

**ADVERTISEMENT FOR BIDS FOR ONE (1) OR MORE
FIRE APPARATUS AND EQUIPMENT**

City of Cascade Locks, Oregon, Department of Fire & EMS ("Cascade Locks") is receiving sealed bids for one (1) or more fire apparatus and equipment in accordance with the documents and specifications on file with Cascade Locks. Copies of the solicitation documents consisting of the Fire Apparatus Specifications, the Instructions to Bidders, Cascade Locks General Provisions for Procurement of Goods, the Supplementary Provisions, the Bid Form and the Agreement may be obtained from Cascade Locks Fire & EMS Office, City Hall, 140 WaNaPa, P.O. Box 308, Cascade Locks, Oregon 97014, telephone: 541-374-8510, fax: 541-374-8752. The solicitation documents shall be available from the date of this advertisement up to 72 hours prior to bid opening.

Prequalification is not required for this solicitation.

Bid security in the amount of 10% of the total amount of the bid shall be required and shall accompany the bid.

Bids must be in writing and delivered to Cascade Locks, c/o Jeff Pricher, Fire Chief, 140 WaNaPa, P.O. Box 308, Cascade Locks, Oregon 97014, in a sealed envelope marked on the outside with the words: "Bid on Fire Equipment and Apparatus". The Bids will be publicly opened and read in Council Chambers at the City Hall at 12:00 p.m. (noon) on the 8th day of September, 2008. Bids received after 12:00 p.m. (noon) will not be received or considered. After opening the bids, they will be available for public inspection.

A bid must include a statement on whether or not the bidder is a "resident bidder" as defined in ORS 279A.120.

Cascade Locks may cancel this solicitation or reject any bid not in compliance with all prescribed public bidding procedures and requirements, and may reject for good cause any or all bids in accordance with ORS 279B.100.

This procurement is conditional upon delivery and approval of the fire apparatus on or before June 30, 2009. If delivery and approval cannot or does not occur by this deadline, this procurement and any agreement entered into in reliance thereupon, will be voidable at the sole discretion of Cascade Locks.

Date of first publication: August 23, 2008

Date of Closing: 12:00 p.m. (noon) September 8, 2008.

ADDENDUM NO. 1 FOR ONE OR MORE FIRE APPARATUS AND EQUIPMENT

City of Cascade Locks, Oregon, Department of Fire and EMS ("Cascade Locks") hereby issues this Addendum No. 1 to the bidding documents advertised on August 23, 2008, for one or more fire apparatus and equipment. Those bidding documents are hereby modified by this addendum dated Wednesday, August 27, 2008.

The original bid packet posted on the Cascade Locks Fire and EMS website did not include the following instruction: "Bidders for this procurement are required to include addenda issued, if any, with their bids. Failure to do so will result in rejection of the bid. Therefore, prospective bidders must alert the Contract Administrator, Jeff Pricher, if they receive bid documents from the web site. Names and contact information must be provided in order to make sure that all prospective bidders receive any addenda which may be posted."

In addition, the bid packet should contain the Cascade Locks General Provisions for Procurement of Goods, a copy of which is now posted on the website.

In addition, the Supplementary Provisions contained a requirement that the successful bidder provide an inspection trip to members of the Cascade Locks Fire and EMS Department but did not state how many members of the Department would need to be included. Two members of the Department will be required for the inspection trip to the factory.

The above-referenced bidding documents are hereby amended by the inclusion of the instruction to notify the Contract Administrator if the bidder receives the bidding documents off of the website, the inclusion of the Cascade Locks General Provisions for Procurement of Goods and the modification of the Supplementary Provisions to provide that 2 inspection trips (one trip for two persons) will be required.

Bidders for this procurement are required to include addenda issued, if any, with their bids. Failure to do so will result in rejection of the bid. Therefore, prospective bidders must alert the contract administrator, Jeff Pricher, if they receive bid documents from the web site. Names and contact information must be provided in order to make sure that all prospective bidders receive any addenda which may be posted.

AGREEMENT FOR PURCHASE OF ONE OR MORE FIRE APPARATUS AND EQUIPMENT

This Agreement is made on _____, 2008, between City of Cascade Locks, Department of Fire & EMS, ("Cascade Locks") and _____ (Seller).

