



City of Harrisonburg, Virginia

FIRE DEPARTMENT

101 North Main Street
Harrisonburg, VA 22802
(540) 432-7703 FAX (540) 432-7780

Larry W. Shifflett
Fire Chief

September 10th, 2012

To Whom it May Concern,

The Harrisonburg Fire Department is currently soliciting bids for a 100' heavy duty rear mount aerial platform.

Bids will be received at the Office of the Fire Chief, 101 North Main Street, 3rd Floor, Harrisonburg, VA 22801 no later than 1:00 pm October 15th, 2012.

For more information, contact Larry Shifflett, Fire Chief, at 540-432-7703.

Sincerely,

Larry W. Shifflett
Fire Chief
Harrisonburg Fire Department

**Harrisonburg
Fire Department**

**Aerial Ladder Platform
Specifications**

September 2012

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GENERAL TERMS AND CONDITIONS FOR THE CITY OF HARRISONBURG, VA

PURCHASING AND CONTRACTING MANUAL: This solicitation is subject to the provisions of the Purchasing and Contracting Policy Manual for the City of Harrisonburg (City) and any revisions thereto, which are hereby incorporated into this contract in their entirety. A copy of the manual is available for review at www.Harrisonburgva.gov/bids.

APPLICABLE LAWS AND COURTS: This solicitation and any resulting contract shall be governed in all respects by the laws of the Commonwealth of Virginia and any litigation with respect thereto shall be brought in the courts of the Commonwealth. The contractor shall comply with all applicable federal, state and local laws, rules and regulations.

ANTI-DISCRIMINATION: By submitting their (bids/proposals), (bidders/offerors) certify to the City that they will conform to the provisions of the Federal Civil Rights Act of 1964, as amended, as well as the Virginia Fair Employment Contracting Act of 1975, as amended where applicable, the Virginians With Disabilities Act, the Americans With Disabilities Act and 2.2-4311 of the *Virginia Public Procurement Act*.

In every contract over \$10,000 the provisions below apply:

1. During the performance of this contract, the contractor agrees as follows:
 - a. The contractor will not discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin, age, disability, or any other basis prohibited by state law relating to discrimination in employment, except where there is bona fide occupational qualification reasonably necessary to the normal operation of the contractor. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.
 - b. The contractor, in all solicitations or advertisements for employees placed by or on behalf of the contractor, will state that such contractor is an equal opportunity employer.
 - c. Notices, advertisements and solicitations placed in accordance with federal law, rule or regulation shall be deemed sufficient for the purpose of meeting these requirements.

The contractor will include the provisions of 1. above in every subcontract or purchase order over \$10,000, so that the provisions will be binding upon each subcontractor or vendor.

2. The City does not discriminate against small and minority businesses or faith based organizations.

ETHICS IN PUBLIC CONTRACTING: By submitting their (bids/proposals), (bidders/offerors) certify that their (bids/proposals) are made without collusion or fraud and that they have not offered or

received any kickbacks or inducements from any other (bidder/offeror), supplier, manufacturer or subcontractor in connection with their (bid/proposal), and that they have not conferred on any public employee having official responsibility for this procurement transaction any payment, loan, subscription, advance, deposit of money, services or anything of more than nominal value, present or promised, unless consideration of substantially equal or greater value was exchanged.

IMMIGRATION REFORM AND CONTROL ACT OF 1986: By submitting their (bids/proposals), (bidders/offerors) certify that they do not and will not during the performance of this contract employ illegal alien workers or otherwise violate the provisions of the federal Immigration Reform and Control Act of 1986.

DEBARMENT STATUS: By submitting their (bids/proposals), (bidders/offerors) certify that they are not currently debarred by the Commonwealth of Virginia from submitting bids or proposals on contracts for the type of goods and/or services covered by this solicitation, nor are they an agent of any person or entity that is currently so debarred.

ANTITRUST: By entering into a contract, the contractor conveys, sells, assigns, and transfers to the City all rights, title and interest in and to all causes of action it may now have or hereafter acquire under the antitrust laws of the United States and the Commonwealth of Virginia, relating to the particular goods or services purchased or acquired by the City under said contract.

MANDATORY USE OF CITY FORM AND TERMS AND CONDITIONS FOR IFBs AND RFPs

1. **(For Invitation For Bids (IFB):)** Failure to submit a bid on the form provided, (if provided) shall be a cause for rejection of the bid. Modifications of or additions to any portion of the Invitation for Bids may be cause for rejection of the bid; however, the City reserves the right to decide, on a case by case basis, in its sole discretion, whether to reject such a bid as nonresponsive. As a precondition to its acceptance, the City may, in its sole discretion, request that the bidder withdraw or modify nonresponsive portions of a bid which do not affect quality, quantity, price, or delivery. No modification of or addition to the provisions of the contract shall be effective unless reduced to writing and signed by the parties.
2. **(For Request For Proposals (RFP):)** Failure to submit a proposal on the form provided, (if provided) shall be a cause for rejection of the bid. Modification of or additions to the General Terms and Conditions of the solicitation may be cause for rejection of the proposal; however, the City reserves the right to decide, on a case by case basis, in its sole discretion, whether to reject such a proposal.

REVISIONS TO THE OFFICIAL IFB/RFP: No offeror shall modify, revise, edit or make any unauthorized change(s) to the original Official Invitation to Bid (IFB) or Official Request for Proposal (RFP). The Official solicitation document and the Addenda(s) are the documents posted on the City of Harrisonburg's web site and/or authorized by the City of Harrisonburg's Purchasing Agent. Any such violation as stated above may result in rejection of the IFB/RFP response. In addition, violations may result in the debarment of the offeror by the City of Harrisonburg.

CLARIFICATION OF TERMS: If any prospective (bidder/offeror) has questions about the specifications or other solicitation documents, the prospective (bidder/offeror) should contact the person whose name appears on the face of the solicitation no later than five working days before the due date. Any revisions to the solicitation will be made only by addendum issued by the buyer.

PAYMENT:

1. To Prime Contractor:

- a. Invoices for items ordered, delivered and accepted shall be submitted by the contractor directly to the payment address shown on the purchase order/contract. All invoices shall show the purchase order number; social security number (for individual contractors) or the federal employer identification number (for proprietorships, partnerships, and corporations).
- b. Any payment terms requiring payment in less than 30 days will be regarded as requiring payment 30 days after invoice or delivery, whichever occurs last. This shall not affect offers of discounts for payment in less than 30 days, however.
- c. All goods or services provided under this contract or purchase order, that are to be paid for with public funds, shall be billed by the contractor at the contract price.
- d. The following shall be deemed to be the date of payment: the date of postmark in all cases where payment is made by mail, or the date of offset when offset proceedings have been instituted as authorized under the Virginia Debt Collection Act.
- e. Individual contractors shall provide their social security numbers, and proprietors, partnerships, and corporations shall provide the City with a federal employer identification number, prior to receiving any payment from the City.
- f. **Unreasonable Charges.** Under certain emergency procurements and for most time and material purchases, final job costs cannot be accurately determined at the time orders are placed. In such cases, contractors should be put on notice that final payment in full is contingent on a determination of reasonableness with respect to all invoiced charges. Charges which appear to be unreasonable will be researched and challenged, and that portion of the invoice held in abeyance until a settlement can be reached. Upon determining that invoiced as to those charges which it considers unreasonable and the basis for the determination. A contractor may not institute legal action unless a settlement cannot be reached within thirty (30) days of notification. The provisions of this section do not relieve the City of its prompt payment obligations with respect to those charges which are not in dispute (*Code of Virginia, 2.2.436*).

2. To Subcontractors:

- a. A contractor awarded a contract under this solicitation is hereby obligated:
- (1) To pay the subcontractor(s) within seven (7) days of the contractor's receipt of payment from the City for the proportionate share of the payment received for work performed by the subcontractor(s) under the contract; or
 - (2) To notify the City and the subcontractor(s), in writing, of the contractor's intention to withhold payment and the reason.
- b. The contractor is to pay the subcontractor(s) interest at the rate of one percent per month (unless otherwise provided under the terms of the contract) on all amounts owed by the contractor that remain unpaid seven (7) days following receipt of payment from the City, except for amounts withheld as stated in (2) above. The date of mailing of any payment by U.S. Mail is deemed to be payment to the addressee. These provisions apply to each sub-tier contractor performing under the primary contract. A contractor's obligation to pay an interest charge to a subcontractor may not be construed to be an obligation of the City.

PRECEDENCE OF TERMS: General Terms and Conditions shall apply in all instances. In the event there is a conflict between any of the other General Terms and Conditions and any Special Terms and Conditions in this solicitation, the Special Terms and Conditions shall apply.

QUALIFICATIONS OF (BIDDERS/OFFERORS): The City may make such reasonable investigations as deemed proper and necessary to determine the ability of the (bidder/offeror) to perform the services/furnish the goods and the (bidder/offeror) shall furnish to the City all such information and data for this purpose as may be requested. The City reserves the right to inspect (bidder's/offeror's) physical facilities prior to award to satisfy questions regarding the (bidder's/offeror's) capabilities. The City further reserves the right to reject any (bid/proposal) if the evidence submitted by, or investigations of, such (bidder/offeror) fails to satisfy the City that such (bidder/offeror) is properly qualified to carry out the obligations of the contract and to provide the services and/or furnish the goods contemplated therein.

TESTING AND INSPECTION: The City reserves the right to conduct any test/inspection it may deem advisable to assure goods and services conform to the specifications.

ASSIGNMENT OF CONTRACT: A contract shall not be assignable by the contractor in whole or in part without the written consent of the City.

CHANGES TO THE CONTRACT: Changes can be made to the contract in any of the following ways:

1. The parties may agree in writing to modify the scope of the contract. An increase or decrease in the price of the contract resulting from such modification shall be agreed to by the parties as a part of their written agreement to modify the scope of the contract.
2. The Purchasing Agent or City delegated agent may order changes within the general scope of the contract at any time by written notice to the contractor. Changes within the scope of the contract include, but are not limited to, things such as services to be performed, the method of packing or shipment, and the place of delivery or installation. The contractor shall comply with the notice upon receipt. The contractor shall be compensated for any additional costs incurred as the result of such order and shall give the City a credit for any savings.

DEFAULT: In case of failure to deliver goods or services in accordance with the contract terms and conditions, the City, after due oral or written notice, may procure them from other sources and hold the contractor responsible for any resulting additional purchase and administrative costs. This remedy shall be in addition to any other remedies, which the City may have.

CANCELLATION OF THE CONTRACT: The City may terminate any agreement resulting from this solicitation at any time, for any reason or for no reason, upon thirty days advance written notice to the contractor. In the event of such termination the Contractor shall be compensated for services and work performed prior to termination.

TAXES: Sales to the City of Harrisonburg are normally exempt from State sales tax. State sales and use tax certificates of exemption, Form ST-12, will be issued upon request.

(NOT NORMALLY REQUIRED FOR SERVICE CONTRACTS)

USE OF BRAND NAMES: Unless otherwise provided in this solicitation, the name of a certain brand, make or manufacturer does not restrict (bidders/offerors) to the specific brand, make or manufacturer named, but conveys the general style, type, character, and quality of the article desired. Any article which the public body, in its sole discretion, determines to be the equal of that specified, considering quality, workmanship, economy of operation, and suitability for the purpose intended, shall be accepted. The (bidder/offeror) is responsible to clearly and specifically identify the product being offered and to provide sufficient descriptive literature, catalog cuts and technical detail to enable the City to determine if the product offered meets the requirements of the solicitation. This is required even if offering the exact brand, make or manufacturer specified. Normally in competitive sealed bidding only the information furnished with the bid will be considered in the evaluation. Failure to furnish adequate data for evaluation purposes may result in declaring a bid nonresponsive. Unless the (bidder/offeror) clearly indicates in its (bid/proposal) that the product offered is an "equal" product, such (bid/proposal) will be considered to offer the brand name product referenced in the solicitation.
(NOT NORMALLY REQUIRED FOR SERVICE CONTRACTS)

TRANSPORTATION AND PACKAGING: By submitting their (bids/proposals), all (bidders/offerors) certify and warrant that the price offered for FOB destination includes only the

actual freight rate costs at the lowest and best rate and is based upon the actual weight of the goods to be shipped. Except as otherwise specified herein, standard commercial packaging, packaging and shipping containers shall be used. All shipping containers shall be legibly marked or labeled on the outside with purchase order number, commodity description, and quantity. **(NOT NORMALLY REQUIRED FOR SERVICE CONTRACTS)**

INSURANCE: By signing and submitting a bid or proposal under this solicitation, the bidder or offeror certifies that if awarded the contract, it will have insurance coverages per the solicitation document at the time the contract is awarded. For construction contracts, if any subcontractors are involved, the subcontractor will have workers' compensation insurance in accordance with 2.2-4332 and 65.2-800 et seq. of the *Code of Virginia*. The bidder or offeror further certifies that the contractor and any subcontractors will maintain these insurance coverages during the entire term of the contract and that all insurance coverages will be provided by insurance companies authorized to sell insurance in Virginia by the Virginia State Corporation Commission. **(NOT NORMALLY REQUIRED FOR GOODS CONTRACTS. INSURANCE IS REQUIRED WHEN WORK IS TO BE PERFORMED ON CITY OWNED OR LEASED FACILITIES OR PROPERTY.)**

AVAILABILITY OF FUNDS: Agreements are made subject to the appropriation of funds by the Harrisonburg City Council and are null and void in the event of non-appropriation by the City Council. Non-appropriation of funds shall not be deemed a cancellation and shall terminate this agreement without recourse and with no liability on the part of the City.

SELECTION PROCESS/AWARD: Upon the award or the announcement of the decision to award a contract as a result of this solicitation, the department will publicly post such notice for a minimum of ten (10) days, or will notify all responsive bidders/offerors.

BID/PROPOSAL ACCEPTANCE PERIOD: Any bid/proposal resulting from this solicitation shall be valid for (30) days. At the end of the (30) days the bid/proposal may be withdrawn at the written request of the Bidder/Offeror. If the bid or proposal is not withdrawn at the time it remains in effect until an award is made or the solicitation is canceled.

EXCUSABLE DELAY: The City shall not be in default of any failure in performance of this agreement in accordance with its term if such failure arises out of causes beyond its reasonable control and without the fault of or negligence of the City. Such causes may include, but are not restricted to acts of God or the public enemy, fires, flood, epidemics, quarantine restrictions, strikes, freight embargoes, and usually severe weather, but in every case the failure to perform must be beyond the reasonable control and without the fault or negligence of the City.

DRUG-FREE WORKPLACE: During the performance of this contract, the contractor agrees to (i) provide a drug-free workplace for the contractor's employees; (ii) post in conspicuous places, available to employees and applicants for employment, a statement notifying employees that the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana is prohibited in the contractor's workplace and specifying the actions that will be taken against

employees for violations of such prohibition; (iii) state in all solicitations or advertisements for employees placed by or on behalf of the contractor that the contractor maintains a drug-free workplace; and (iv) include the provisions of the foregoing clauses in every subcontract of purchase order of over \$10,000, so that the provisions will be binding upon each subcontractor or vendor.

