

STANDARD BID CONDITIONS

H-16-253P

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. When a bidder claims and can show clear and convincing evidence that a material mistake was made in the bid and was not the bid intended, the bidder may be permitted to withdraw their bid prior to award without forfeiture of bid bond. 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). These bonds shall not only serve to guarantee the completion of the work, but also to guarantee the excellence of both workmanship and material until the work is finally accepted and the provisions of the Plans, Specifications, and Special Provisions fulfilled. 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) 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@arkansashighways.com.

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 AND PROCUREMENT DIVISION
BID SHEET**

Contract No.: H-16-253P

BIDDER: _____

Page 1 of 2

1. **1** – Cab & Chassis, 33,000# GVWR, 120” CA, Diesel, Automatic Transmission w/15’ Sign Body and 80 CFM PTO Driven Underbody Mounted Air Compressor, to meet AHTD **Spec. 16-83-056**.

FOB: **1 ea. - AHTD – District 5 Headquarters, 1673 Batesville Blvd. Batesville, AR 73501**

Bid Price (Do not include any Local, State or Federal Taxes) Each \$ _____

Total for **1** Cab & Chassis \$ _____

Cab & Chassis proposed as meeting specifications:

Make _____ Model _____ Warranty _____

Guaranteed Delivery Date _____

Additional Units may be purchased at the same pricing and conditions through _____
(Date)

2. **1** – Crew Cab & Chassis, 33,000# GVWR, 120” CA, Diesel, Automatic Transmission w/15’ Sign Body and 80 CFM PTO Driven Underbody Mounted Air Compressor, to meet AHTD **Spec. 16-84-056**.

FOB: **1 ea. - AHTD – District 4 Headquarters, 808 Frontier Road, Barling, AR 72923**

Bid Price (Do not include any Local, State or Federal Taxes) Each \$ _____

Total for **1** Cab & Chassis \$ _____

Cab & Chassis proposed as meeting specifications:

Make _____ Model _____ Warranty _____

Guaranteed Delivery Date _____

Additional Units may be purchased at the same pricing and conditions through _____
(Date)

BID TOTAL \$ _____

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
SPECIFICATION 16-83-056
FOR
CAB AND CHASSIS
33,000 POUNDS GVWR
AUTOMATIC TRANSMISSION WITH
15' SIGN BODY AND UNDERDECK AIR COMPRESSOR

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. 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.
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. **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.
5. Shall be assembled, adjusted and made ready for continuous operation at time of delivery.
6. 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).
7. **Parts Inventory & Service Facilities:** The successful bidder shall maintain a representative inventory of replacement parts and service facilities for servicing equipment bid on.
8. **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.
9. **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.
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. Crew Cab & Chassis:

1. GVWR: No less than 33,000 pounds.
2. Wheelbase: Minimum of 173", maximum of 202".
3. Cab to Axle: Nominal effective CA of 108".
4. Intended Use: Sign Body (Van type body modified for highway sign storage & transport).
5. Tires: Six (6) steel belted tubeless radials, no less than 11R22.5 - "G" Load Range; Single Front and Dual Rear.
6. 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.
7. 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.
8. 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.
9. Exhaust System: Horizontal or vertical exhaust. If vertical, exhaust stack shall have a rain cap or curved outlet and be equipped with a heat shield. Muffler and exhaust system shall provide clearance for installation of transmission mounted PTO with 80 cfm, shaft driven air compressor.
10. 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.
11. Throttle Control: Engine shall be equipped with an in-cab throttle control for use with PTO. May be mechanical locking type or electronic control.
12. Fuel Tank(s): Single or dual fuel tanks with instrument panel fuel gauge. Minimum fuel capacity of 100 gallons.
13. Transmission: Allison 3500 RDS automatic with six (6) speed programming and PTO provision. Transmission shall have synthetic lubricant and be equipped with a transmission oil cooler.
14. Steering: Hydraulic actuated power steering as regularly offered by manufacturer.
15. Front Axle: I Beam Type with wet seals, outboard mounted drums and a minimum capacity of 12,000 pounds.
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 68 MPH and still provide acceptable startability.)
17. 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.
20. Frame: Section modulus and yield strength of frame material shall provide a minimum RBM of 2,000,000.
21. 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 locks on right

and left front doors, factory installed fresh air heater-defroster unit, grab handle on each side, right and left sun shades and fitted rubber floor mats.

