



## STANDARD BID CONDITIONS

## M-15-060R

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 and in the form of a cashier's check, certified check, or surety bond issued by a surety company, unless otherwise 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 or disability, 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](mailto: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**

**SPECIFICATION 15-069**

**FOR**

**TRUCK MOUNTED UNDER BRIDGE INSPECTION UNIT**  
**75' WORKING REACH**

**A. General Conditions:**

1. **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. Machines 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 may be required to submit documentation substantiating the aforementioned requirements. A list of user references may also be required.
2. **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.
3. 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.
4. **Drawings:** Professional quality drawings which depict the layout of the chassis will be provided with the bid.
5. **Manuals:** The successful bidder shall furnish two (2) copies each of the following literature: Operator's Instruction Manual, Shop Repair Manual and Parts Book for Under Bridge Inspection Unit and all components.  
  
The successful bidder may provide Shop Repair Manuals and Parts Manuals on computer media (CD, DVD, USB Drive, etc.) in lieu of printed manuals.
6. Units shall be assembled, adjusted and made ready for continuous operation at time of delivery.
7. All parts, accessories and tools necessary for satisfactory operation of this 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).
8. **Training:** The successful bidder shall furnish qualified personnel to instruct AHTD operators and service technicians on operation and maintenance of machine.
9. **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.
10. **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.

**B. Unit Specification:**

1. General: This specification is intended to cover the purchase of a completely self contained Under Bridge Inspection Unit including cab and chassis, flat bed, aerial device and all necessary booms and components required to accomplish the functions specified herein. Under Bridge Inspection Unit shall make it possible to position inspectors and their equipment no less than 13' below the bridge deck while reaching 75' horizontally. Unit shall be capable of extend no less than 72' below the bridge deck, and extend up no less than 49' above the bridge deck, as measured to the bottom of the basket. The unit shall be able to cover a work area of approximately 6,600 square feet without moving the truck, with all movements controlled by the personnel in the work basket. A work basket shall be provided which when completely extended and while the truck is driven slowly forward or back, will provide continuous or overlapping areas of coverage.
2. Under Bridge Inspection Unit: The equipment shall consist of a truck mounted aerial lift device, hydraulically operated, for under bridge inspection and maintenance work. It shall consist of a turret mounted on a truck behind the cab and four (4) articulating booms sections. A second turret shall be mounted at the outboard end of the first boom section. The second boom shall be attached to the second turret. The third boom shall telescope. The fourth boom shall telescope and include a work basket on the end.
3. Pedestal and Sub-frame: The pedestal and sub-frame shall be constructed of high strength steel capable of withstanding the torsional stress applied by the boom while at full extension and with maximum rated load in the work platform. The pedestal shall be welded to a tubular sub-frame that extends from the back of cap to the end of the frame. The sub-frame shall be mounted to the truck frame.
4. Turrets and Booms: For clarity, the turrets and booms are designated herein as Turrets number 1 and 2, and Boom numbers 1, 2, 3 and 4. The aerial device shall be designed to be operated from either curbside or roadside of the truck with the truck's longitudinal axis parallel to the curb line. It shall be possible to move the truck forward or backward at slow speed with booms extended in working position.
  - a) Turret 1: Shall be mounted on top of the pedestal and allow operation from both sides of the truck. Turret shall provide a minimum of 180 degrees of rotation.
  - b) Boom 1: Shall be hinged to Turret 1 and be a minimum of 16' 11" in length. Shall be capable of 30° minimum elevation and 35° minimum depression from horizontal.
  - c) Turret 2: Shall be mounted at the outboard end of Boom 1 and be capable of at least 180° rotation with the work basket fully extended in an under bridge position.
  - d) Boom 2: Shall be attached to Turret 2 and to Boom 3. Shall have a minimum reach of 24' and be able to articulate a minimum of 105° from stowed position.
  - e) Boom 3: Shall be attached to the end of Boom 2 and include a telescoping boom section. Shall have a minimum reach of 48' and be able to articulate a minimum of 155° from stowed position.
  - f) Boom 4: Shall be pin mounted to the outboard end of Boom 3 and include a telescoping boom section provide a minimum vertical reach of 16' and be capable of a minimum articulation of 125°.
5. Work Basket: Shall be attached to the outboard end of Boom 4. The work basket shall be made of aluminum and be approximately 60" long x 40" wide x 42" deep with a minimum capacity of 700 pounds. The work basket shall be hydraulically self-leveling through the full range of travel. Gravity leveling and the hunt and seek or stepping type action that could cause the basket leveling to lag behind boom travel are not acceptable. A 12 volt outlet shall be provided in the work basket for plugging in a spotlight for inspection purposes.
6. Safety Belts: Unit shall be furnished with three safety harnesses and lanyards with attaching points locate inside the work basket.
7. Working Reach: Telescoping and articulation of the booms shall provide a horizontal reach of no less than 75'. With the booms tilted downward, the vertical reach as measured from the bottom of the work basket, shall be no less than 72' below the bridge deck.
8. Overhead Reach: Telescoping and articulation of booms shall provide positioning of the bottom of the work basket no less than 49' above the bridge deck.