SAFETY and OSHA STANDARDS: All parties performing services for the City shall comply with all Occupational Safety and Health Administration (OSHA), State Occupational Health Standards, and any other applicable rules and regulations. All parties shall be held responsible for the training, supervision, and safety of their employees. Any unsafe acts or hazardous conditions that may cause injury or damage to any persons or property within and around the work site areas under this contract shall be remedied per the regulatory agency's guidelines.

PERMITS AND FEES: All proposals submitted shall have included in price the cost of any business or professional licenses, permits or fees required by the City of Harrisonburg or the Commonwealth of Virginia. The offeror must have all necessary licenses to perform the services in Virginia and, if practicing as a corporation, be authorized to do business in the Commonwealth of VA.

COOPERATIVE PROCUREMENT: This procurement is being conducted on behalf of other public bodies, in accordance with 2.2-4304 (A) of the Code of VA. The successful bidder has the option to provide these same items (services), except architectural and engineering services, at the same prices, awarded as a result of this solicitation to any public body within the Commonwealth of Virginia. If any other public body decides to use the final contract, the contractor (s) must deal directly with that public body concerning the placement of orders, issuance of the purchase orders, contractual disputes, invoicing and payment. Failure to extend a contract to any public body will have no effect on consideration of your bid.

STATE CORPORATION COMMISSION IDENTIFICATION NUMBER: Pursuant to Code of VA 2.2-4311.2 subsection B, a bidder or offeror organized or authorized to transact business in the Commonwealth pursuant to Title 13.1 or Title 50 is required to include in its bid or proposal the identification number issued to it by the State Corporation Commission (SCC). Any bidder or offeror that is not required to be authorized to transact business in the Commonwealth as a foreign business entity under Title 13.1 or Title 50 or an otherwise required by law is required to include in its bid or proposal a statement describing why the bidder or offeror is not required to be so authorized. Link to the SCC site is <http://www.scc.virginia.gov>.

GENERAL STATEMENT AND REQUIREMENTS

It is the intent of these Specifications to describe the minimum requirements for a 100' heavy duty rear mount aerial platform. The aerial platform will not contain a pump or water tank. The vehicle will conform to NFPA Standard 1901, unless otherwise specified. All body and cab material shall be a minimum of 3/16 aluminum.

The aerial platform is to be built on a four (4) door cab and chassis, and is to be equipped as herein specified. The cab shall be a full tilt cab with a 10" raised roof. The cab shall be approximately 80" long, and provide seating for a minimum of six (6) personnel. The cab shall be a minimum of 96" wide.

It is understood that manufacturers of said equipment have different design and methods of construction, therefore, this bid covers general requirements as to type of construction and tests which the apparatus must meet. Other specifications or details for certain items or equipment that are common to all manufacturers are herein requested and shall be furnished.

This bid covers the furnishing of the latest production of the aerial equipment, which has been in service at least three (3) years, as described herein at the time bids are received.

The bidder shall furnish as references a minimum of ten (10) current owners of this type of aerial apparatus, to include departments name, address, telephone number and a department representative.

All items not expressly mentioned in these specifications, but involved in carrying out their intent, are required by this bid, and the vendor shall perform the same as though they were specifically mentioned, described, and delineated.

The construction of this apparatus shall provide this agency with the maximum payload and water flow capacity in the platform while keeping the completed vehicle's road travel weight to a minimum.

It is this Agency's intent to comply as closely as possible with the Federal Department of Transportation requirements for motor vehicles. The overall weight of the apparatus will be taken into consideration in awarding the bid.

All "standard features" listed or described in the latest literature published by the manufacturers/vendors at the time of this bid for the particular equipment model specified shall become a requirement of this bid. In cases where the specification contradicts the manufacturers/vendors "standard features", the specifications shall supercede.

All equipment design and accessory installation shall permit accessibility for use, maintenance

and service. All components and assemblies shall be free of hazardous protrusions, sharp edges, cracks or other elements which might cause injury to personnel or damage equipment. All oil, hydraulic, and air tubing lines and electrical wiring shall be located in protective positions properly attached to the frame or body structure and shall have protective loom and grommets at each point where they pass through structural members, except where a through the frame connector is necessary.

Parts and components should be located or positioned for rapid and simple inspection and recognition of excessive wear or potential failure. Whenever functional layout of operating components determines that physical or visual interference between items cannot be avoided, the item predicted to require the most maintenance shall be located for best accessibility.

Cover plates, which must be removed for component adjustment or part removal, should be equipped with quick disconnect fastenings or hinged panels.

Drains, filler plugs, grease fittings, hydraulic lines, bleeders and check points for all components should be located so that they are readily accessible and do not require special tools for proper servicing. Design practices should minimize the number of special tools required for maintenance. Vendor shall supply customary special tools needed to service vehicle.

All components shall be designed and protected so that heavy rain or other adverse weather conditions will not interfere with normal operation and servicing.

Weight distribution of the completed apparatus shall not exceed the carrying capacity of any of its components and shall meet the current NFPA 1904 standards. If the proposed vehicle does not meet this standard, a detailed explanation must be attached to this bid document that fully describes and details the areas of non-compliance.

All parts and materials used in the construction of the equipment shall be new. No used or rebuilt materials will be considered or accepted.

The successful vendor shall supply the original manufacturer part cross-over numbers for parts which are not manufactured by the equipment manufacturer at time of acceptance.

The successful vendor shall furnish two (2) copies of the manufacturer's preventive maintenance schedule at the time of delivery. A permanent type identification plate shall be mounted on the inside of left side cab entrance to list all chassis and pump fluid capacities. A complete list of all O.E.M. replacement filter numbers shall also be provided at this location.

All nameplates and instruction plates shall be metal or plastic with the information engraved,

stamped, or etched thereon. If metal, they shall be made of a non-corrosive material. Plastic plates shall not be used in exposed positions where they are subject to weathering. Nameplates shall show make, model, serial numbers, and other such data necessary to positively identify the item. All plates shall be mounted in a conspicuous place with stainless steel screws, bolts, or rivets.

SUBMISSION OF BID

Bids will be received at the Office of the Fire Chief, 101 North Main Street, 3rd Floor, Harrisonburg, Virginia 22802, no later than 1:00 p.m. October 15, 2012. At this time, they shall be opened and read aloud. Bids received after the time stated will be returned unopened. It is the vendor's responsibility to see that the bids are delivered to the specified location prior to the specified time. No phone, facsimile, or cabled bids will be accepted.

Bids must be signed by an authorized officer or agent for the vendor's company.

Bids shall be submitted in a sealed envelope, and clearly marked "Bid for Aerial Ladder Platform".

Vendor's or their agents, are invited to attend the bid opening.

The signed bid shall be considered an offer on the part of the vendor, and all prices quoted shall remain valid for 60 calendar days from the receipt of the bid.

BID FORM

All vendors shall use the enclosed bid form for the submission of their bid. Bid forms are to be completed in their entirety. Bid forms shall be submitted as Page 1 of vendors bid package.

Bid Form

Name of Manufacturer _____

Name of Vendor _____

Price of Vehicle _____

Option for Cummins ISX 15L 550 H.P. engine _____

Option for downsized alternator _____

Delivery Time _____

Discount for Partial Payment _____

Amount of Partial Payment Required for Discount _____

Number of Exceptions to Specifications _____

Number of Addendums Received _____

Signature _____

This bid form is to be used as Page 1 of all submitted bids.

PRE-BID CONFERENCE

A pre-bid conference will be held at the Fire Chief's Office, 101 North Main Street, 3rd Floor, Harrisonburg, Virginia on Tuesday, September 25, 2012 at 1:00 p.m. Attendance is not mandatory, however, vendors are encouraged to attend.

POINT OF CONTACT

The point of contact for any questions or clarification's concerning this bid shall be Fire Chief Larry W. Shifflett, Email – larry.shifflett@harrisonburgva.gov.

ORGANIZATION OF BID

For the ease of comparison and evaluation, the bid package shall be organized as follows:

- Page 1 – Bid Form
- Page 2 – List of Exceptions
- Page 3 – Bid Bond
- Page 4 – Certificate of Insurance
- Page 5 – Financing Plan
- Page 6 – Specification Sheet
- Page 7 – EPQ Statement
- Page 8 – Financial Statement

PAYMENT TERMS

Bidder is to include with bid, proposal for a 3 year lease/purchase agreement for the price of the vehicle. Information provided is to include name of financing company, interest rate, annual payments (principal and interest), total payout (principal and interest) and any other information necessary to evaluate proposal.

EVALUATION AND EXCEPTIONS

Vendor shall indicate in space provided at the end of each specification, whether or not the submitted bid complies with the specification. If an exception is taken to the specification, the exception shall be indicated in the space provided. Any exception or variation to the customer specifications shall be detailed and explained fully on separate sheets, and attached to the bid package directly behind the bid

form. The exceptions shall be listed in bid sequence, listing customer specifications page and paragraph number.

FAILURE TO COMPLY WITH THE REQUIREMENT WILL AUTOMATICALLY DISQUALIFY THE BID.

The customer reserves the right to determine which, if any, exceptions are acceptable.

The customer's specifications shall, in all cases, govern the construction of the apparatus, unless a properly documented exception was approved.

Vendors taking a total exception to these specifications, or submitting a stock unit not meeting these specifications will be automatically disqualified.

FAILURE TO LIST EXCEPTIONS

Failure to list all exceptions means the bidder is complying 100% to the specifications. Apparatus will be inspected on delivery for compliance with specifications. Deviations will not be tolerated and will be cause for rejection of apparatus unless they were originally listed in the bidder's proposal. Liquidated damages in the amount of \$100 per calendar day shall be deducted from the final payment until the apparatus is considered acceptable. If after 30 days the apparatus is not brought up to compliance, the bidder may be considered in default of the contract, and procedures to institute the provisions of the performance bond may commence.

CONSIDERATION OF BIDS

The Harrisonburg Fire Department reserves the right to consider price, experience, service, delivery time, operating characteristics, and solvency of the manufacturer in awarding the contract.

RIGHT TO REJECT BIDS

The City of Harrisonburg reserves the right to reject any and all bids received and accept any bid that, in its judgment, best serves the interest of the City.

BID BOND

A bid bond or certified check in the amount of 5% of the bid shall be furnished with the bidder's proposal. The bond will ensure that the bidder submits a performance bond within 14 days of notice of award of contract. The successful bidder's bid bond will be returned or released after a contract is executed and an acceptable performance bond has been delivered. In case of failure to comply within the stated time, the bid bond will be forfeited as liquidated damages because of the default. The bid bond or check of all other bidders will be returned after bids are opened and evaluated.

PERFORMANCE BOND

A performance bond in the amount of 100% of the bid shall be furnished by the successful bidder within 14 days of receiving the official notice of award of contract. Failure of the contractor to complete delivery according to the contract and specifications will be cause to begin action to institute the provisions of the performance bond. The bond also shall guarantee compliance and performance with the warranty provisions of the specifications. Bonds issued to agents of the manufacturer are unacceptable.

PRODUCT LIABILITY INSURANCE

Product liability insurance of not less than \$5 million shall be supplied by the bidder. Documentation of the amount of product liability carried by the manufacturer and the name of the insurance carrier shall be provided by the bidder at the time of bid submission. The successful bidder shall defend any and all suits and assume liability for the use of a patented device or an article forming a part of the apparatus furnished under the contract. Failure to supply a copy of the Certificate of Insurance with the bid will be cause for immediate rejection of the bid. No exception to this requirement will be allowed.

MANUFACTURER'S SOLVENCY

The solvency of the manufacturer is a prime concern of the purchaser. Each bid must include a financial statement from Dun and Bradstreet or another nationally recognized accounting firm. Failure to submit such a statement will be cause for rejection.

AWARD OF ORDER

The City of Harrisonburg intends to make the award to a responsible vendor and/or manufacturer that can meet the requested specification and provide the apparatus as specified.

The City reserves the right to reject any or all bids, in whole or in part, to waive informalities and to delete items prior to making the award whenever it is deemed, in the sole discretion of the City, to be in its best interest.

The City reserves the right to negotiate price with the lowest responsive bidder.

Due consideration will be given to price, previous experience of manufacturer, weight, height, and size of the vehicle, and the ability of the vendor to provide required equipment.

After consideration of all proper bids, the City shall issue a written purchase order to the vendor submitting a bid which is in the best interest of the City.

FACTORY INSPECTION TRIPS

The manufacturer shall provide for three (3) inspection trips for four (4) personnel at the following times:

Completion of chassis.

Completion of all construction prior to painting.

Completion of entire unit, before delivery.

Comply: Yes ____ No ____ Exception ____

MANUFACTURER’S RELIABILITY

The manufacturer must be satisfactory to the city in terms of experience, reliability, and demonstrated ability to manufacture equipment, comparable as to size and type, as specified, for the past five (5) years. A list of fire departments located in this State that have purchased the same type of apparatus from the bidder over the past five years must be supplied along with the bid.

MANDATORY AND OPTIONAL WORK

All items listed in the specifications are to be considered mandatory except work and equipment listed at the end as “options”. Any person bidding on this project must agree to price and perform all work and furnish all equipment listed in both the mandatory and optional sections of the specification. It is understood that the purchaser may select or delete items listed as options as necessary when accepting the bid.

DIVIDED RESPONSIBILITY

All parts of the apparatus including the cab, body, and chassis are to be manufactured by one builder so that divided responsibilities are not a problem to the City of Harrisonburg.

Comply: Yes ____ No ____ Exception ____

BUILT IN USA

All major components must be built and assembled in the continental United States (engine, cab, chassis and body).

Comply: Yes ____ No ____ Exception ____

APPARATUS CONSTRUCTION MATERIAL

It is the intent of the City of Harrisonburg to purchase an apparatus of an all-aluminum cab and body.

Comply: Yes ____ No ____ Exception ____

APPROVAL DRAWINGS

Drawings for approval and blueprints with all details must be furnished no more than 30 days after the preconstruction conference.

The engineering drawing must be drawn to scale and representative of the bid unit after the preconstruction conference clarification's are incorporated. Views of both sides as well as the front, back, and top must be shown. Generic drawings are unacceptable.

The fire department will make every effort to correct the approval drawing before it is returned. However, if a variation or omission between the approval drawing and the written specifications is discovered, the written specifications shall prevail.

EQUIPMENT MOUNTING

All equipment supplied with the apparatus shall be mounted by the bidder as per the fire department's instructions.

ACCEPTANCE

Acceptance of the delivered apparatus and equipment will be made at the completion of all required tests and the receipt of all specified equipment.

Equipment items not delivered at the time of delivery, or construction not in conformance with the contractor's proposal, will be cause for accepting authority to withhold payment for those items found unsatisfactory or not delivered.