a) Instruments: Shall include the following as a minimum:

- (1) Speedometer/odometer
- (2) Electric tachometer
- (3) Electric engine hourmeter
- (4) Ammeter or voltmeter
- (5) Oil pressure gauge
- (6) Coolant temperature gauge
- (7) Transmission oil temperature gauge or warning light
- (8) Air brake pressure gauge

b) Air Conditioning: Factory installed air conditioning. Shall include tinted glass all around.

c) Windshield Wipers: Dual electric intermittent windshield wipers with washers.

d) 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.

e) Seats: Three (3) person seating, including seat belts, consisting of an air suspension driver's seat and a two (2) person passenger seat.

f) Radio: Factory installed electronic AM/FM/WB radio.

g) Heated Mirrors: Dual Heated West Coast Sr. type mirrors no less than 7" x 16" with adjustable brackets and auxiliary convex mirrors.

h) Air Horn: Single or dual trumpet air horn.

22. Hood: Tilting fiberglass or composite hood and fenders.

23. Front Bumper: Shall be equipped with front bumper as regularly furnished by manufacturer.

24. Lights: Shall be equipped with dual beam headlights, parking lights, clearance lights, automatic backup 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.

25. 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.

26. 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.

C. Sign Body:

1. Body: Shall be as per attached drawing (of which this specification sheet is made a part) and as specified below. Except for the inside vertical dimensions of the sign storage compartments, dimensions are nominal and may be adjusted to some extent for best fit to the body.

- Item 6 on drawing - total of four (4) doors, two (2) on each side.
- Item 7 on drawing – one (1) rear door.
- Skid boards down each side, 1-1/8" x 1' x 15' 6" (nominal) laminated oak board bolted to vertical channels with carriage bolts.
- 3/4" plywood to be bolted to front wall posts at bottom and extend 18" up from floor.
- Crossmembers on bottom floor to be no less than 3" structural channels on not more than 16" centers.
- Intermediate floor to have three (3) vertical supports on each side in front compartment and two (2) vertical supports on each side in rear compartment. Supports to be 2" x 1" aluminum channel.
- Main frame to be no less than 5" structural channel.

- Body shall have lighting equipment and reflectors to meet FMVSS108.
- 2. Mud Flaps: Shall have mud flaps no less than 24" wide and 1/4" thick, without advertising, mounted behind rear wheels.
- 3. Serial Number: Each unit shall be provided with a manufacturer's serial number, unique to each unit, permanently attached by plate or engraving. This shall be placed in a discreet location. No additional dealer's or manufacturer's advertisement shall be placed on the body without prior approval of AHTD.

