphragm waste oil pump.
 3. Hose Reels: Skid lube shall be equipped with three (3) hose reels for dispensing and recovery of oil. The two (2) new oil product reels shall have 50' of dispensing hose and the waste oil reel shall be equipped with 30' of recovery hose.
 4. Product Meters: Each of the new product oil hoses shall be equipped with a hand controller with metering capability.
 5. Dimensions: Skid lube shall be no more than 42" wide, 36" tall and 60" deep.
- H. Warranty:
1. Cab and chassis shall have truck manufacturer's standard warranty as regularly furnished on new vehicles sold to the public. Warranty data shall be furnished with each unit.

2. The service body, integrated power system, crane and other incidental equipment furnished under this specification shall be warranted against defective material and workmanship for a minimum period of (12) months (365 days) from date unit is placed in operation by AHTD.
 - a. Warranty should include all parts, labor and transportation costs to the location of equipment.
 - b. If equipment cannot be repaired on location, warranty shall include cost of transport to the facility where the repair work will be done.
3. Warranty repairs are to be performed by any authorized dealership of the manufacturer; however, the Successful Bidder will be ultimately responsible for coordinating repairs and insuring that warranty repairs are completed in a timely manner.
4. If any warranty literature submitted with the bid conflicts with AHTD warranty requirements, the conflict(s) shall be specifically noted, corrected and included with the bid or the conflict(s) will be considered an exception to warranty specifications and the bid rejected.
5. Recent prior failure to provide warranty-work, parts, replacement parts or service, in a timely manner, for equipment from the same manufacturer or dealer shall be grounds for the rejection of any submitted bid, or for the denial of any otherwise qualified low bidder, whether such failure is attributable to the manufacturer or the dealer of the equipment. For the purposes of this paragraph "timely manner" means a period of time not exceeding thirty (30) calendar days to provide requested warranty-work, parts, replacement parts, or service. For the purposes of this paragraph "manufacturer" means the original manufacturer of the equipment and its successor or successors, regardless of number, and whether acquired by sale, merger, or otherwise. For the purposes of this paragraph "replacement part" means a part redesigned by a manufacturer to correct a design or engineering defect and which replacement part is capable of providing dependable performance in normal operation conditions for its normal service life without failure. Such bid or bids may be rejected by the Department until such failure or failures have been remedied to the satisfaction of the Department and until such manufacturer or dealer is providing such warranty-work, parts, replacement parts, and service in a timely manner.