A road test equal to the requirements of NFPA 1901 will be performed after the apparatus is fully equipped and loaded. The apparatus must pass all the requirements of this chapter to be considered acceptable.

Tower to be weighed with equipment before placing in service to establish gross weight.

ACCEPTANCE AUTHORITY

The Chief of the Harrisonburg Fire Department, or his designated representative, shall be the acceptance authority, and shall have the power to accept or reject any or all proposals, as well as the authority to award the contract.

It is understood that the manufacturer of the vehicle which best meets the needs of the City of Harrisonburg will be offered the contract.

DOCUMENTS TO BE DELIVERED PRIOR TO ACCEPTANCE

Manufacturer's report of construction details.

All specified Owners, Parts and Service Manuals.

A Statement of Warranty and compliance's.

Allison five (5) year warranty statement.

A complete list of crossover part numbers.

Third party aerial testing certificate.

Schedule of manufacturer's recommended preventative maintenance procedures.

Exact wiring diagram for 12 volt DC system.

Exact wiring diagram for 120/240 volt AC system.

A statement of Aerial warranty.

A statement of cab and body corrosion warranty.

A statement of structural warranty.

A statement of Cummins ISX engine warranty.

A statement of warranty for axles furnished.

The Cummins ISX EPQ certificate.

Software necessary to read transmission trouble codes.

DELIVERY TERMS

The apparatus shall be delivered by the bidder under its own power with all equipment specified, to the City of Harrisonburg, Virginia (rail or truck freight not acceptable).

Bidder must submit a firm delivery time (number of calendar days from the date of order to date of delivery) of said apparatus with the bid. Delivery date is to be entered on bid form.

Quoting number of days after receipt of all components is unacceptable.

A deduction of \$100 per day will be made for each day over and above the quoted delivery date.

The penalty also will apply if the vehicle is delivered and rejected, until the vehicle is returned meeting specifications.

PRE-DELIVERY SERVICE

After transportation from the factory and prior to acceptance, the apparatus shall receive pre-delivery service consisting of an engine oil and filter change, chassis lubrication, adjustment of the engine to the manufacturer's specifications, and a complete inspection including all electrical and mechanical devices for proper operation and correction of leaks or obvious problems. This shall take place after all tests and training has been completed.

TESTS

Tests required are those tests specified in NFPA 1901 Table 4.2.2.

The road tests required are those specified in NFPA Standard 1901 and shall be conducted at time of delivery to the purchaser, and in the presence of the accepting authority.

In the event the apparatus fails to meet the test requirements on the first trial, a second trial may be made at the option of the bidder within 30 days of the date of the first trial.

Such trials shall be final and conclusive, and failure to comply with these requirements a second time shall be cause for rejection.

The manufacturer shall provide a certificate verifying successful 3rd party testing, as per NFPA 1901, of the aerial device at the time of delivery.

Permission to keep or store the apparatus in any building owned or occupied by the purchaser during the above specified period, with the permission of the bidder, shall not constitute acceptance.

Insurance covering loss, theft or liability shall remain the responsibility of the bidder until formal acceptance is completed.

TRAINING

The contractor shall deliver the unit to the customer with the services of a qualified delivery engineer/mechanic, who is a full time employee of the manufacturer.

Sales representatives of the manufacturer will not be an acceptable substitute for the said engineer.

The delivery engineer shall instruct fire department personnel in the operation, care and maintenance of the equipment delivered, for a minimum six (6) consecutive days with evening instructions included.

The delivery engineer shall conduct an NFPA acceptance test in the City of Harrisonburg as witnessed by the Harrisonburg Fire Department.

APPARATUS WARRANTY

The bidder shall warrant the apparatus and effective materials and workmanship for a period of no less than ONE YEAR from the date of acceptance. The bidder's warranty shall conform to those specified here and accompany the bid proposal.

ANY DIFFERENCE BETWEEN THE WARRANTY OFFERED BY THE MANUFACTURER AND THE REQUIREMENTS OF THESE SPECIFICATIONS MUST BE CLEARLY STATED AND TAKEN AS AN EXCEPTION. SERIOUS CONSIDERATION OF THE WARRANTY EXCEPTIONS WILL BE MADE DURING THE BID EVALUATION PROCESS.

The specifications shall prevail in any variation between the manufacturer's offered warranty and those required in the specifications, unless an exception has been granted.

During the warranty period, mobile repair units shall provide service at the purchaser's location. If major shop work is involved, fire department personnel will drive the apparatus to the repair facility. If towing the apparatus to the repair facility is required, it shall be the responsibility of the bidder to provide such service at its own cost.

The successful bidder also agrees to assist the city in the coordination of warranty claims of the other major components, such as the engine, transmission, etc.

Comply: Yes ____ No ____ Exception ____

START OF WARRANTY PERIOD

All warranties shall commence on the date the apparatus is accepted. The manufacturer shall be notified by registered mail of the date.

ENGINE WARRANTY

The engine shall be covered by manufacturer's five (5) year parts and labor warranty.

Comply: Yes ____ No ____ Exception ____

GENERAL WARRANTY STATEMENT

The contractor guarantees that all articles of equipment, including all parts, comply in all respects or are fully equal to standards called for in the bid.

Comply: Yes ____ No ____ Exception ____

TRANSMISSION WARRANTY

The automatic transmission shall be covered by a five (5) year extended warranty, to include 100% parts and labor.

Comply: Yes ____ No ____ Exception ____

COMPONENT WARRANTY

The tires, batteries, and electrical devices subject to deterioration from normal wear and tear shall be covered by their respective manufacturer's warranty or guarantee. Where the component manufacturer does not provide a warranty equal in time to the one (1) year specified, the additional warranty shall be the responsibility of the bidder.

Any costs involved, including but not limited to labor for removal or installation, parts, components, and shipping fees, during the warranty period shall be the sole responsibility of the bidder.

The apparatus dealer and/or manufacturer shall assist the purchaser in processing warranty claims through the various component manufacturers.

Comply: Yes ____ No ____ Exception ____

CHASSIS

The cab and chassis shall be designed and built by the apparatus builder in order to assure compatibility and to eliminate split warranty responsibility. NO EXCEPTIONS.

Comply: Yes ____ No ____ Exception ____

The chassis shall be designed and manufactured for heavy duty fire service use with adequate strength and capacity for all components as detailed in this bid.

Comply: Yes ____ No ____ Exception ____

The chassis frame shall have a lifetime warranty.

Comply: Yes ____ No ____ Exception ____

The manufacturer shall not use push lock fittings on any air or water lines.

Comply: Yes ____ No ____ Exception ____

The chassis shall contain a Vogel lubrication system.

Comply: Yes ____ No ____ Exception ____

ENGINE

A Cummins ISX 12, six cylinder, with a peak torque rating of 1,645 lb. ft., and a minimum of 500 H.P., at the manufacturers rated R.P.M. shall be furnished. The engine shall be provided with an Jacobs three step engine brake. Brake to be equipped with an on/off switch.

Comply: Yes ____ No ____ Exception ____

Spin-on oil filter(s) shall be installed for ease of servicing.

Comply: Yes ____ No ____ Exception ____

Engine oil pressure, engine oil temperature, engine coolant temperature gauges, with both audible and visual warning systems, shall be furnished.

Comply: Yes ____ No ____ Exception ____

A dry element type air cleaner, sized and located as required by Cummins, shall be furnished.

Air cleaner shall not be located below frame rails. An ember separator shall be provided in the system prior to the air filter.

Comply: Yes No Exception

An air cleaner restriction gauge shall be located in the cab convenient to the driver.

Comply: Yes No Exception

A cable operated emergency engine shut down control shall be furnished and installed in the cab convenient to the driver.

Comply: Yes No Exception

The vendor must furnish to the customer a copy of the EPQ approval in which the engine manufacturer approves of the engine installation for this application. This approval letter must show that the engine installation has successfully passed the Cummins cooling test requirements and that the fuel system, lube system, air intake system, exhaust and electrical system on the engine are installed in accordance with Cummins recommendations without loss of power at anytime. A copy of the EPA test passage shall be submitted with the bid proposal.

Comply: Yes No Exception

ENGINE OPTION

Price as an option, the Cummins ISX15L six cylinder engine with 550 H. P. and 2050 peak torque rating. Manufacturer shall provide evidence of certification for use in the vehicle.

Comply: Yes No Exception

HIGH IDLE SWITCH

The engine shall have a "high idle" switch on the dash that shall automatically maintain a pre-set engine RPM. A switch shall be installed at the cab instrument panel for activation/deactivation. The "high idle" mode shall become operational only when the parking brake is on and truck transmission is in neutral. A high idle switch shall also be located on the rear of the apparatus as well as the turntable pedestal, and on the control panel in the platform.

Comply: Yes No Exception

FRONT AXLE

The front axle shall be a heavy duty 22,800 lb. axle. Manufacturer shall provide the cramp angle for the axle.

Comply: Yes ____ No ____ Exception ____

Axle shall be equipped with Stemco oil seals.

Comply: Yes ____ No ____ Exception ____

REAR AXLE

The rear axle shall be a heavy duty Meritor RT 58-185 axle.

Comply: Yes ____ No ____ Exception ____

The axle shall have Stemco oil seals, and inter-axle differential lock, with manual control and warning light installed in cab convenient to driver.

Comply: Yes ____ No ____ Exception ____

The rear axle shall be geared to provide a top speed of 60 miles per hour without exceeding engine manufacturer's rated RPM.

Comply: Yes ____ No ____ Exception ____

Apparatus manufacturer shall specify axle to be used and give estimated rear axle weight of vehicle.

Comply: Yes ____ No ____ Exception ____

The manufacturer shall state axle and frame rating, and GVWR of the vehicle.

Comply: Yes ____ No ____ Exception ____

BRAKES

Front disc brakes with 17" rotors with maximum available brake pad. Vendor to state size of brake pad.

Comply: Yes ____ No ____ Exception ____

Rear disc brakes with maximum available brake pad. Vendor to state size of brake pad.

Comply: Yes ____ No ____ Exception ____

The brakes shall be equipped with a "Maxi" parking brake with a control knob and indicator light located on the instrument panel of the cab.

Comply: Yes ____ No ____ Exception ____

The "maxi" parking brake shall also engage the front wheels and be arranged so that the front wheel brakes shall not engage should the system lose air pressure.

Comply: Yes ____ No ____ Exception ____

Minimum 18.7 CFM compressor lubricated from engine oil, and cooled by engine cooling system shall be provided. It shall be direct gear driven at rear of engine.

Comply: Yes ____ No ____ Exception ____

A Wabco Model 1200 air dryer with a heated automatic moisture ejector shall be provided.

Comply: Yes ____ No ____ Exception ____

Three (3) air supply tanks with a minimum total air tank capacity 6000 cu. inch. shall be provided.

Comply: Yes ____ No ____ Exception ____

The air system shall incorporate a quick build up feature.

Comply: Yes ____ No ____ Exception ____

The brake hoses from frame to axle shall have spring guards on both ends to prevent wear and crimping as they move with suspension.

Comply: Yes ____ No ____ Exception ____

All main brake lines shall be of a color coded nylon type, protected in high temperature rated split plastic loom.

Comply: Yes ____ No ____ Exception ____

All fittings for brake system plumbing shall be brass.

Comply: Yes ____ No ____ Exception ____

Front and rear brakes shall have automatic slack adjusters.

Comply: Yes ____ No ____ Exception ____

Full air system shall meet all current FMVSS-121 standards.

Comply: Yes ____ No ____ Exception ____

Brake pedal shall be treadle type with all brake switches inside the cab to eliminate exposure to the elements.

Comply: Yes ____ No ____ Exception ____

Accessories plumbed from air system shall go through a PR3 valve and to a manifold so that if accessories fail they shall not interfere with air brake system.

Comply: Yes ____ No ____ Exception ____

An air system inlet/fill connection shall be provided, to be located in the step inside driver's side door.

Comply: Yes ____ No ____ Exception ____

A Rockwell/Wabco 4 Channel Anti-lock braking system shall be provided. The system shall be supplied with Automatic Slip Response System (ARS).

Comply: Yes ____ No ____ Exception ____

An on/off switch for the Acceleration Slip Resistance System (ASR) shall be provided on the dash. ASR to allow the driver to override the computer and turn the ASR on when at a higher speed for better traction in deep mud or snow.

Comply: Yes ____ No ____ Exception ____

Manufacturer shall specify the size of brakes and air chambers proposed.

Comply: Yes ____ No ____ Exception ____

All necessary gauges and controls to properly operate the air system shall be furnished.

Comply: Yes ____ No ____ Exception ____

A "reserve air" system, with an isolated air tank shall be installed to enable the releasing of the "Maxi Brake" should the regular air system fail. System shall contain a control valve with a protective cover to prevent accidental activation.

Comply: Yes ____ No ____ Exception ____

FRAME

The frame of the vehicle shall be a minimum of 13 3/8" with a 100,000 psi rating.

The entire frame shall be painted gloss black prior to installing wiring harnesses or other components.

Comply: Yes ____ No ____ Exception ____

The manufacturer shall provide an unlimited lifetime frame warranty.

Comply: Yes ____ No ____ Exception ____

SUSPENSION

The suspension shall be of the manufacturer's standard design, and be capable of carrying the maximum vehicle load without problems. The bidder shall provide full specifications of the suspension system with the bid.

Comply: Yes ____ No ____ Exception ____

TIRES

Front tires shall be Michelin XFE 425/65R22.5, load range L, single type.

Comply: Yes ____ No ____ Exception ____

Rear tires shall be Michelin XDN 12R22.5, load range H, dual type Mud and Snow.

Comply: Yes ____ No ____ Exception ____

Tires shall be rated for the speed of the vehicle.

Comply: Yes ____ No ____ Exception ____

WHEELS

All wheels shall be Alcoa Duro Brite hub pilot ventilated aluminum disc type, 10 stud, of the appropriate size for the required tires and meet the GVW of the vehicle.

Comply: Yes ____ No ____ Exception ____

Chrome center caps and lug covers shall be furnished.

Comply: Yes ____ No ____ Exception ____

Apparatus shall be delivered with tires and wheels balanced.

Comply: Yes ____ No ____ Exception ____

Mud flaps shall be provided behind front and rear tires.

Comply: Yes ____ No ____ Exception ____

EXHAUST SYSTEM

The exhaust system shall be constructed from heavy duty truck components. All exhaust tubing shall be aluminized. Stainless steel flex tube shall be used to isolate the exhaust system from engine. Outlet shall be directed to the right side with a straight tip. The muffler shall be a double wrapped aluminized type meeting the engine manufacturer's specifications and meeting current noise level tests. A fiberglass heat absorbing sleeve shall be used on the exhaust pipe in the engine compartment area to reduce the heat, to protect the alternator, and also to protect hands when checking or adding oil in the engine compartment. Where the exhaust pipe passes below a compartment floor, a heat shield shall be provided between the top of the exhaust pipes and the bottom of the compartment.