9. Hydraulics: All aerial device movements are to be hydraulically powered. Hydraulic system shall be sufficient to properly operate the unit. All valves, pumps, filter, hoses, fittings and required PTO accessories shall be furnished whether specifically mentioned or not.
- a) PTO and Hydraulic Pump: The PTO shall be transmission mounted. Cab shall be equipped with a PTO engaged light. The hydraulic pump shall be powered from the PTO and maintain constant flow and pressure.
  - b) Hydraulic Cylinders: All articulating functions of the booms are to be done with double acting cylinders with automatic safety check valves mounted directly to the cylinders so that in the event of a cylinder failure the booms will not collapse. All cylinder bores are to be pressure tested and serialized. Certification is to be provided.
  - c) Hydraulic Lines: Hydraulic hoses shall be wire braid reinforced with a bursting pressure rating of no less than 200 % of system operating pressure.
  - d) Filters: Hydraulic system shall be equipped with a replaceable 10 micron return filter and a suction strainer.
  - e) Hydraulic Tank: Shall be of welded steel construction with a minimum storage capacity of 50 gallons. Tank shall be complete with baffles, clean out, sight glass and magnetic drain plug.
  - f) Backup Hydraulic Pump: The unit shall be equipped with an emergency backup hydraulic pump system. The pump shall be driven by an auxiliary, liquid cooled, diesel engine. Auxiliary engine is to be installed in a lockable compartment and draw fuel from the chassis fuel tank. This system is to be used in the event of truck engine, PTO, or truck mounted pump failures and shall have the capability to stow the unit from any operating position.

10. Controls: Two (2) complete sets of electrical controls are to be provided for operation of the aerial device and one (1) set of manual controls is to be provided. One (1) electrically operated control is to be mounted in the work basket. One (1) set of remote controls for use from the bridge deck. The manually operated controls are to be located near Turret 1 in case of an electrical failure. Controls are to be proportional flow control, two-way, return to neutral, lever type. The truck level controls shall have the capability at any time to override the work basket controls. All controls are to be of the dead man type and will control all movements of the booms either separately or in combination without loss of speed of any of the operating functions. All controls are to be labeled as to their function.

A master power control switch shall be provided at the work basket, to render the controls inoperable when the unit is in its work position, to prevent the accidental activation of any boom controls.

11. Stabilization: Shall be accomplished by a minimum of four (4) hydraulically operated suspension lockouts. Lockouts shall be mounted on the front steer axle and rear drive axle. Other axles may be equipped with lockouts as deemed necessary by the manufacturer. The spring lockouts shall allow forward and reverse movement of the truck at a speed of at least 3 mph.

A safety interlock system shall be provided that will not allow the operation of the aerial device unless the spring lockouts are engaged and the counterweight deployed.