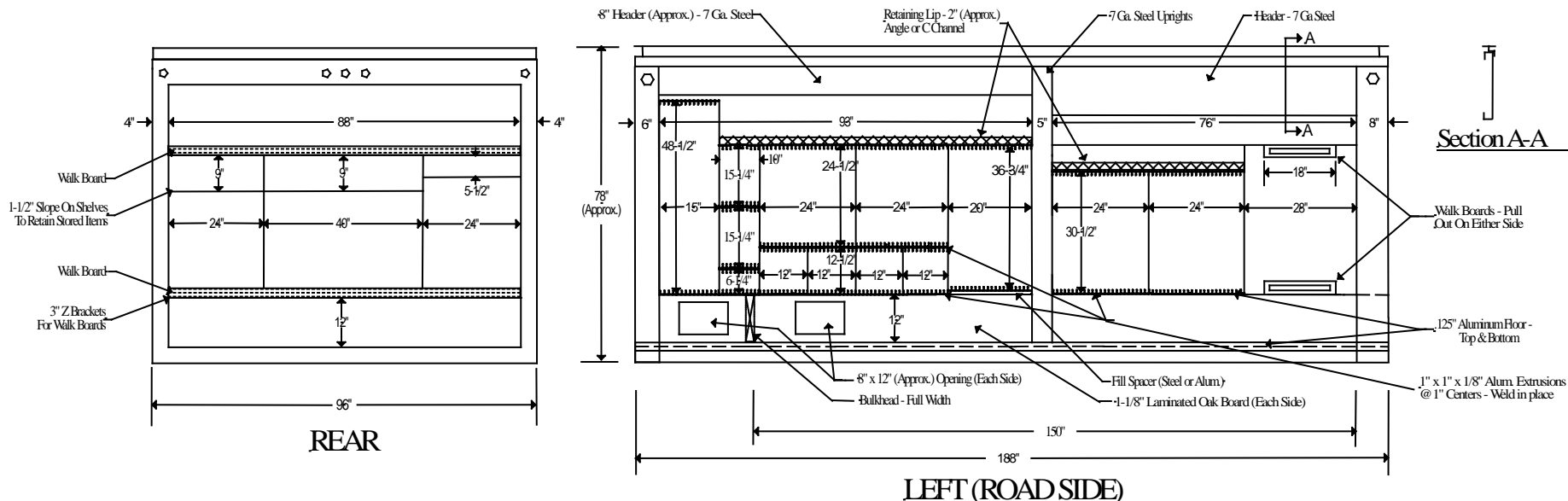
D. Air Compressor:

1. PTO Driven Air Compressor: A PTO driven air compressor with a minimum output rating of 80 cfm shall be provided. Unit shall be completely installed and ready for operation. The air compressor and all necessary incidentals shall be mounted below the truck bed.
2. Compressor: Positive displacement, single stage, oil flooded rotary screw type compressor driven by a drive shaft attached to a transmission mounted power take-off unit. The air compressor furnished shall produce a minimum of 80 cubic feet of free air per minute at no less than 100 psi.
3. Air Intake Filter: Remote mount two-stage, heavy duty, dry type air filter/s shall be provided for the air compressor.
4. Air Receiver: Shall be ASME approved for no less than 200 psi working pressure and be of adequate capacity for use with 80 cfm minimum air compressor. Receiver shall have an ASME approved pressure relief valve and be equipped with a fill cap, oil level sight gauge, 3/4" minimum service valve, 25 micron minimum spin-on air compressor oil filter with safety by-pass feature, and an air/oil separator. Air receiver shall be designed for under deck remote mounting and be mounted in a location which will allow the oil level sight gauge to be inspected without crawling beneath the truck.
5. Heat Exchanger: Compressor cooling system shall allow rated air delivery and pressure operation continuously in ambient temperatures up to no less than 125° F. Cooler shall be mounted in a sheet metal enclosure with a suction type fan assembly. A fan temperature switch shall be provided to regulate compressor cooling.
6. Protective Circuit: Compressor shall automatically shut down in case of high compressor temperature or over pressurization. An automatic blow down valve and minimum pressure orifice shall also be provided.
7. Instrument Panel: Shall be mounted at curbside rear and be equipped with a compressor hour meter, air pressure gauge, compressor oil temperature gauge and over-temperature/over-pressure reset switch. If the instrument panel is an electronic type it shall be mounted in the cab. Mounting location shall be convenient to the driver.
8. Inlet Control Valve: Shall automatically modulate output from 0 to 100% in response to air demand.
9. Speed Control: Shall be designed to suit engine make/type/model and fuel delivery system. Speed control for electronically controlled engines shall allow modulation of engine speed to match air demand.
10. Safety Switches: Unit shall be installed so that emergency brake must be applied to activate air compressor and shall include an interlock to prevent compressor from operating when transmission is in gear.
11. Power Take-Off: Shall be "hot shift", multi-gear type equipped with high grade needle or roller bearings. Power take-off provided shall be for mounting on an Allison 3500 RDS automatic transmission with six speed programming. Shall have a pilot light to indicate when PTO is engaged.
12. Drive Line: Minimum 2-1/2" Dana 1310 series, or equal, driveline with universal joint, yoke and companion flange.
13. Air Lines: Minimum 3/4" NPT air discharge lines shall be furnished and installed to provide outlets at the upper and lower curb side rear edges of the body. An additional 1/2" NPT outlet shall be provided at the lower curb side rear for use of an air drill or impact wrench. Outlets shall be capped or plugged when delivered to AHTD. (Appropriate quick disconnects will be installed by AHTD personnel.)