Comply: Yes ____ No ____ Exception ____

Exhaust pipe shall be equipped with adapter to connect to Magna Grip Exhaust removal system compatible with customer's equipment. Adapter is not to extend past the running board.

Comply: Yes ____ No ____ Exception ____

RADIATOR/COOLING SYSTEM

The radiator shall be of sufficient size and capacity to keep the engine properly cooled as recommended by Cummins. The manufacturer shall state the size of the radiator being used.

Comply: Yes ____ No ____ Exception ____

The radiator shall contain permanent type anti-freeze adequate to protect the engine to -40F.

Comply: Yes ____ No ____ Exception ____

System shall contain a water/antifreeze filter capable of inhibiting electrolysis.

Comply: Yes ____ No ____ Exception ____

Drain valves shall be provided at the lowest point of the cooling system to allow complete removal of fluids from the system.

Comply: Yes ____ No ____ Exception ____

All radiator and heater hoses shall be silicone hoses.

Comply: Yes ____ No ____ Exception ____

A low level coolant alarm shall be provided.

Comply: Yes ____ No ____ Exception ____

TRANSMISSION

The transmission shall be an Allison Model 4500 EVS

Comply: Yes ____ No ____ Exception ____

A spin-on type transmission oil filter shall be provided.

Comply: Yes ____ No ____ Exception ____

A transmission oil cooler of proper size to maintain proper oil temperature shall be furnished.

Comply: Yes ____ No ____ Exception ____

A transmission oil temperature gauge, with both visual and audible warning, shall be installed in the cab instrument panel.

Comply: Yes ____ No ____ Exception ____

The transmission gear selector shall be back-lighted.

Comply: Yes ____ No ____ Exception ____

A five (5) year Allison transmission extended warranty shall be provided to include 100% of parts and labor.

Comply: Yes ____ No ____ Exception ____

A transmission oil dipstick shall be provided in an easily accessible location.

Comply: Yes ____ No ____ Exception ____

DRIVE LINE

Drive line shall be Spicer 1810 series, sized for the engine and the retarder system.

Comply: Yes ____ No ____ Exception ____

The universal joints shall be extended life joints with dual grease fittings.

Comply: Yes ____ No ____ Exception ____

BATTERIES

Cranking performance of the batteries shall be rated no less than 1100 amps at 0 degrees Fahrenheit.

Comply: Yes ____ No ____ Exception ____

The batteries shall be mounted in the jump seat area, and designed for ease of maintenance and removal/replacement of batteries.

Comply: Yes ____ No ____ Exception ____

Batteries shall be secured with hold down clamp and resting on a ventilated rubber matting.

Comply: Yes ____ No ____ Exception ____

The batteries shall be covered with an acid blanket.

Comply: Yes ____ No ____ Exception ____

The battery box shall be lined with a rubber anti-acid coating.

Comply: Yes ____ No ____ Exception ____

A master battery switch with an indicator light shall be installed in the cab for the convenience of the driver.

Comply: Yes ____ No ____ Exception ____

External jumper posts shall be provided and protected.

Comply: Yes ____ No ____ Exception ____

The battery cables shall be a minimum 3/0 gauge. Battery cable terminals shall be solder dipped, color coded and labeled on heat shrink tubing with a color coded rubber boot protecting the terminals from corrosion.

Comply: Yes ____ No ____ Exception ____

There shall be a fuse of adequate size protecting the tilt pump and other options as required. This fuse shall be accessible with the cab in the lowered position.

Comply: Yes ____ No ____ Exception ____

STEERING

Ross heavy duty Model TAS-85 power steering shall be provided. The steering gear shall be bolted to the frame at the cross-member for steering linkage rigidity. Four (4) turns from lock to lock with an 18" diameter wrapped steering wheel. Steering column shall have six-position tilt and 2" telescopic adjustment. A minimum 45 degree cramp angle shall be provided in each direction providing very tight turning ability.

Comply: Yes ____ No ____ Exception ____

Dual steering boxes shall be provided for extra turning ability.

Comply: Yes ____ No ____ Exception ____

FUEL SYSTEM

A minimum sixty-five (65) gallon fuel tank shall be installed. The bidder shall state how the tank is to be mounted and where it is to be located.

Comply: Yes ____ No ____ Exception ____

The tank shall be readily removable from the apparatus and shall have a drain plug in the bottom of the tank. The fuel gauge sending unit shall be readily accessible without removing the fuel tank.

Comply: Yes ____ No ____ Exception ____

One (1) tank baffle shall be used.

Comply: Yes ____ No ____ Exception ____

All fuel lines shall be covered in high temperature rated split plastic loom.

Comply: Yes ____ No ____ Exception ____

Adequate fuel filters as required by Cummins, shall be provided.

Comply: Yes ____ No ____ Exception ____

An electric priming device shall be installed to enable re-priming of fuel system.

Comply: Yes ____ No ____ Exception ____

WINDSHIELD WIPERS

Two (2), black anodized finish, electric wipers with 2-speed pantographic (dual arm) wipers, with wet arm washer system shall be provided.

Comply: Yes ____ No ____ Exception ____

Control switches for wipers and washer, with intermittent feature shall be installed on cab instrument panel, convenient to driver.

Comply: Yes ____ No ____ Exception ____

BUMPER

A twelve inch (12”) minimum height chrome-plated, steel wrap-around bumper shall be provided and attached directly to the frame. The bumper shall be extended to accommodate the mounting of hydraulic tools and hydraulic hose reel. Tools and reel to be enclosed in an insulated water tight aluminum tread plate compartment.

Comply: Yes ____ No ____ Exception ____

For additional strength and reinforcement, a ¼” x 10” steel plate shall be mounted inside the bumper, extending the full length, shall be attached directly to the frame.

Comply: Yes ____ No ____ Exception ____

The area between the bumper and the cab shall be boxed in with aluminum tread plate.

Comply: Yes ____ No ____ Exception ____

AIR HORNS

Two (2) Grover 2040 Stuttertone chrome plated air horns, shall be recess mounted, one (1) each side in the bumper and controlled by foot switches on the driver’s side and officer’s side.

Comply: Yes ____ No ____ Exception ____

ELECTRICAL/ALTERNATOR

A minimum of a 400 amp Niehoff alternator with dual ½” belt drive shall be provided. (Bidder to provide a larger alternator if required).

Comply: Yes ____ No ____ Exception ____

The alternator shall have a high amp output at idle.

Comply: Yes ____ No ____ Exception ____

All electrical wiring shall be high temperature cross link of sufficient gauge to carry the intended electrical load.

Comply: Yes ____ No ____ Exception ____

All wiring shall be color coded and every 3"- 4" of wire shall state function and be number stamped.

Comply: Yes ____ No ____ Exception ____

All wires shall be covered with high temperature split plastic loom and secured.

Comply: Yes ____ No ____ Exception ____

All electrical connections throughout the chassis shall be treated to prevent corrosion or sealed multi-wire connectors.

Comply: Yes ____ No ____ Exception ____

All circuit breakers and flashers shall be located in cab under the dash protected by a removable cover, with a wiring schematic provided inside.

Comply: Yes ____ No ____ Exception ____

All wiring shall be protected from overload by circuit breakers of the thermo reset type.

Comply: Yes ____ No ____ Exception ____

All lighting that has a current draw of 15 amps or more shall utilize continuous duty solenoids or relays to prevent the premature failure of individual control switches.

Comply: Yes ____ No ____ Exception ____

Electric power to the tip of the platform shall be routed through an electronic swivel with an adequate number of collector rings to allow 360 degree continuous rotation of the aerial while connecting all electrical circuits through the rotation point.

Comply: Yes ____ No ____ Exception ____

A 12 volt circuit shall be wired to the turntable pedestal to allow for the addition of a radio.

Comply: Yes ____ No ____ Exception ____

ALTERNATOR OPTION

Bid to include an amp draw report to determine if alternator can be downsized, with pricing for downsized alternator.

Comply: Yes ____ No ____ Exception ____

CAB

The cab shall be aluminum, minimum six (6) person, 10" rear raised roof custom, one piece, tilt approximately 80" in length, minimum 96" wide with four (4) side opening doors. The doors shall have full length stainless steel piano hinges with a double seal around the door. A rubber coated nylon web door stop shall be provided on all side doors. The inside of the cab doors shall be covered with flat, brushed aluminum. The entire inside of the cab doors shall be covered with red and yellow chevron reflective striping.

Comply: Yes ____ No ____ Exception ____

The rear doors of the cab (jump seats) shall have a full width horizontal bar located just under the window.

Comply: Yes ____ No ____ Exception ____

The cab shall be of the one-piece design and shall tilt a minimum of 45 degrees by the use of dual hydraulic cylinders powered by an electric hydraulic pump with toggle switch type lever control. Switch to be located in first compartment on left hand side. There shall be a manually operated hydraulic pump for tilting the cab incase the electrical pump should fail. Cab shall be equipped with a manual device to lock the cabin in the up position.

Comply: Yes ____ No ____ Exception ____

The cab and crew area shall be equipped with a full compartment of crash air bags.

Comply: Yes ____ No ____ Exception ____

INTERIOR

The cab interior shall be finished in red vinyl. It shall include full front and rear headliners, rear firewall and the panel behind the seats. Extra protection on doghouse by driver and officer seat to prevent ripping/tearing of vinyl shall be provided.

Comply: Yes ____ No ____ Exception ____

The driver's and officer's seats in the front of cab shall have 3-point retractable seat and shoulder belts.

Comply: Yes ____ No ____ Exception ____

The driver's seat shall be four-way adjustable and a minimum of twenty (20) inches wide.

Comply: Yes ____ No ____ Exception ____

The cab floor area shall be covered with aluminum diamondette.

Comply: Yes ____ No ____ Exception ____

The underside of the roof of the cab and jump seat to be furnished with a removable, sound absorption, perforated headliner.

Comply: Yes ____ No ____ Exception ____

Sound proofing is to extend down the back wall of the cab and jump seat.

Comply: Yes ____ No ____ Exception ____

A removable flat aluminum shelf shall be mounted on top of the engine doghouse between the driver and officer for the purpose of mounting equipment. There shall be a minimum of 1 1/2" separation between the doghouse insulation and the bottom of the shelf. Shelf shall support minimum of 200 lbs.

Comply: Yes ____ No ____ Exception ____

A compartment capable of storing EMS supplies shall be located in the crew compartment as directed by the customer.

Comply: Yes ____ No ____ Exception ____

A radio storage compartment shall be installed below the officer's seat. The compartment shall have a hinged door. The compartment shall be vented.

Comply: Yes ____ No ____ Exception ____

All cab doors are to be full length with a minimum width of 26" for the entry area, and with recessed stainless steel piano hinges with a minimum of a 3/8" pin.

Comply: Yes ____ No ____ Exception ____

The interior door panel shall have a chrome plated grab handle mounted near the hinge.

Comply: Yes ____ No ____ Exception ____

The full interior surface of all cab doors shall be covered with reflective red and yellow chevrons.

Comply: Yes ____ No ____ Exception ____

The cab recessed step areas shall be covered with aluminum treadplate.

Comply: Yes ____ No ____ Exception ____

Cab interior shall be painted with non-reflective black paint.

Comply: Yes ____ No ____ Exception ____

Two (2) sun visors, one (1) each side, running the length of the windshield shall be installed.

Comply: Yes ____ No ____ Exception ____

A glove box shall be installed on the right side of cab, with a hinged door.

Comply: Yes ____ No ____ Exception ____

Grab handles are to be installed on the outer end of the dash to assist the driver and officer with entry into the cab.

Comply: Yes ____ No ____ Exception ____

A red rotating beacon and audible signal shall be installed in the ceiling of the cab to indicate an open cab or compartment door.

Comply: Yes ____ No ____ Exception ____

A two-piece curved, tinted, windshield shall be provided with a total area of approximately 2660 square inches. Cab doors shall have manual crank windows. A large window shall be provided, one (1) each side of the crew area. Window rubber shall have a chrome bead insert. Side cab doors shall have roll down windows. All cab windows are to be tinted.

Comply: Yes ____ No ____ Exception ____

Dealer to install sliding tray for Panasonic Toughbook Computer, mounted on officer's side of cab, at customer specified location.

Comply: Yes ____ No ____ Exception ____

A map box compartment shall be provided between driver and officer, minimum 10" width, with dividers as per customers request.

Comply: Yes ____ No ____ Exception ____

A minimum 1,000 watt electrical inverter shall be provided to power the laptop computer, and other equipment. The inverter shall be protected with a Harris charge guard to protect from electrical surges.

Comply: Yes ____ No ____ Exception ____

At least three electrical receptacles shall be located on the officer's side, powered by the electrical inverter.

Comply: Yes ____ No ____ Exception ____

HEATER/AIR CONDITIONER

The cab shall be equipped with a Thermo King air conditioner sufficient to heat and cool the cab at all temperature extremes. The defroster shall be capable of keeping the windshield clear under all conditions.

Comply: Yes ____ No ____ Exception ____

The condenser shall be roof mounted and work at full rated capacity at engine idle with no engine heat problems.

Comply: Yes ____ No ____ Exception ____

There shall be a 12 volt fan directed at the driver's side windshield, and a separate 12 volt fan directed at the officer's side windshield.

Comply: Yes ____ No ____ Exception ____

The exterior cover of the heat/air unit shall be painted the same red color as the rest of the vehicle.

Comply: Yes ____ No ____ Exception ____

A minimum 48,000 BTU fresh air heater with a 3-speed fan shall be furnished. Ducts shall

be provided for the defroster to force air across the entire width of the windshield.

Comply: Yes ____ No ____ Exception ____

The cooling unit in the jump seat area shall be utilized to heat the jump seat area.

Comply: Yes ____ No ____ Exception ____

All controls for cab heating and cooling shall be located on the cab dash.

Comply: Yes ____ No ____ Exception ____

INSTRUMENT PANEL

The main dash shroud which covers the area directly in front of the driver, from the door post to the engine hood, shall be custom molded and covered with a non-glare vinyl. The dash shall have a hinged service panel that tilts outward for easy access to the internal components. All gauges shall be color coded, green for normal operating range and red for abnormal range. All gauges and controls shall be back-lighted for night vision and identified for function. All main gauges and warning lights shall be seen through the steering wheel.

Comply: Yes ____ No ____ Exception ____

Instruments to Include:

- Tachometer
- Speedometer
- Engine Hour Meter
- Aerial Hour Meter
- Ammeter
- Voltmeter
- Fuel gauge
- Engine oil pressure
- Transmission temperature
- Engine temperature
- Primary air pressure
- Secondary air pressure

Comply: Yes ____ No ____ Exception ____

The following indicator and warning lights shall be visible to driver:

Battery on
Parking brake engaged
Low air with buzzer
Turn signals
Hi-beam
Engine temperature with alarm
Engine oil pressure with alarm
Check transmission
Stop engine with audible alarm
Check engine
Cab door open
Compartment door open (flashing)
Anti lock brake warning
Seat belt indicator
Ladder power light
PTO Light
Outrigger down light

Comply: Yes ____ No ____ Exception ____

The driver's position shall also include a fast idle switch with indicator light, an indicator light to indicate that jacks are not nested, headlight switch with instrument panel dimmer control, brake control valve, individual windshield wiper, washer and intermittent controls, heater/defroster controls, transmission retarder control switch, horn/siren switch and a master switch provided for all emergency lights with independent switches for each group of lights.