12. Sliding Counterweights: Hydraulically controlled sliding counterweights and all necessary components for that function shall be furnished to assist in stabilization of the unit.
13. Safety and Design Considerations: The equipment shall be built to meet all applicable State and Federal requirements and regulations. In particular, the unit shall be tested for stability in accordance with current ANSI A.92.8 statutes, as applicable.
14. Dimensions: When the unit is in the stowed for over-the-road travel conditions, the overall nominal dimensions shall not exceed 102" width, 33' 0" in length from the back of the cab to rear of body, and 13' 6" in height. Overall unit length shall not exceed 44'.

When the unit is in its working configuration under the bridge, it shall not take up more than one lane of traffic.

15. Communications: A three (3) station, 12 volt intercommunication circuit providing both listen and transmit from the cab of the truck, the main control station located on the frame and on the work basket shall be provided. The station on the work basket shall be an open system allowing workers under the bridge to talk and listen without operating switches. The two (2) remaining stations shall require a push to talk switch. Unit in the cab shall be conveniently located for the driver. The intercommunication circuit shall be powered by the truck batteries
16. Generator: Unit shall be equipped with a 120 Volt, 5 KW, 60 Hz, single phase, AC generator. Generator shall be driven by the auxiliary diesel engine which powers the emergency backup hydraulic system. Four (4) 120 volt, three (3) contact, waterproof, grounding receptacles with ground fault interruption protection shall be installed on the unit. Two (2) receptacles shall be mounted at the work basket and two (2) on the truck flat bed body.

17. Color: Unit shall be painted Sherwin Williams F8W2030 Frost White Acrylic Enamel, or equal.
18. Performance Test: A performance test shall be made to determine the capability of the machine and to see that it meets all requirements set forth in these specifications such as Under Bridge Horizontal Reach, Stability, Vertical Reach (down), Load Capacities, Road Travel Clearance, Communications, Travel with Platform in Under Bridge Position, and all other functions.

**C. Flat Bed Body:**

1. Construction: An all steel platform type body shall be provided. Body length shall be as required to suit truck frame and provide an overall nominal length from the back of the cab of no more than 33' 2". Deck shall be constructed of diamond plate steel no less than 3/16" thick treated with a non-skid material. The deck shall be welded to heavy-duty structural steel crossmembers and longitudinals with side and end rails. A minimum of one (1) set of access steps shall be provided at the rear of the deck. Shall have anti-sail mud flaps no less than 24" wide and 1/4" thick, without advertising, mounted in front of the pusher axle, behind the rear steer axle, rear drive axle and tag axle.
2. Lights and Reflectors: Side marker and clearance lights shall be grommet mounted LED type. Reflectors shall be bolt on type. Lights and reflectors shall comply with Federal Motor Vehicle Safety Standard FMVSS108.
3. Storage Boxes: Two (2) aluminum, water tight, tool boxes with shelves and swing doors shall be provided. These boxes are to be approximately 12 cubic feet capacity. Boxes shall be lockable and are to be keyed alike.
4. Strobe Lights: Two (2) LED strobe lights are to be mounted on the back rail of the flat bed body. Suitable make and model is Whelen 5V3A, or approved equivalent. Ground effect portion of light shall be wired to activate when truck marker lights are turned on.
5. Color: Unit shall be painted Sherwin Williams F8W2030 Frost White Acrylic Enamel, or equal.