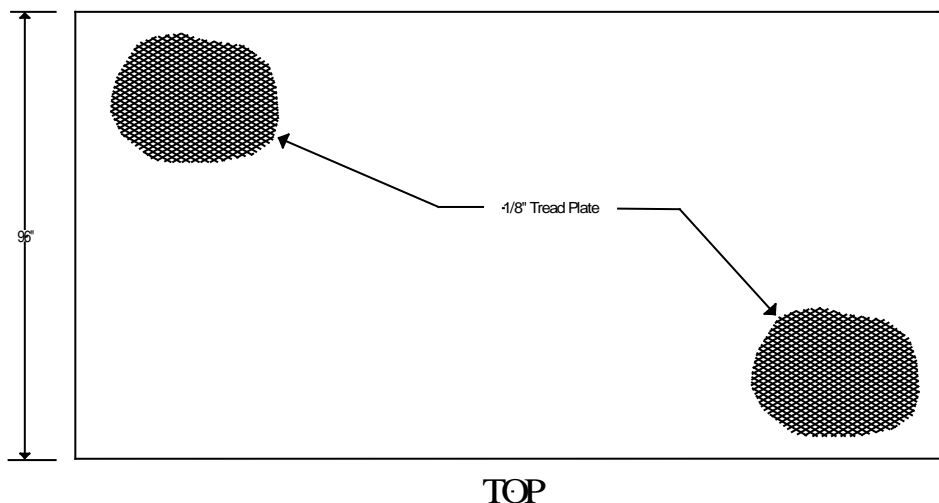
E. Warranty:

1. Cab and chassis shall have truck manufacturer's regular warranty. Warranty data shall be furnished with each unit.
2. The sign body, PTO driven air compressor 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.
 - a) Warranty shall 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.
 - c) It will be the responsibility of the successful bidder to insure that repairs are completed in a timely manner.
3. 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.
4. 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.



1. Top Rail - Aluminum Extrusion - To Form A Square Roof Rail.
2. Lower Rail - Aluminum Extrusion.
3. Rear Frame - 10 Gauge Steel.
4. Front Post - Aluminum Extrusion.
5. Roof Bow - Aluminum Hat Section.
6. Side Doors - TODCO Overhead Door. Front Door - 7' 9", Rear Door 6' 4".
7. Rear Door - TODCO Overhead Door.
8. Header and Center Post - 3/16" (7 Gauge) Steel.
9. Roof - .032 Aluminum One Piece Overlaid w/1/8" Aluminum Tread Plate, Riveted To The Top In A Manner So That The Rivets Are Outside The Cargo Area.



ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

**15' SIGN TRUCK BODY
SPECIFICATION 11-64-1087**

DRAWING NOT TO SCALE

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
SPECIFICATION 16-84-056
FOR
CREW CAB AND CHASSIS
33,000 POUNDS GVWR
AUTOMATIC TRANSMISSION WITH
15' SIGN BODY AND UNDERDECK AIR COMPRESSOR

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. 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.
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. **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.
5. Shall be assembled, adjusted and made ready for continuous operation at time of delivery.
6. 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).
7. **Parts Inventory & Service Facilities:** The successful bidder shall maintain a representative inventory of replacement parts and service facilities for servicing equipment bid on.
8. **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.
9. **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.
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. Crew Cab & Chassis:

1. GVWR: No less than 33,000 pounds.
2. Wheelbase: Minimum of 227”.
3. Cab to Axle: 120” minimum effective CA, 126” maximum effective CA.
4. Intended Use: Sign Body (Van type body modified for highway sign storage & transport).
5. Tires: Six (6) steel belted tubeless radials, no less than 11R22.5 - “G” Load Range; Single Front and Dual Rear.
6. 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.
7. 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.
8. 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.
9. Exhaust System: Horizontal or vertical exhaust. If vertical, exhaust stack shall have a rain cap or curved outlet and be equipped with a heat shield. Muffler and exhaust system shall provide clearance for installation of transmission mounted PTO with 80 cfm, shaft driven air compressor.
10. 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.
11. Throttle Control: Engine shall be equipped with an in-cab throttle control for use with PTO. May be mechanical locking type or electronic control.
12. Fuel Tank(s): Single or dual fuel tanks with instrument panel fuel gauge. Minimum fuel capacity of 100 gallons.
13. Transmission: Allison 3500 RDS automatic with six (6) speed programming and PTO provision. Transmission shall have synthetic lubricant and be equipped with a transmission oil cooler.
14. Steering: Hydraulic actuated power steering as regularly offered by manufacturer.
15. Front Axle: I Beam Type with wet seals, outboard mounted drums and a minimum capacity of 12,000 pounds.
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 68 MPH and still provide acceptable startability.)
17. 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.
20. Frame: Section modulus and yield strength of frame material shall provide a minimum RBM of 2,000,000.
21. Cab: Four (4) door crew cab, 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 front doors, factory installed fresh air heater-defroster unit, grab handle on each side, right and left sun shades and fitted rubber floor mats.

- a) Instruments: Shall include the following as a minimum:
 - (1) Speedometer/odometer
 - (2) Electric tachometer
 - (3) Electric engine hourmeter
 - (4) Ammeter or voltmeter
 - (5) Oil pressure gauge
 - (6) Coolant temperature gauge
 - (7) Transmission oil temperature gauge or warning light
 - (8) Air brake pressure gauge
 - b) Air Conditioning: Factory installed air conditioning. Shall include tinted glass all around.
 - c) Windshield Wipers: Dual electric intermittent windshield wipers with washers.
 - d) 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.
 - e) 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.
 - f) Radio: Factory installed electronic AM/FM/WB radio.
 - g) Heated Mirrors: Dual Heated West Coast Sr. type mirrors no less than 7" x 16" with adjustable brackets and auxiliary convex mirrors.
 - h) Air Horn: Single or dual trumpet air horn.
22. Hood: Tilting fiberglass or composite hood and fenders.
23. Front Bumper: Shall be equipped with front bumper as regularly furnished by manufacturer.
24. Lights: Shall be equipped with dual beam headlights, parking lights, clearance lights, automatic backup 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.
25. 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.
26. 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.

C. Sign Body:

1. Body: Shall be as per attached drawing (of which this specification sheet is made a part) and as specified below. Except for the inside vertical dimensions of the sign storage compartments, dimensions are nominal and may be adjusted to some extent for best fit to the body.
 - Item 6 on drawing - total of four (4) doors, two (2) on each side.
 - Item 7 on drawing – one (1) rear door.
 - Skid boards down each side, 1-1/8" x 1' x 15' 6" (nominal) laminated oak board bolted to vertical channels with carriage bolts.
 - 3/4" plywood to be bolted to front wall posts at bottom and extend 18" up from floor.
 - Crossmembers on bottom floor to be no less than 3" structural channels on not more than 16" centers.
 - Intermediate floor to have three (3) vertical supports on each side in front compartment and two (2) vertical supports on each side in rear compartment. Supports to be 2" x 1" aluminum channel.
 - Main frame to be no less than 5" structural channel.
 - Body shall have lighting equipment and reflectors to meet FMVSS108.

2. Mud Flaps: Shall have mud flaps no less than 24" wide and 1/4" thick, without advertising, mounted behind rear wheels.
3. Serial Number: Each unit shall be provided with a manufacturer's serial number, unique to each unit, permanently attached by plate or engraving. This shall be placed in a discreet location. No additional dealer's or manufacturer's advertisement shall be placed on the body without prior approval of AHTD.