Comply: Yes ____ No ____ Exception ____

All light switches shall be back-lighted and arranged for convenience to driver and officer, properly marked and visible both day and night.

Comply: Yes ____ No ____ Exception ____

A PROTECTED switch and indicator light shall be provided for the "On-Spot" chains, within easy reach of the driver.

Comply: Yes ____ No ____ Exception ____

A light switch panel shall be provided with four (4) extra light switches.

Comply: Yes ____ No ____ Exception ____

Other controls on main dash:

- Master power disconnect with ignition switch
- Engine start switch
- Headlight switch
- Windshield wiper/washer switch
- Dimmer switch for back lighting
- Parking brake control
- Heated mirror switch
- Remote control mirror switch

Comply: Yes ____ No ____ Exception ____

Included in steering column:

- Horn/Siren switch
- Turn signal switch
- Hi-beam, low-beam switch
- 4-way flasher switch
- Tilt-telescopic steering wheel controls

Comply: Yes ____ No ____ Exception ____

Controls, gauges, and indicator lights to driver's right side:

- Transmission shifter
- Air filter restriction gauge
- Heater/defroster controls
- Necessary illuminated rocker switches to control all components, plus four (4) extra

Comply: Yes ____ No ____ Exception ____

Driving compartment warning labels shall include:

“HEIGHT OF VEHICLE”

“OCCUPANTS MUST BE SEATED AND BELTED WHEN APPARATUS IS
IN MOTION”

“DO NOT USE AUXILIARY BRAKING SYSTEMS ON WET OR SLIPPERY
ROADS”

Comply: Yes ____ No ____ Exception ____

A low coolant warning light and alarm shall be provided on the cab dash.

Comply: Yes ____ No ____ Exception ____

An engine warning system shall be provided. This shall include a STOP ENGINE (red) light with buzzer, and a CHECK ENGINE (amber) light. This system shall monitor engine conditions such as low oil pressure, high engine temperature and low coolant level.

Comply: Yes ____ No ____ Exception ____

MASTER 12 VOLT ELECTRICAL PANEL

The chassis main breaker panel shall be wired through the master disconnect solenoid and controlled with a three-position ignition rocker switch. Circuit breakers and flashers shall be located at officer's right side lower interior firewall. Breaker panel shall have a cover. A notebook holder shall be fastened on the outside of the breaker panel cover. A schematic drawing shall be provided depicting the wiring configuration of the breakers.

Comply: Yes ____ No ____ Exception ____

The integrated electrical sub-panel shall interface to the body and chassis through an engineered harness system.

Comply: Yes ____ No ____ Exception ____

Relay boards with circuit breaker protection for additional loads shall be provided. All relay boards set up to trip with input from switch of positive-negative or load manager by moving connector on board (no tools needed to do this).

Comply: Yes ____ No ____ Exception ____

All relay boards shall have power-on indicator light (red) switch, input indicator light (green, one per switch) and power output indicator light (red, one per relay).

Comply: Yes ____ No ____ Exception ____

All relays and circuit breakers on relay boards shall be pull-out/push-in replaceable.

Comply: Yes ____ No ____ Exception ____

All circuit breakers on relay boards shall be 20 amp. auto reset and can be doubled or tripled

for 40 or 60 amp. capacity.

Comply: Yes ____ No ____ Exception ____

System includes Deutch DRC weather resistant connector at the breaker panel, toe board and main dash connections.

Comply: Yes ____ No ____ Exception ____

All internal wire end terminals, including locking connectors, shall be mechanically affixed to the wire ends by matching terminal crimping presses to assure the highest quality terminations.

Comply: Yes ____ No ____ Exception ____

All internal splices shall be welded connections and all internal wiring shall be high temperature GXL type wire that is protected by wiring duct wherever possible.

Comply: Yes ____ No ____ Exception ____

All switches shall be ground controlled; no power going through any rocker switch.

Comply: Yes ____ No ____ Exception ____

All relays shall be tagged with the function that the relay is controlling.

Comply: Yes ____ No ____ Exception ____

All wiring shall have XL high temperature crosslink insulation and shall be gauged according to the load. All wiring shall be color coded, and the function and number stamped at 3" intervals on each wire. All wiring shall be covered with high temperature rated split loom for easy access to wires when trouble shooting. All electrical connectors and main connectors throughout the chassis shall be treated to prevent corrosion.

Comply: Yes ____ No ____ Exception ____

Provide battery direct wiring to a bus ATC Fuse Panel 15600-20-20 located inside the cab for easy access to accessory hookups.

Comply: Yes ____ No ____ Exception ____

CAB EXTERIOR

Two (2), twenty-four (24) inch Knurled, chrome plated grab handles, shall be installed, one each side, at the front cab door.

Comply: Yes _____ No _____ Exception _____

Two (2), twenty-four (24) inch Knurled, chrome plated grab handles, shall be installed, one each side, at the rear cab door.

Comply: Yes _____ No _____ Exception _____

Large (16" x 7") West Coast type remote control mirrors and brackets shall be stainless steel or chrome plated and mounted on each side of the cab. The mirrors shall be of the breakaway type. The mirrors shall be heated, with control switch mounted on cab switch panel.

Comply: Yes _____ No _____ Exception _____

A six (6) inch stainless steel or chrome plated convex mirror shall be mounted below the regular mirror.

Comply: Yes _____ No _____ Exception _____

The front fender area shall have full width removable wheel liner with polished stainless steel or chrome fender molding over front wheel. Wheel liners shall be of cab metal.

Comply: Yes _____ No _____ Exception _____

A 20 amp, red, Kussmal Auto Eject electrical receptacle shall be located on the driver's side of the cab between the driver's and crew doors.

Comply: Yes _____ No _____ Exception _____

INTERCOM SYSTEM

Interior of cab shall be equipped with a Firecom intercom system. Driver and Officer shall have intercom, as well as two-way radio capability. Positions in jump seat areas shall have intercom capability only.

Comply: Yes _____ No _____ Exception _____

Headsets shall be provided at all seating areas.

Comply: Yes ____ No ____ Exception ____

SEATING

All seats shall be upholstered with red Durawear fabric.

Comply: Yes ____ No ____ Exception ____

The driver’s seat shall be a Bostrom Sierra FX air ride high back, adjustable fore/aft. A 3-point seat belt shall be provided.

Comply: Yes ____ No ____ Exception ____

The officer’s seat shall be a Bostrom Firefighter Tanker 450 ABTS SCBA seat. The seat shall have the following features:

- Integrated 3-point seat belt
- “Auto-Pivot & Return” head rest
- Built in lumbar support
- 100% Durawear red material

Comply: Yes ____ No ____ Exception ____

The crew cab area shall have four (4) Bostrom Firefighter seats. The seating arrangement shall be: two (2) rear facing Bostrom Tanker 450 ABTS SCBA seats and two (2) forward facing Bostrom 400CT ABTS SCBA flip up seats. The seats shall have the following features:

- Integrated 3-point seat belts
- “Auto-Pivot & Return” head rest
- Built in lumbar support
- 100% Durawear red tweed seat material

Comply: Yes ____ No ____ Exception ____

SCBA BRACKET

The officer and crew seats shall come equipped with an H. O. Bostrom SecureAll SCBA Locking System capable of securing all U. S. and international SCBA brands and sizes while in transit or for storage on fire trucks.

Locking shall be achieved by pushing the SCBA unit (bottle) against the pivot arm to engage

The automatic lock system. A top clamp will surround the top of the SCBA tank for a secure fit in all directions. The bracket shall be equipped with a center guide fork to keep the tank in-place for a safe and comfortable fit in seat cavity.

All adjustment points will utilize one tool and be easily adjustable.

The bracket system shall be free of straps and clamps that may interfere with auxiliary equipment on SCBA units.

The release handle shall be integrated into the front of the seat cushion for quick and easy release and will eliminate the need for straps or pull cords to interfere with other SCBA equipment.

The bracket system shall meet NFPA 1901 standards and requirements of EN1846-2.

Comply: Yes ____ No ____ Exception ____

CREW SEAT COMPARTMENT

A compartment shall be provided under the forward facing crew seats on the back wall of the cab. The compartment shall be full through, with an access door on each side, accessible from the side of the crew cab doors.

Comply: Yes ____ No ____ Exception ____

HELMET STORAGE

A universal style helmet bracket shall be provided for each riding position.

Comply: Yes ____ No ____ Exception ____

A placard shall be provided for each riding position warning that injury may occur if helmets are worn while seated.

Comply: Yes ____ No ____ Exception ____

SEAT BELT WARNING SYSTEM

An Akron/Weldon seat belt warning system shall be provided, and will monitor each seating position. Each seat shall be supplied with a sensor that, in conjunction with the display module located on the dash, shall determine when the seat belt was fastened and if the seat is occupied. An icon shall represent that the seat is properly occupied. An audible and visual alarm shall be

activated if the seat is occupied and/or the belt is not fastened in the proper sequence.

LIGHTING AND ELECTRICAL (CAB AND CHASSIS)

Auxiliary lighting shall be provided inside the cab and crew cab for passenger safety. Two clear dome lights shall be provided in the front of the cab mounted above the seats and shall have integral switches as well as be switched to the cab door. There shall be two (2) dome lights with integral switches located in the crew area of the cab. All step entries shall have door activated lights. There shall be two, red interior lights with switches, one located above the driver’s seat, and one located above the officer’s seat.

Comply: Yes ____ No ____ Exception ____

Exterior lighting and reflectors shall meet or exceed Federal Motor Vehicle Safety Standards and National Fire Protection Association requirements in effect at this time. All lighting shall be LED lights, whenever possible.

Comply: Yes ____ No ____ Exception ____

The cab shall have dual sealed beam headlights in custom housings.

Comply: Yes ____ No ____ Exception ____

One set of driving lights shall be recessed in the front bumper, one each side, for driving in inclement weather.

Comply: Yes ____ No ____ Exception ____

Cab shall be equipped with “Skytech DR-200” video recording driving camera wired to the master switch.

Comply: Yes ____ No ____ Exception ____

Vehicle shall be equipped with a back-up camera to come on when transmission is placed in reverse.

Comply: Yes ____ No ____ Exception ____

LIGHTS

In addition to lights specified, vehicle shall be equipped with all required DOT LED lights.

Comply: Yes ____ No ____ Exception ____

Two (2) Whelen Model 600 red stop and tail lights, installed, one (1) each side of the rear of the vehicle.

Comply: Yes ____ No ____ Exception ____

Two (2) Whelen Model 600 LED backup lights installed, one (1) each side on rear of the vehicle. Lights shall come on automatically when transmission is shifted into reverse.

Comply: Yes ____ No ____ Exception ____

Two (2) Whelen Model 600 LED amber turn signals installed on front and side of cab.

Comply: Yes ____ No ____ Exception ____

Two amber Whelen Model 600 LED turn signals installed on rear of vehicle, one each side.

Comply: Yes ____ No ____ Exception ____

One (1) each side, minimum 4", flush mounted amber turn signals, mounted below running boards, between rear axles, angled towards rear of vehicle.

Comply: Yes ____ No ____ Exception ____

Turn signals shall be controlled by self canceling turn signal switch built into the steering column with 4-way flash.

Comply: Yes ____ No ____ Exception ____

Stop and tail lights, back-up lights, and turn signals to be grouped together in chrome housing.

Comply: Yes ____ No ____ Exception ____

Five (5) amber lights shall be installed across the front of the cab, wired to the headlight switch.

Comply: Yes ____ No ____ Exception ____

Amber lights shall be recessed in the running boards/rub rails include one (1) each side at front bumper, one (1) each side behind the cab, one (1) each side in front, and behind the rear axle, and five (5) red lights across the rear of the vehicle.

Comply: Yes ____ No ____ Exception ____

One (1), each side, minimum 4", clear, back-up light, mounted on body between rear axles, angled towards rear of vehicle. Lights shall come on automatically when transmission is shifted to reverse.

Comply: Yes ____ No ____ Exception ____

Two (2), waterproof engine compartment lights, one each side, with individual switches.

Comply: Yes ____ No ____ Exception ____

Four (4), flush mount, 3 1/2" LED clear work lights, installed as follows, one (1) each side at the rear, to illuminate the rear step area, one (1) each side at ladder to turntable to illuminate ladder. Lights shall come on when parking brake is applied.

Comply: Yes ____ No ____ Exception ____

The inside wall of all four cab doors shall be equipped with a minimum 5" round LED, amber, flashing, LED light. Lights shall activate when door is opened.

Comply: Yes ____ No ____ Exception ____

Front of cab shall be equipped with a "Opticom" traffic light emitter, wired to come on with emergency lights and go off when the parking brake is applied. Location to be specified by customer.

Comply: Yes ____ No ____ Exception ____

Six (6) minimum, 3 1/2" LED clear ground illumination lights shall be located, 3 each side, one under cab door, one under jump seat door, and one behind rear axle. Lights shall be activated by door switches as well as a switch located at control panel in cab.

Comply: Yes ____ No ____ Exception ____

Two (2), 12 volt auxiliary power outlets shall be installed in the cab, each on a separate circuit. Location to be determined.

Comply: Yes ____ No ____ Exception ____

Step lights shall be installed on the front facing of each cab door entrance step well, controlled by a switch activated by the cab door.

Comply: Yes ____ No ____ Exception ____

Whelen Model TAM85 500 Series TIR6 light, with amber lens shall be mounted at rear of vehicle.

Comply: Yes ____ No ____ Exception ____

EMERGENCY WARNING LIGHTS

Light Bars-Two (2) Whelen Freedom FNMINI 24” LED mounted on top front of cab, one each side of ladder.

Comply: Yes ____ No ____ Exception ____

Two (2) Whelen Freedom FNMINI 24” LED light bars mounted top of body, one each side, behind top mounted cord reels.

Comply: Yes ____ No ____ Exception ____

Two (2), Whelen Model L31HAF red LED lights shall be mounted on rear stanchions, one Each side.

Comply: Yes ____ No ____ Exception ____

Four (4), Whelen M-6 LED lights shall be installed, two (2) each side, red and white combination, mounted above the headlights in chrome housing.

Comply: Yes ____ No ____ Exception ____

Six (6), Whelen M-6 LED lights shall be mounted, three (3) each side of apparatus. One shall be mounted on the front corner, each side of cab, and two (2) mounted, each side of body, forward and left of rear tandems. Lights shall be mounted in chrome housing.