**D. Cab & Chassis:**

1. General: Shall be a conventional cab type cab and chassis with tandem steer axle and tandem rear drive axles. In addition, the chassis shall be equipped with a pusher axle located in front of the tandem drive axles and steerable tag axle located behind the tandem drive axles.
2. GVWR: No less than 86,000 pounds.
3. Cab to Axle: No less than 240" to center of tandem drive axles.
4. Wheelbase: Per truck manufacturer to meet CA requirements.
5. Engine: Liquid cooled 4 cycle diesel with a minimum piston displacement of 12.4 liters. Shall have an advertised rating of no less than 430 SAE gross horsepower and a minimum of 1,550 lb. ft. SAE gross torque. Governed speed shall be no less than 2,000 RPM. Shall have full flow oil filter(s), fuel filters, dry type air cleaner, 12 volt electrical equipment with no less than 160 amp alternator and maintenance free batteries as regularly furnished with engine specified.
6. Engine Brake: Jacobs engine brake, or equal, designed to use engine compression to retard engine speed. Shall be capable of utilizing all engine cylinders for braking effect.
7. Engine Speed Control: Shall be equipped with electronic speed control for use with PTO provision specified above.
8. 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.
9. Cooling System: Heavy duty cooling system recommended by the manufacturer for use with the engine size and PTO provision specified above. Shall have extended life anti-freeze protection to -20° F, or lower.
10. Block Heater: Engine shall be equipped with a block heater rated at no less than 1,500 watts which will operate on 120 volts AC.
11. Exhaust System: Vertical muffler and exhaust stack with curved outlet. Exhaust stack to be equipped with a heat shield.

12. Transmission: Allison HD 4560P automatic with a minimum of six (6) forward speeds. Transmission shall be equipped with PTO drive gear.
13. Steer Axles: Shall be twin, tandem steer axle with each having a minimum capacity of 20,000 pounds. Axle shall have wet seals, outboard mounted drums and automatic slack adjusters.
14. Steer Suspension: Each of the front tandem steer axle shall have a minimum suspension capacity of 20,000 pounds and be equipped with heavy duty shock absorbers.
15. Steering: Hydraulic actuated power steering as regularly offered by manufacturer for use with axles described above.
16. Front Tires and Wheels: Four (4) 425/65R22.5 steel belted tubeless radials - load range "J" minimum. Shall be mounted on 22.5" diameter ten (10) hole, hub piloted steel disc wheels with a rim section of no less than 12.25".
17. Rear Drive Axles and Suspension: Tandem with power divider, inter-axle differential with lock out and Henderson RT-463 equalizing beam type suspension. Shall be full floating with wet seals, outboard mounted drums and have a minimum capacity of 46,000 pounds. Ratio of 5.29 or 5.38 to 1. Alternate ratio may be provided if approved by AHTD prior to delivery. Looking for 65 MPH.
18. Pusher Axle: Non-steerable pusher axle shall have a minimum capacity of 17,000 pounds and be complete with spacer kit, air controls and dual tires and wheels. Pusher axle shall be equipped wet seals, outboard mounted drums, automatic slack adjusters and air up and air down capability. Pusher axles shall be mounted forward of rear drive axles. Exact location and spacing of the pusher axle in relation to the rear tandem axle shall be as required by the manufacturer of the Under Bridge Inspection Unit.
19. Tag Axle: The tag axle shall have a minimum capacity of 13,000 pounds and be complete with spacer kit, air controls, and single tires and wheels. Pusher axle shall be equipped wet seals, outboard mounted drums and automatic slack adjusters. The tag shall be a double convalescent air lift type, self steering, with air up and air down capability. Exact location and spacing of the tag axle in relation to the rear tandem axle shall be as required by the manufacturer of the Under Bridge Inspection Unit.
20. Rear Tires And Wheels: Fourteen (14) no less than 11R22.5 - load range "H" steel belted tubeless radials. Wheels shall be 22.5" diameter ten (10) hole, hub piloted steel disc with a rim section of no less than 8.25".
21. Spare Wheel: One (1) spare rear wheel (less tire) shall be furnished.
22. Air System: Air compressor shall have a minimum capacity of 15 cfm and draw air through the engine air cleaner. Air system shall be equipped with a heated air dryer.
23. Brakes: Factory installed full air operated two-shoe type with dust shields and automatic slack adjusters. Drive axles shall have spring set parking brakes.
24. Frame: Section modulus and yield strength of frame material shall provide a minimum RBM of 3,520,000. If the manufacturer of the Under Bridge Inspection Unit requires additional frame reinforcement, it shall be provided. It shall be the responsibility of the successful bidder to insure that any additional frame requirements that may be needed for proper installation of the unit are provided (i.e. - clean CA or clear frame rails).
25. Cab: Conventional 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 lock 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.
26. Cab Mounts: Air suspension type rear cab mounts.
27. Instruments: Shall include the following as a minimum:
  - a) Speedometer/odometer
  - b) Electric tachometer
  - c) Electric engine hour meter
  - d) Ammeter or volt meter
  - e) Oil pressure gauge
  - f) Coolant temperature gauge