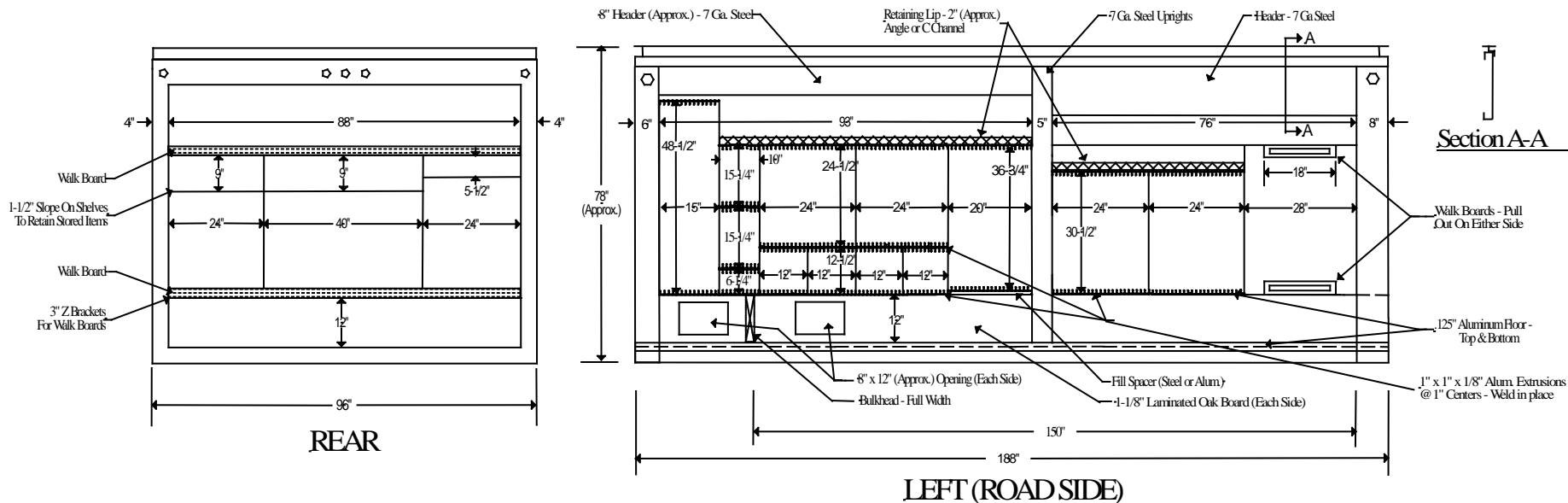
D. Air Compressor:

1. PTO Driven Air Compressor: A PTO driven air compressor with a minimum output rating of 80 cfm shall be provided. Unit shall be completely installed and ready for operation. The air compressor and all necessary incidentals shall be mounted below the truck bed.
2. Compressor: Positive displacement, single stage, oil flooded rotary screw type compressor driven by a drive shaft attached to a transmission mounted power take-off unit. The air compressor furnished shall produce a minimum of 80 cubic feet of free air per minute at no less than 100 psi.
3. Air Intake Filter: Remote mount two-stage, heavy duty, dry type air filter/s shall be provided for the air compressor.
4. Air Receiver: Shall be ASME approved for no less than 200 psi working pressure and be of adequate capacity for use with 80 cfm minimum air compressor. Receiver shall have an ASME approved pressure relief valve and be equipped with a fill cap, oil level sight gauge, 3/4" minimum service valve, 25 micron minimum spin-on air compressor oil filter with safety by-pass feature, and an air/oil separator. Air receiver shall be designed for under deck remote mounting and be mounted in a location which will allow the oil level sight gauge to be inspected without crawling beneath the truck.
5. Heat Exchanger: Compressor cooling system shall allow rated air delivery and pressure operation continuously in ambient temperatures up to no less than 125° F. Cooler shall be mounted in a sheet metal enclosure with a suction type fan assembly. A fan temperature switch shall be provided to regulate compressor cooling.
6. Protective Circuit: Compressor shall automatically shut down in case of high compressor temperature or over pressurization. An automatic blow down valve and minimum pressure orifice shall also be provided.
7. Instrument Panel: Shall be mounted at curbside rear and be equipped with a compressor hour meter, air pressure gauge, compressor oil temperature gauge and over-temperature/over-pressure reset switch. If the instrument panel is an electronic type it shall be mounted in the cab. Mounting location shall be convenient to the driver.
8. Inlet Control Valve: Shall automatically modulate output from 0 to 100% in response to air demand.
9. Speed Control: Shall be designed to suit engine make/type/model and fuel delivery system. Speed control for electronically controlled engines shall allow modulation of engine speed to match air demand.
10. Safety Switches: Unit shall be installed so that emergency brake must be applied to activate air compressor and shall include an interlock to prevent compressor from operating when transmission is in gear.
11. Power Take-Off: Shall be "hot shift", multi-gear type equipped with high grade needle or roller bearings. Power take-off provided shall be for mounting on an Allison 3500 RDS automatic transmission with six speed programming. Shall have a pilot light to indicate when PTO is engaged.
12. Drive Line: Minimum 2-1/2" Dana 1310 series, or equal, driveline with universal joint, yoke and companion flange.
13. Air Lines: Minimum 3/4" NPT air discharge lines shall be furnished and installed to provide outlets at the upper and lower curb side rear edges of the body. An additional 1/2" NPT outlet shall be provided at the lower curb side rear for use of an air drill or impact wrench. Outlets shall be capped or plugged when delivered to AHTD. (Appropriate quick disconnects will be installed by AHTD personnel.)