Comply: Yes ____ No ____ Exception ____

Two (2) Whelen M-9 LED lights with red lenses shall be mounted on each side of platform, just above floor. Lights shall be mounted in chrome housing.

Comply: Yes ____ No ____ Exception ____

Two (2), large, alternating, Whelen M-9 LED lights, shall be mounted on rear of apparatus, one each at top corner of rear of body. Lights shall be mounted in chrome housing.

Comply: Yes ____ No ____ Exception ____

A flashing headlight system shall be installed and wired according to the Code of Virginia regulations.

Comply: Yes ____ No ____ Exception ____

One LED Roto Ray light with two red and one clear lens shall be mounted below windshield.

Comply: Yes ____ No ____ Exception ____

Four (4) Whelen M-9 red LED lights shall be mounted two (2) each side on stabilizer panels.

Comply: Yes ____ No ____ Exception ____

Four (4) Whelen M7RC red warning lights mounted on front of basket. Lights shall be mounted in chrome housings.

Comply: Yes ____ No ____ Exception ____

Three (3), minimum of 3", flush mounted LED warning lights shall be installed in the skirt of the turntable floor. Lights shall have red lenses. Light shall be switched with the emergency lights.

Comply: Yes ____ No ____ Exception ____

AUDIBLE WARNING DEVICES

Dual electric horns shall be installed, controlled from the steering wheel horn button.

Comply: Yes ____ No ____ Exception ____

A Federal Q2B siren shall be installed in the front cab, controlled by a foot switch on the officer side of the cab, and by the steering wheel horn button through a horn/siren selector switch. The siren shall be equipped with a directional shield.

Comply: Yes ____ No ____ Exception ____

The siren shall be fully insulated to reduce noise in the cab.

Comply: Yes ____ No ____ Exception ____

A siren brake switch shall be located on the cab dash convenient to both the driver and the officer.

Comply: Yes No Exception

A Powercall Model DX5200 shall be provided to include two 100 watt speakers. Speakers shall be mounted in the front bumper.

Comply: Yes No Exception

HAND HELD SPOTLIGHT

One Optronics Blue Eye Model KB-4003, 400,000 candle power hand-held spot light shall be provided, installed at officer's side of cab.

Comply: Yes No Exception

SPOTLIGHTS

Two (2) cab LED spotlights shall be provided, with controls in the cab. They shall be located at upper left and upper right corners of windshield.

Comply: Yes No Exception

MAP LIGHT

There shall be a red "goose neck" LED map light on the officer's side of the cab dash.

Comply: Yes No Exception

LOAD MANAGER

The load manager shall have the ability to sequence loads on and off. It shall also be able to shed loads when the vehicle is stationary. Any load that has been shed shall be off for a minimum of five minutes. When voltage has rebounded above shed voltage, the shed load shall automatically come on. There shall also be an indicator panel alongside the rocker switches which indicate power is on, battery warning and fast idle. Battery warning indicator shall flash at a rate proportional to the voltage discharge rate, once the voltage has dropped to a level that requires a load to be shed, the light shall be steady burning. The fast idle indicator shall illuminate once the voltage has dropped below 12.3 volts

DC for more than one minute. The load manager shall activate the high idle function if all appropriate interlocks and conditions are met and shall raise engine speed for a minimum of five minutes until voltage exceeds 13.0 volt DC.

Comply: Yes ____ No ____ Exception ____

BODY/COMPARTMENTS

The equipment compartments on this vehicle are of critical importance to provide adequate and sufficient areas for carrying equipment. It is the intent of these specifications to provide for the maximum amount of compartment space on this vehicle. The bidder shall take the general concepts of the compartments listed below, and refine them to provide a proposal which details specific sizes and configurations of the compartment. Transverse compartments, or partial transverse compartments shall be provided where possible.

Comply: Yes ____ No ____ Exception ____

The vehicle chassis and the compartment body shall be separate modules to provide flex, to alleviate stress and prevent cracking of body.

Comply: Yes ____ No ____ Exception ____

The body and compartments shall be constructed of aluminum.

Comply: Yes ____ No ____ Exception ____

Minimum cubic footage of compartment space, shall be 400’.

Comply: Yes ____ No ____ Exception ____

Minimum amount of compartment floor space, not counting shelves, shall be 100 square feet.

Comply: Yes ____ No ____ Exception ____

Interior compartment space shall be finished as per manufacturer’s regular process.

Comply: Yes ____ No ____ Exception ____

All compartments shall be seamless, with sweep out floor design.

Comply: Yes ____ No ____ Exception ____

There shall be an 8” – 12” wide frame depth, cab height, compartment between the cab and the body, each side, for backboards and long handled tools.

Comply: Yes ____ No ____ Exception ____

Compartments forward of rear wheels shall be locker style compartments.

Comply: Yes ____ No ____ Exception ____

All compartment doors shall be swing out doors of manufacturer’s best design to provide for maximum strength and durability. All doors shall have full perimeter rubber weather stripping.

Comply: Yes ____ No ____ Exception ____

All compartment doors shall have flush mount, chrome-plated, bent “D” ring handles, with two point, slam type, Eberhard #206 latches, with adjustable catches.

Comply: Yes ____ No ____ Exception ____

All hinges shall be stainless steel, full length, piano type.

Comply: Yes ____ No ____ Exception ____

Stay arms in all compartments shall hold doors in full 90 degree position to allow for maximum access to equipment.

Comply: Yes ____ No ____ Exception ____

Top hinged compartment doors shall have dual air/gas strut, cylinder stay arms provided.

Comply: Yes ____ No ____ Exception ____

Drip molding shall be provided above all compartment doors. Drip molding shall extend from the hinge to full width of all compartment doors. The corners of all drip molding shall be rounded to eliminate sharp edges.

Comply: Yes ____ No ____ Exception ____

Compartments between 30” and 48” in height shall have one adjustable, removable shelf.

Comply: Yes ____ No ____ Exception ____

Compartments over 48" in height shall have two (2), adjustable, removable shelves.

Comply: Yes ____ No ____ Exception ____

There shall be transverse compartments wherever possible.

Comply: Yes ____ No ____ Exception ____

Bid shall include four (4) roll-out trays, location to be determined by customer.

Comply: Yes ____ No ____ Exception ____

Large ventilation louvers shall be provided on the inside back wall of all equipment compartments.

Comply: Yes ____ No ____ Exception ____

Two (2) LED strip lights shall be provided in all compartments. Lights are to come on automatically when doors are opened.

Comply: Yes ____ No ____ Exception ____

All compartments and shelves shall be equipped with red turtle tile, or equivalent.

Comply: Yes ____ No ____ Exception ____

Wheel wells shall be provided with full width wheel well liners. Wheel wells shall be of body metal.

Comply: Yes ____ No ____ Exception ____

Wheel wells shall be constructed with adequate space for regular tire chains.

Comply: Yes ____ No ____ Exception ____

There shall be no hydraulic, air, fuel, or electric lines run through the wheel well areas.

Comply: Yes ____ No ____ Exception ____

Provide total of eight (8) (four each side), recessed compartments with hinged door for air bottle storage in panel above rear tandem axles. Compartments shall accommodate MSA 60 minute air bottle.

Comply: Yes ____ No ____ Exception ____

Body shall be provided with heavy duty rub rails, fitted with end caps, and spaced away from the body.

Comply: Yes ____ No ____ Exception ____

Top of body shall be covered with aluminum tread plate.

Comply: Yes ____ No ____ Exception ____

Entire rear of body shall be covered with flat aluminum. Entire surface of aluminum on rear of body shall be covered with red and yellow reflective chevrons.

Comply: Yes ____ No ____ Exception ____

Body area directly above tandem axles shall be covered with aluminum tread plate.

Comply: Yes ____ No ____ Exception ____

Outside edge of all wheel wells shall have stainless steel fenderettes.

Comply: Yes ____ No ____ Exception ____

DISSIMILAR METALS

When dissimilar metals are used, a corrosion preventative material shall be used as a coating/sealant between the metals.

Comply: Yes ____ No ____ Exception ____

LADDER STORAGE

Ladder storage shall be in center of vehicle. Ladders shall be mounted vertically in such a way that one ladder does not have to be removed to access another. Ladder storage area shall have a roll up door.

Comply: Yes ____ No ____ Exception ____

LADDERS

Vendor shall supply, and furnish storage for the following ladders:

- 1 – Duo Safety Series 1000A 10’ extension ladder
- 1 – 10’ Folding attic ladder
- 1 – 16’ Roof ladder with folding hooks
- 1 – 20’ Roof ladder with folding hooks
- 1 – 14’ Combination ladder
- 1 – 28’ Extension ladder
- 1 – 35’ Extension ladder
- 1- 40’ Extension ladder
- 1 – 8’ Fiberglass, Type 1A, stepladder, 300 lb. rating
- 1 – 6’ Fiberglass, Type 1A, stepladder, 300 lb. rating

Comply: Yes _____ No _____ Exception _____

With the exception of the stepladders, all ladders shall be Duo-Safety, aluminum ladders.

Comply: Yes _____ No _____ Exception _____

Ladder compartment shall be sealed against dirt and moisture.

Comply: Yes _____ No _____ Exception _____

PIKE POLES

Vendor shall furnish, and provide storage for the following pike poles:

- 2 – 6’ Fire hooks Unlimited Model MPH-6
- 2 – 8’ Fire Hooks Unlimited Model MPH-8
- 2 – 12’ Fire Hooks Unlimited Model MPH-12
- 2 – 4’ Fire Hooks Unlimited Model APH-4 WD
- 2 – 6’ Fire Hooks Unlimited Model TRH-6 WD

Comply: Yes _____ No _____ Exception _____

CROW BARS

The vendor shall furnish, and provide storage for two (2) “crow bars”, minimum length 36”.

Comply: Yes _____ No _____ Exception _____

CLAW TOOLS

The vendor shall furnish, and provide storage for two (2) Fire Hooks Unlimited “PRO-BAR”, or equivalent. One bar to be approximately 30” long, one bar to be approximately 48” long.

Comply: Yes____ No____ Exception____

SLEDGE HAMMERS

The vendor shall furnish, and provide storage for two (2), 12 lb. sledge hammers, with fiberglass handles.

Comply: Yes____ No____ Exception____

HAND LIGHTS

The vendor shall furnish four (4), 12V, rechargeable, Streamlite Vulcan hand lights, with “spot” lenses. Hand lights shall be mounted at customers’ discretion.

Comply: Yes____ No____ Exception____

FIRE EXTINGUISHERS

Vendor shall furnish the following fire extinguishers; with brackets:

1 – 20 lb. Class D extinguisher

1 – 2.5 gallon Class K extinguisher

2 – 20 lb. ABC dry chemical

2 – 2 ½ gallon pressurized water

1 – 15 lb. CO² extinguisher

Comply: Yes____ No____ Exception____

Fire extinguishers shall be mounted at the discretion of the customer.

Comply: Yes____ No____ Exception____

SHOVELS

Vendor shall furnish two (2) aluminum scoop shovels with fiberglass, D-ring handles.

Comply: Yes____ No____ Exception____

Shovels shall be mounted at the discretion of the customer.

Comply: Yes____ No____ Exception____

AXES

Vendor shall furnish the following axes, with proper mounts:

3 – 6 lb. flat head axes with fiberglass handles – Fire Hooks, Unlimited Model FA-6#

3 – 6 lb. pick head axes with fiberglass handles – Fire Hooks, Unlimited Model FAP-6#

Comply: Yes____ No____ Exception____

Axes shall be mounted at the discretion of the customer.

Comply: Yes____ No____ Exception____

Vendor shall provide protection for the “pick” side of the pick head axe.

Comply: Yes____ No____ Exception____

BOLT CUTTERS

Vendor shall furnish, and provide storage for one (1) pair of 36” bolt cutters with replaceable heads. Cutters to cut “Rockwell 52” hardness.

Comply: Yes____ No____ Exception____

WHEEL CHOCKS

Vendor shall furnish four (4), Zico folding heavy duty, aluminum wheel chocks.

Comply: Yes____ No____ Exception____

Wheel chocks shall meet SAE Standard J348.

Comply: Yes____ No____ Exception____

Wheel chocks shall be mounted at the discretion of the customer.

Comply: Yes____ No____ Exception____

HOSE ROLLER/HOIST

Vendor shall furnish, and provide storage for one (1), heavy duty, hose roller/hoist.

Comply: Yes____ No____ Exception____

LADDER BELTS

Vendor shall provide six (6) ladder/safety belts in the following sizes:

2 – medium

2 – large

2 – extra large

Comply: Yes____ No____ Exception____

Ladder/safety belts shall meet NFPA 1983 standard.

Comply: Yes____ No____ Exception____

POWER TAKE-OFF (PTO)

The vehicle shall be equipped with a transmission driven power take-off (PTO) to operate the aerial device. The PTO shall be activated by an electric shift located in the cab.

Comply: Yes____ No____ Exception____

An amber indicator light shall be installed in the cab dash to indicate when the PTO is engaged.

Comply: Yes____ No____ Exception____

The PTO shall be installed in such a manner that it will engage only when the parking brake has been set, and the transmission is in neutral.

Comply: Yes ___ No ___ Exception ___

AERIAL DEVICE

The aerial device shall be constructed of either steel or aluminum. The aerial device shall be a heavy duty ladder tower/platform and shall be a minimum of 100' in height, as measured by NFPA standards. If constructed of steel, the aerial and platform shall be painted white. The aerial device shall be a rear mount device. Vendor shall provide full details and specifications of their aerial device with their bid. The aerial device shall include the following:

Comply: Yes ___ No ___ Exception ___

There shall be a turntable access ladder on each side of the rear of the vehicle. The bottom rung of the access ladder shall be a fold down step, and shall be a minimum of 16" from the ground.

Comply: Yes ___ No ___ Exception ___

Shall meet all provisions of NFPA Standard 1901, unless otherwise specified.

Comply: Yes ___ No ___ Exception ___

The overall height of the vehicle shall not be over 12'.

Comply: Yes ___ No ___ Exception ___

The aerial device shall have as a minimum 24" handrails. Handrails are to be continuous to the basket.

Comply: Yes ___ No ___ Exception ___

Emergency hydraulic power, with limited functions, for all modes of operations.

Comply: Yes ___ No ___ Exception ___

Provisions for manual operation of rotation system, retracting the aerial, and an auxiliary bleed down to lower the aerial, should loss of hydraulic power occur.

Comply: Yes ___ No ___ Exception ___

An automatic turntable alignment indicator light, visible from the turntable, and the platform.

Comply: Yes _____ No _____ Exception _____

A light to indicate full extension, visible from the turntable, and the platform.

Comply: Yes _____ No _____ Exception _____

A full extension audible alarm shall be located at both the turntable and the platform.

Comply: Yes _____ No _____ Exception _____

All components of the aerial device shall be designed with a minimum of 2:1 safety factor. The rating shall be verified by a registered structural engineer with an independent firm.