- g) Transmission oil temperature gauge or warning light
- h) Air brake pressure gauge
- 28. Air Conditioning: Shall be equipped with factory-installed air conditioning and include tinted glass all around.
- 29. Tilt Steering Column: Factory installed.
- 30. Windshield Wipers: Dual electric intermittent windshield wipers with washers.
- 31. Seats: Driver's shall be fully adjustable air suspension bucket seat. Passenger's seat shall be air suspension. Shall include driver's and passenger's seat belts.
- 32. Radio: Factory installed electronic AM/FM radio.
- 33. Heated Mirrors: Dual Heated West Coast Sr. type mirrors no less than 7" x 16" with adjustable brackets and auxiliary convex mirrors.
- 34. Bar light: A 55" minimum amber, LED, bar light is to be mounted on the top of the cab using manufacturers mounting kit. Suitable make and model is Whelen Freedom, FX2AAAA with QTY6 of FLDAA or approved equivalent.
- 35. Air Horn: Single base-dual trumpet air horn.
- 36. Hood: Tilting fiberglass hood and fenders with stationary grill.
- 37. Front Bumper: Swept back or similar type front bumper.
- 38. Turn Signals: Class A Directional Turn Signals with column mounted switch and hazard flasher switch. Front signals to be double faced. Rear signals to be wired for stop and tail lights in addition to directional signals.
- 39. 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.
- 40. Body Builders Wiring: Factory installed body builders wiring harness as required by the manufacturer of the Under Bridge Inspection Unit.
- 41. 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.
- 42. Strobe Lights: Two (2) LED strobe lights are to be mounted on the front bumper. Suitable make and model is Whelen 5V3A, or approved equivalent. Ground effect portion of light shall be wired to activate when truck marker lights are turned on.
- 43. Fuel Tank/s: Fuel tank(s) with instrument panel fuel gauge. Tank shall have a minimum fuel capacity of 100 gallons and be mounted on the left side of the chassis.
- 44. Tools: Lug Wrench with handle.
- 45. Color: Cab, Hood, Fenders & Wheels shall be Sherwin Williams F8W2030 Frost White Acrylic Enamel, or equal. Grill, bumper and mirrors shall be as regularly furnished by manufacturer.

**E. Warranty:**

1. Warranty: Cab and Chassis shall have truck manufacturer's standard warranty and service as regularly furnished on new vehicles sold to the public. Warranty data shall be furnished with each unit.
2. The Under Bridge Inspection Unit and other incidental equipment purchased under this specification shall be warranted against defective material and workmanship for a minimum period of twelve (12) months (365 Days) from date unit is placed in operation by AHTD. Warranty shall include parts, labor and transportation cost to location of equipment. If equipment cannot be repaired on location, warranty shall include cost of transport to the facility where the repair work will be done. It will be the responsibility of the successful bidder to insure that repairs are completed in a timely manner.
3. The successful bidder shall furnish the following: Warranty Data, which shall contain all necessary information such as motor and/or serial numbers and shall be signed by the selling dealer at the time vehicle is delivered to the Highway Department. One (1) copy of the Invoice to be furnished to Equipment & Procurement Division, P.O. Box 2261, Little Rock, Arkansas 72203. In addition, Certificate of Origin, Federal Excise Tax Exemption Certificate and Odometer Disclosure Statement shall be provided.