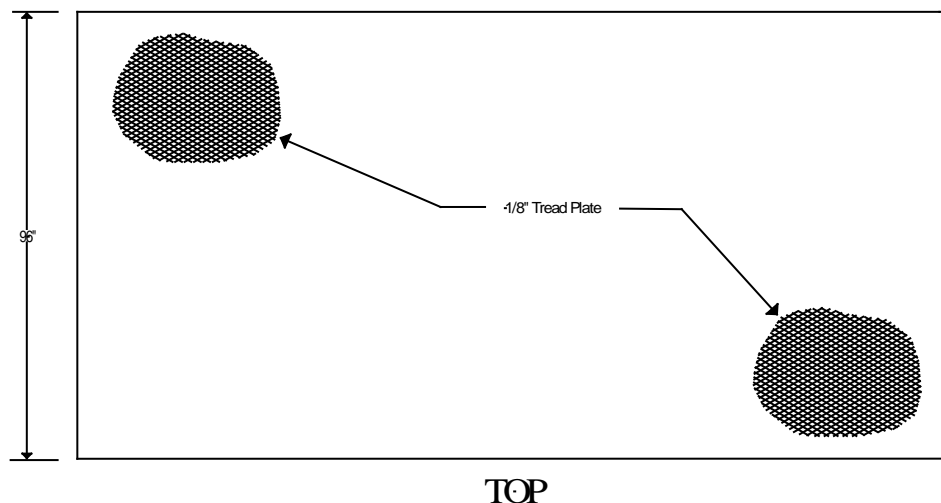
E. Warranty:

1. Cab and chassis shall have truck manufacturer's regular warranty. Warranty data shall be furnished with each unit.
2. The sign body, PTO driven air compressor 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.
 - a) Warranty shall 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.
 - c) It will be the responsibility of the successful bidder to insure that repairs are completed in a timely manner.
3. 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.
4. 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.



1. Top Rail - Aluminum Extrusion - To Form A Square Roof Rail.
2. Lower Rail - Aluminum Extrusion.
3. Rear Frame - 10 Gauge Steel.
4. Front Post - Aluminum Extrusion.
5. Roof Bow - Aluminum Hat Section.
6. Side Doors - TODCO Overhead Door. Front Door - 7' 9", Rear Door 6' 4".
7. Rear Door - TODCO Overhead Door.
8. Header and Center Post - 3/16" (7 Gauge) Steel.
9. Roof - .032 Aluminum One Piece Overlaid w/1/8" Aluminum Tread Plate, Riveted To The Top In A Manner So That The Rivets Are Outside The Cargo Area.



ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

**15' SIGN TRUCK BODY
SPECIFICATION 11-64-1087**

DRAWING NOT TO SCALE