Comply: Yes _____ No _____ Exception _____

Indicators shall be located on the top, and side, of both handrails of the base section, to indicate feet of extension and angle of ladder. Indicators shall be visible to turntable operator during night time operation.

Comply: Yes _____ No _____ Exception _____

The turntable shall be designed to provide maximum work area for the operator, at the control pedestal.

Comply: Yes _____ No _____ Exception _____

The floor of the turntable shall be constructed of non-slip material.

Comply: Yes _____ No _____ Exception _____

Railings, minimum of 42" high shall be provided for the turntable.

Comply: Yes _____ No _____ Exception _____

A ladder cradle interlock system shall be provided to prevent the lifting of the aerial device from the nested position until the operator places all outriggers in a load supporting position.

Comply: Yes _____ No _____ Exception _____

A switch shall be installed at the cradle to prevent operation of the stabilizers once the aerial has been elevated from the nesting position.

Comply: Yes _____ No _____ Exception _____

A load indicator, located at the base of the aerial, shall provide the following information: tip load, tip load with water flowing, and distributed load at full extension.

Comply: Yes _____ No _____ Exception _____

The ladder rungs shall have glow in the dark rung covers.

Comply: Yes _____ No _____ Exception _____

TURNTABLE PEDESTAL

The turntable pedestal shall include:

Individual elevation, extension, and rotation controls.

Comply: Yes _____ No _____ Exception _____

Hydraulic system pressure gauge.

Comply: Yes _____ No _____ Exception _____

Main control power switch.

Comply: Yes _____ No _____ Exception _____

Base/platform control selector switch.

Comply: Yes _____ No _____ Exception _____

12V light switches for lights on aerial and pedestal.

Comply: Yes _____ No _____ Exception _____

Rung alignment indicator light.

Comply: Yes _____ No _____ Exception _____

Engine high idle switch.

Comply: Yes _____ No _____ Exception _____

Controls for emergency hydraulic pumps.

Comply: Yes____ No____ Exception____

Controls for two-way intercom.

Comply: Yes____ No____ Exception____

Controls/joystick for automatic nozzle.

Comply: Yes____ No____ Exception____

Air Minder shall give visual indication of breathing air supply, with warning light and audible warning when air supply is depleted to 20% capacity. Audible warning also to sound when air capacity is at 15% and 5% levels.

Comply: Yes____ No____ Exception____

Flowmeter for ladderpipe.

Comply: Yes____ No____ Exception____

Engine shut down switch.

Comply: Yes____ No____ Exception____

Engine start switch.

Comply: Yes____ No____ Exception____

Hour meter for aerial device.

Comply: Yes____ No____ Exception____

Hinged, waterproof cover on pedestal.

Comply: Yes____ No____ Exception____

An audible and visual alarm system shall be provided, and located both at the turntable pedestal, and the basket pedestal, to indicate if a load has been placed on the basket which, in

all positions of operations, exceeds its rated capacity. The alarm system shall include a minimum 100dba audible alarm, and a gauge which indicates SAFE/CAUTION/OVERLOAD.

Comply: Yes ___ No ___ Exception ___

The pedestal shall contain a water tight box for storage of a two way radio. Size shall be provided by customer.

Comply: Yes ___ No ___ Exception ___

AERIAL BASKET

The platform shall be the largest available platform from the manufacturer. The front corners of the platform shall be angled 45 degrees. The doors shall open at the angled corners.

Comply: Yes ___ No ___ Exception ___

Handrails, minimum of 42" high.

Comply: Yes ___ No ___ Exception ___

A 4" kickplate, extending above floor level, surrounding the entire basket.

Comply: Yes ___ No ___ Exception ___

Lights inside the basket, at floor level shall illuminate the work area of the basket.

Comply: Yes ___ No ___ Exception ___

Anchor points for a minimum of four (4) ladder belts. Anchor points shall be determined at pre-construction conference.

Comply: Yes ___ No ___ Exception ___

Lifting eye mounted beneath the platform capable of lifting the rated capacity of the aerial device. The lifting eye shall be mounted in such a way so as not to allow an eccentric load to be placed on either side of the basket.

Comply: Yes ___ No ___ Exception ___

The basket shall be equipped to accept removable brackets for the purpose of mounting a Ferno-Washington Model #71, stokes basket, for use in rescue operations. The brackets shall

mount to the platform basket, and be secured by a minimum of .5" locking pins. The locking pins shall be attached to the brackets using stainless steel cable, to prevent them from being lost. The brackets shall mount front to back on the platform. The brackets shall include all necessary hooks and straps needed to secure the stokes basket to the brackets.

Comply: Yes ___ No ___ Exception ___

A storage compartment with lid, that can accommodate 100' of 1-3/4" hose, with an automatic nozzle, as well as two ladder belts shall be furnished.

Comply: Yes ___ No ___ Exception ___

Platform shall be equipped with drop-down ladder to allow egress from platform to roof, over a parapet wall.

Comply: Yes ___ No ___ Exception ___

The basket operating pedestal shall be located in front of the basket, and shall include:

Necessary controls for elevation, extension, and retraction, with accidental activation protection.

Rung alignment light.

Water flow meter.

Air Flow Minder, with visual indication of breathing air supply, with warning light when supply is depleted to 20% capacity.

High idle switch.

Switches for necessary illumination of pedestal and basket work lights.

Switches for basket mounted flood lights.

Intercom between basket and turntable.

Basket overload audible alarm and gauge.

Comply: Yes ___ No ___ Exception ___

Weather-tight storage compartment shall accommodate two (2) MSA positive pressure facepieces, each with 6 ft. of air hose.

Comply: Yes ___ No ___ Exception ___

One (1), 20 amp, 110V electrical receptacle with NEMA L5-20 connector, with waterproof cover.

Comply: Yes ___ No ___ Exception ___

One (1), Whelen M-9 LED light, with red lens shall be mounted to the underside of the platform basket, and switched so that the light comes on automatically whenever the PTO is engaged. The light shall be protected from damage which may occur when the basket is set on any surface.

Comply: Yes _____ No _____ Exception _____

One (1), 14' roof ladder shall be mounted in/on last section of ladder. Ladder shall be accessible and easily removed by personnel in the basket.

Comply: Yes _____ No _____ Exception _____

One (1), Fire Hooks, Unlimited Model PH-10, 10' pike pole shall be mounted in/on last section of ladder. Pike pole shall be accessible, and easily removed by personnel in the basket.

Comply: Yes _____ No _____ Exception _____

One (1), 6 lb pick head axe with fiberglass handle, Fire Hooks, Unlimited Model FAP-6#, shall be mounted in basket. Axe shall have protection for pick end.

Comply: Yes _____ No _____ Exception _____

A 12 volt video camera shall be mounted in the platform per customer's direction. Monitor for the camera shall be mounted on the pedestal.

Comply: Yes _____ No _____ Exception _____

Mount for Ferno-Washington Model # 71 Stokes Basket shall be provided on exterior of base section ladder.

Comply: Yes _____ No _____ Exception _____

AERIAL/BASKET LIGHTS

In addition to any other lighting specified, the following lighting shall be provided for the aerial device.

Two (2) Collins Model FX-12, 750,000 candle power, 12 volt, spot/flood lights shall be provided, one (1) left side, one (1) right side, on the front exterior of the basket. Lights shall be switched at basket pedestal for on/off operation. Lights shall have spot/flood adjustment on each individual light.

Comply: Yes____ No____ Exception____

Two (2), Collins Model FX-12, 750,000 candle power, 12 volt, spot/flood lights, mounted on the exterior base section ladder. Lights shall be switched at the turntable pedestal. Lights shall have individual spot/flood adjustments on each individual light.

Comply: Yes____ No____ Exception____

Two (2), Fire Research Spectra flood lights, with 20,000 lumens mounted on telescopic poles, shall be mounted on the exterior back corners of the basket. The poles shall allow for 360 degree rotation of the lights. When extended, the pole extension shall be held in position by a turn screw handwheel mounted on the side of the pole. Individual switches for these lights shall be located on the basket pedestal. Switches shall be wired direct from the circuit breaker panel.

Comply: Yes____ No____ Exception____

One (1), Fire Research Spectra flood light, with 20,000 lumens shall be mounted on the underside of the basket, to provide light beneath the basket during operations. Light shall be protected from damage when basket is lowered on any surface. Light shall be switched at basket and at turn table. Switch shall be wired direct from the circuit breaker panel.

Comply: Yes____ No____ Exception____

One Whelen Model PFA2 floodlight mounted on/in front of platform. Light shall be switched in cab and at turntable pedestal.

Comply: Yes____ No____ Exception____

LED lighting shall run full length of all ladder sections, on both sides. Lights shall be activated when the PTO is engaged.

Comply: Yes____ No____ Exception____

OUTRIGGERS

The outrigger system shall provide the following safety features:

A system to ensure that all outrigger beams are fully extended before the jack cylinders can be lowered.

Comply: Yes____ No____ Exception____

A system shall be provided to allow the aerial device to operate in the "short set" position. This system shall be so designed as to require two (2) people to operate.

Comply: Yes ___ No ___ Exception ___

A system shall be provided to prevent the rotation of the aerial device in the direction that the outriggers have been "short set".

Comply: Yes ___ No ___ Exception ___

An outrigger interlock system to prevent raising of the aerial prior to all outrigger's being in firm contact with the ground. Green indicator lights shall be provided at the outrigger control stations to indicate circuit completion. System must measure true ground contact. Bidder shall describe system.

Comply: Yes ___ No ___ Exception ___

A warning light and momentary safety switch shall be provided at the turntable operator's console and at the platform operator's console. The warning light shall warn the operator that outriggers are not fully extended in the event the apparatus has been set up with one (1) or more outrigger beams "short set". The momentary safety switch shall allow the operator to engage the safety switch in conjunction with hand controllers for aerial operation.

Comply: Yes ___ No ___ Exception ___

One (1) 6 "diameter, double faced, red flashing LED light shall be mounted on each outrigger, just below the horizontal beam, with the light facing to the front, and to the rear of the vehicle. Lights shall come on automatically when the outriggers are set.

Comply: Yes ___ No ___ Exception ___

Four (4) outrigger slide on/magnetic pads shall be provided and mounted at customer's discretion.

Comply: Yes ___ No ___ Exception ___

Four (4) composite oversized pads shall provided for setting aerial in soft ground, to be mounted at the customer's discretion.

Comply: Yes ___ No ___ Exception ___

Each outrigger shall be provided with one (1), minimum 4" clear floodlight, to illuminate the area around the outrigger. The lights shall come on automatically when the outriggers leave the stowed position.

Comply: Yes ___ No ___ Exception ___

An automatic leveling system shall be provided.

Comply: Yes ___ No ___ Exception ___

An audible alarm shall sound in the cab to alert that the parking brake is released, and the outriggers are not stowed.

Comply: Yes ___ No ___ Exception ___

HYDRAULIC SYSTEM

The hydraulic system shall be the manufacturer's standard design, with all safety features, adequate filtration, and of adequate capacity.

Comply: Yes ___ No ___ Exception ___

WATERWAY

A telescoping pre-piped waterway, capable of delivering a minimum of 2,000 gpm, at 100 psi nozzle pressure.

Comply: Yes ___ No ___ Exception ___

One (1) Akron 3570 Stream Master manual water monitor, with water shut-off valve shall be mounted on the platform. The monitor shall have the capacity to be operated 90 degrees to the platform, and straight down. Monitor to be supplied with Akron 5170 nozzle.

Comply: Yes ___ No ___ Exception ___

One (1) Akron 3578 Stream Master electric water monitor shall be mounted on the platform. Controls shall be provided in the platform as well as at the pedestal. Monitor shall be supplied with Akron 5178 nozzle.

Comply: Yes ___ No ___ Exception ___

Two (2) sets of Akron stack tips, Model 2499 to include 1 3/8", 1 1/2", 1 3/4" and 2" tips, with stream straightener.

Comply: Yes ___ No ___ Exceptions ___

One (1), 2 1/2" gated outlet, with a 1 1/2" reducer cap and chain conveniently located in the platform.

Comply: Yes ___ No ___ Exception ___

A spray nozzle of minimum 65 gpm capacity mounted on the underside of the basket. Nozzle shall have a shut-off valve easily accessed by personnel in basket.

Comply: Yes ___ No ___ Exception ___

A pre-set relief valve, capable of relieving excess pressure in the waterway.

Comply: Yes ___ No ___ Exception ___

A 1 1/2" drain located at the lowest point in the waterway system.

Comply: Yes ___ No ___ Exception ___

Threads on all nozzles and appliances shall be NST.

Comply: Yes ___ No ___ Exception ___

Manufacturer shall state overall friction loss in waterway at full extension, flowing 2,000 gpm.

Comply: Yes ___ No ___ Exception ___

Aerial waterway shall exit the rear of vehicle, waterway connection shall be 5" Stortz coupling, with 45 degree elbow, blind cap, and intake pressure gauge, shutoff valve, and Akron model 2583, 3 way siamese with Stortz coupling.

Comply: Yes ___ No ___ Exception ___

GENERATOR

Vendor shall furnish and install an Onan, 20.0 KW, hydraulic generator.

Comply: Yes ___ No ___ Exception ___

CIRCUIT BREAKER PANEL

A copper buss, circuit breaker panel, capable of handling the capacity of the generator, equipped with circuit breakers for specified equipment, plus space for an additional ten (10) circuit breakers, shall be installed in a location to be determined by the customer.

Comply: Yes___ No___ Exception___

WIRING

All wiring from the generator and circuit breaker panel shall be of adequate size for the circuit specified.

Comply: Yes___ No___ Exception___

All wiring shall be protected from physical abuse, with grommets being used where wiring passes through metal, or any other material which may cause damage.

Comply: Yes___ No___ Exception___

There shall be no exposed wiring running through compartments.

Comply: Yes___ No___ Exception___

All wiring shall be fastened with appropriate clamps. Stick-on clamps or stick-on wire ties are not acceptable.

Comply: Yes___ No___ Exception___

CORD REELS

Vendor shall furnish three (3), Edwards, portable cord reels, to be mounted in compartment location to be determined by customer.

Comply: Yes___ No___ Exception___

Each reel shall contain 150', of 12-3 SO wire, with NEMA L5-20 connectors.

Comply: Yes___ No___ Exception___

Two (2), electric rewind, wire reels, containing 150' each, 8-3 SO wire, shall be located on top of body. Reels shall be wired to circuit breaker panel, with 240V, 40 amp circuit breakers.

Wire shall be equipped with “Daniel Woodhead” junction box, Model Number 32W90-1E143, or equivalent, with NEMA L5-20, female connectors. Junction boxes shall have a positive stop between junction box and reel, to prevent junction box from hitting reel. Junction boxes to contain four (3) NEMA L5-20 110V, 20 amp outlets with twist lock connectors, and one (1) 20 amp household outlet.

Comply: Yes____ No____ Exception____

Rewind controls shall be located at discretion of customer.

Comply: Yes____ No____ Exception____

Compartment with reel shall be equipped with one set of rollers on each side of compartment, for ease of removing wire from reel.

Comply: Yes____ No____ Exception____

ELECTRIC RECEPTACLES

All electric receptacles shall be equipped with NEMA L5-20 connectors. All electrical receptacles shall be equipped with waterproof covers.

Comply: Yes____ No____ Exception____

Three (3), 20 amp, 110V, electric receptacles, separate circuits, wired to circuit breaker panel, NEMA L5-20 shall be located in compartments containing portable cord reels.

Comply: Yes____ No____ Exception____

Four (4) NEMA L5-20, 20 amp, 110V, electric receptacles, separate circuits, mounted at, or near, circuit breaker panel.

Comply: Yes____ No____ Exception____

One (1), 50 amp, 240V, electric receptacle, located at, or near, the circuit breaker panel.

Comply: Yes____ No____ Exception____

One (1), 40 amp, 240V, electric receptacle, located in compartment shall be designated by customer.

Comply: Yes____ No____ Exception____

One (1), 20 amp, NEMA L5-20 110V, electric receptacle, located in aerial basket.

Comply: Yes _____ No _____ Exception _____

One 20 amp duplex outlet in the EMS compartment in cab crew area. Outlet wired to both generator and shore line.

Comply: Yes _____ No _____ Exception _____

ELECTRICAL CONNECTORS

All electrical connectors shall be attached to cords with “Kellum” style connectors.

Comply: Yes _____ No _____ Exception _____

WATER PROOF COVERS

All electric receptacles shall be protected with water proof covers.

Comply: Yes _____ No _____ Exception _____

FLOOD LIGHTS

Two FRC Spectra flood lights, with 20,000 lumens, mounted mid body. One each side, light switch in cab.

Comply: Yes _____ No _____ Exception _____

Furnish and install (2) each side, Fire Research Spectra floodlights with 20,000 lumens. Lights shall be mounted at the discretion of the customer.

Comply: Yes _____ No _____ Exception _____

REELS FOR HYDRAULIC HOSE

Three (3), electric rewind reels, capable of storing 100’ each of hydraulic hose for rescue tools shall be furnished. Two shall be pre-connected and mounted in a compartment designated by the customer, and one shall be pre-connected and mounted in the front bumper.

Comply: Yes____ No____ Exception____

RESCUE TOOL AIR SYSTEM

Vendor shall supply two (2), 300 cubic foot minimum, 5,000 psi, ASME air tanks, shall be mounted at discretion of customer, for supplying air operated rescue equipment.

Comply: Yes____ No____ Exception____

Air is to be piped to a control panel to contain a high pressure bottle fill connection, and three (3), low pressure, air connections. Each connection shall have its own individual gauge, and regulator. Customer shall supply information as to the type of air fitting needed and mounting location.

Comply: Yes____ No____ Exception____

BREATHING AIR SYSTEM

Breathing air is shall be supplied by two (2), minimum of 300 cubic feet, 5,000 psi ASME air tanks, shall be mounted in manufacturer's normal position. Breathing air system shall include:

Comply: Yes____ No____ Exception____

Cylinders shall be valved so they may be used, and filled simultaneously.

Comply: Yes____ No____ Exception____

An air connection shall be located at a convenient location for refilling the air cylinders.

Comply: Yes____ No____ Exception____

Air capacity to the basket shall be capable of supplying four (4) air masks.

Comply: Yes____ No____ Exception____

Basket breathing air connections shall be located two (2) on the left side, two (2) on the right side, of basket.

Comply: Yes____ No____ Exception____

The customer will specify, at a later date, the type of breathing air connections shall be used.

Comply: Yes____ No____ Exception____

Supply of breathing air shall be monitored by Span Air Minder gauges, located one each at the turntable pedestal, and the basket pedestal. System shall provide visual and audible warning when supply of air is depleted to 20%.

Comply: Yes____ No____ Exception____

Pressure regulator, and all other components needed to activate the system shall be easily accessible to the turntable operator.

Comply: Yes____ No____ Exception____

WINCH

Winch – A 12,000 lb. electric winch shall be provided. Winch shall be removable. Receivers shall be provided on all four sides of vehicle. Receivers shall have quick disconnect electrical connection, winch shall be stored at customer’s discretion. Receivers shall be load tested to a minimum of 12,000 lbs. with third party proof load documentation.

Comply: Yes____ No____ Exception____

AERIAL INTERCOM

A two-way intercom system shall be installed between the turntable and the basket.

Comply: Yes____ No____ Exception____

The system shall have controls mounted on the turntable pedestal, and the basket pedestal, with the master controls being located at the turntable pedestal.

Comply: Yes____ No____ Exception____

The system shall consist of a 12 volt transistorized amplifier, and two waterproof send and receive speakers.

Comply: Yes____ No____ Exception____

PAINT

The exterior of the vehicle shall be painted with DuPont #2564 UW red paint. Finished paint shall be clear coated.

Comply: Yes____ No____ Exception____

Aluminum body compartment interiors shall be finished as per manufacturer's regular process.

Comply: Yes____ No____ Exception____

Aluminum aerial device shall not be painted.

Comply: Yes____ No____ Exception____

Steel aerial device shall be painted with DuPont #9219 white paint.

Comply: Yes____ No____ Exception____

All surfaces to be painted shall be properly cleaned and etched prior to the application of finish.

Comply: Yes____ No____ Exception____

All metal, cab, body frame, and trim parts, shall receive primer and finish coats prior to final assembly.

Comply: Yes____ No____ Exception____

All holes used for mounting equipment/fixtures shall be drilled and deburred prior to painting.

Comply: Yes____ No____ Exception____

LETTERING

Apparatus shall be lettered with white Type IV reflective letters and striping, in a manner similar to attached picture. Letters shall be shaded in black.

Comply: Yes____ No____ Exception____

Front of cab of vehicle shall be lettered "HARRISONBURG", in 3" letters.

Comply: Yes____ No____ Exception____

Front door of vehicle shall be lettered "TOWER 1", in 4 1/4" letters.

Comply: Yes____ No____ Exception____

Area beneath jump seats shall be lettered:

HARRISONBURG (3" letters)
FIRE DEPT. (4 ¼" letters)

Comply: Yes ___ No ___ Exception ___

Lettering shall be done as depicted in the attached photos, and to the following specifications.

Comply: Yes ___ No ___ Exception ___

Rear body area shall have HFD logo in 20" – 25" letters.

Comply: Yes ___ No ___ Exception ___

Compartment doors, cab doors and windows, shall be striped with 3/8" gold scotchlite, bordered by 1/16" black pinstripe, with white pinstripe on inside of gold stripe.

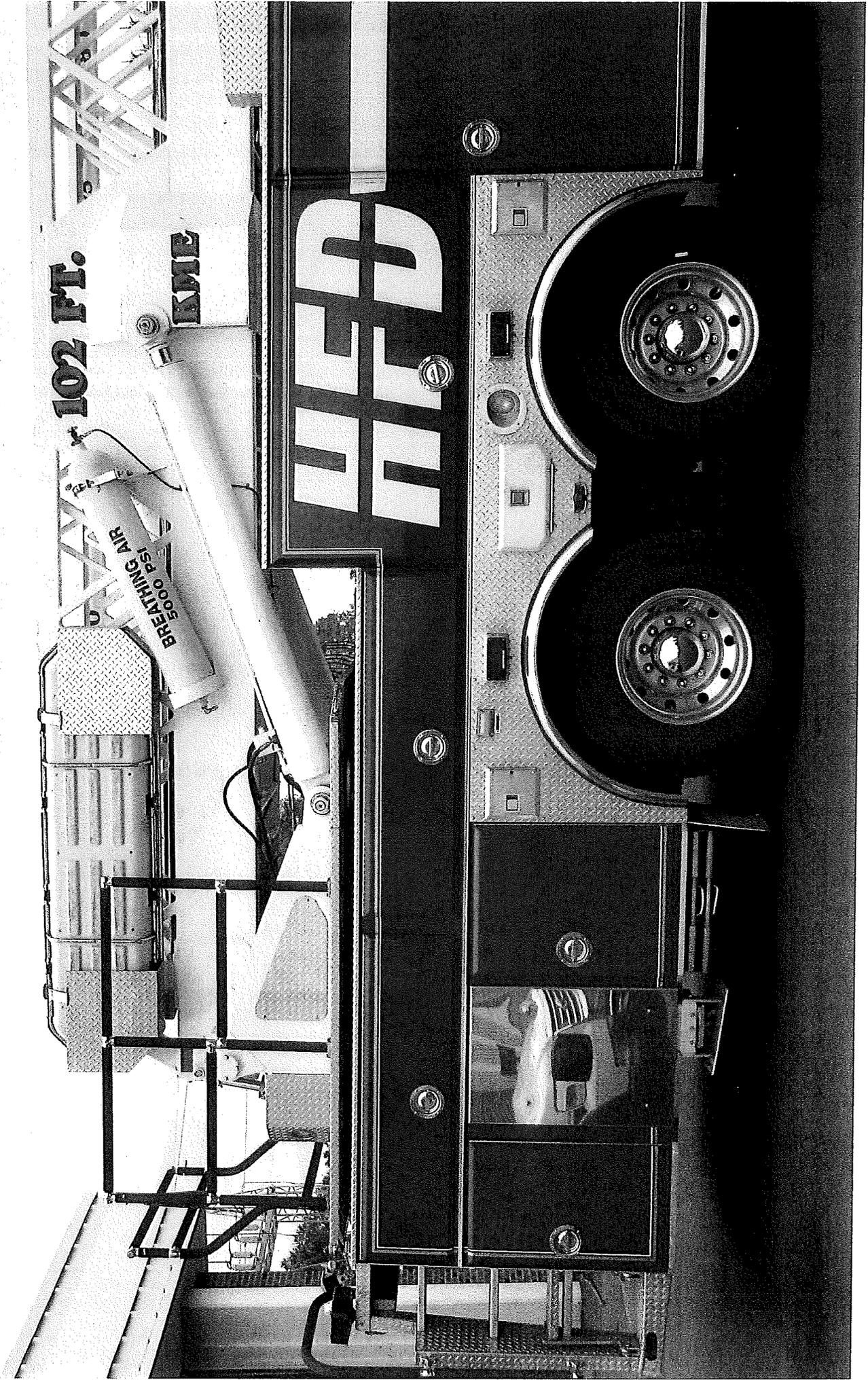
Comply: Yes ___ No ___ Exception ___

A 6" white scotchlite stripe shall encircle the entire apparatus in a manner depicted by the picture. The white scotchlite shall be bordered by a black pinstripe.

Comply: Yes ___ No ___ Exception ___

Exterior of both sides of base section of aerial device shall be lettered "Harrisonburg Fire Department". Letters shall be applied to flat metal sheet and attached directly to aerial device. Letters shall be minimum of 8" in height, white scotchlite. Flat metal sheet shall be painted red to match vehicle.

Comply: Yes ___ No ___ Exception ___



HARRISONBURG

TOWER

1





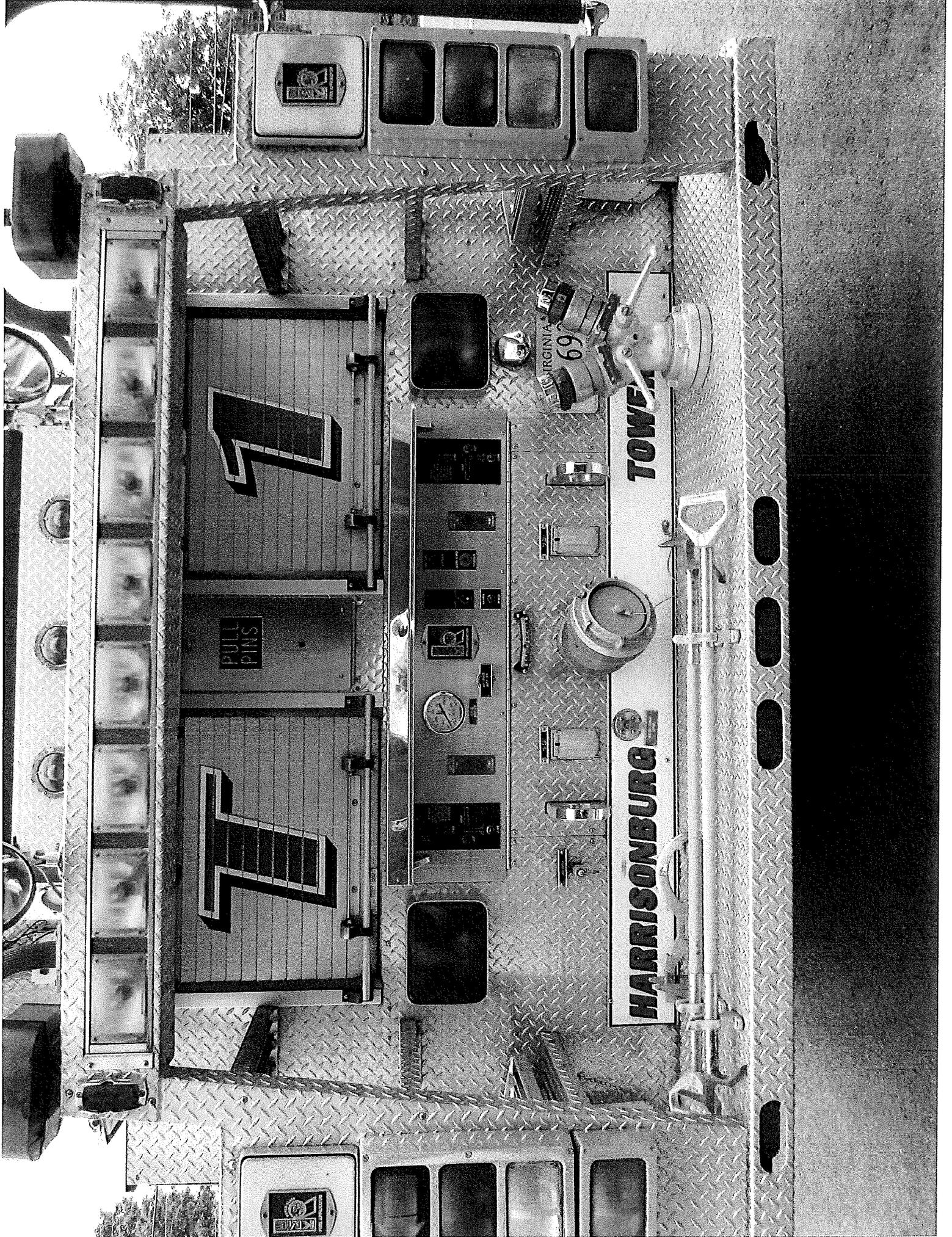
HARRISONBURG FIRE DEPT.

TOWER 1

102 FT.

HFD

HARRISONBURG FIRE DEPT.



1

PULL PINS

T

NEW JERSEY
69

TOWER

HARRISONBURG