SELLER AGREES TO PROVIDE AND CASCADE LOCKS AGREES TO PURCHASE FIRE APPARATUS AS SET FORTH IN THE CONTRACT DOCUMENTS AND THIS AGREEMENT.

1. CONTRACT DOCUMENTS:

1.1. On _____, 2008, Cascade Locks received bids for one or more fire apparatus and equipment (the goods). Seller submitted the lowest responsive bid for providing the goods. Seller's bid has been accepted by Cascade Locks.

1.2. The following contract documents are attached to and incorporated in this sales Agreement:

- 1.2.1. Cascade Locks' General Provisions for Procurement of Goods,
- 1.2.2. Instructions to Bidders,
- 1.2.3. Supplementary Provisions,
- 1.2.4. Fire Apparatus Specifications for fire apparatus and equipment, and
- 1.2.5. Seller's bid.

2. CONTRACT ADMINISTRATOR: The Contract Administrator for this Contract shall be Jeff Pricher, Fire Chief, Cascade Locks Fire & EMS Office, 140 WaNaPa, P.O. Box 308, Cascade Locks, Oregon 97014, telephone: 541-374-8510, fax: 541-374-8752.

3. PURCHASE: The Contract Administrator shall issue purchase orders for goods as needed. Purchase orders shall incorporate all provisions of the contract documents. Notwithstanding any other provision to the contrary, payment will not be required until after the time of delivery and acceptance.

4. TIMELY DELIVERY & APPROVAL: This Agreement is expressly conditioned on delivery and approval of the fire apparatus on or before June 30, 2009. If delivery and approval cannot occur by this deadline, this Agreement will be voidable at the sole discretion of Cascade Locks.

SELLER

CITY OF CASCADE LOCKS, OREGON

By _____
(authorized signature)

By _____

(title)

Date _____

Date _____

Fed ID# _____

BID FOR FIRE APPARATUS AND EQUIPMENT

The Bidder named below hereby offers to supply one or more fire apparatus and equipment as described in the Bidding Documents issued by Cascade Locks. The provisions of the Bidding Documents, including the definitions, are incorporated in this Bid.

Name of Bidder

Business address of the Bidder

Name and title of authorized representative of Bidder

Address of authorized representative of Bidder

Telephone number of authorized representative of Bidder

Check applicable spaces:

Bidder is an individual.

Bidder is a partnership.

Bidder is a corporation that is incorporated in the State of

Bidder is a "resident bidder" as defined in ORS 279A.120. "Resident bidder" means a Bidder who has paid unemployment taxes or income taxes in the State or Oregon during the 12 calendar months immediately preceding submission of the Proposal and has a business address in this state.

Bidder is not a "resident bidder." Bidder's business is located in the State of

BID REQUIREMENTS AND SCHEDULE

Each bidder shall check box either Yes or No for the full compliance of the paragraph. This allows the fire department to easily compare each bid specification.

Bidder Complies: Y ___ N ___
Body Builder Supplied 10% Bid Bond

Bidder Complies: Y ___ N ___
Body Builder Supplied \$10 Million (total) Insurance Certificates

Bidder Complies: Y ___ N ___
Detailed scaled drawing of the proposed and competed apparatus

Bidder Complies: Y ___ N ___
Weight distribution chart of the proposed and completed apparatus

Bidder Complies: Y ___ N ___
Listing and Insurance Certificate for Warranty and Repair Facility

Bidder Complies: Y ___ N ___
Certificates of Warranties listed

Bidder Complies: Y ___ N ___
Manufacturer shall have manufactured no fewer than 20 fire apparatus equipment per year for the past seven (7) years and shall have been in business for the past 20 years

BID PRICE FORM

DELIVERY AND ACCEPTANCE WILL BE ON OR BEFORE JUNE 30, 2009. PAYMENT IN FULL SHALL BE MADE AFTER DELIVERY AND ACCEPTANCE. THERE WILL BE NO PROGRESS PAYMENTS

APPARATUS BODY PRICE AS PROPOSED: \$ _____

CHASSIS PRICE AS PROPOSED: \$ _____

TOTAL COST OF COMPLETE FIRE APPARATUS: \$ _____

INSPECTION TRIP(S): 2-PERSON(S): INCLUDED ___ NOT INCLUDED ___ COST
\$ _____

CHASSIS PREPAYMENT: INCLUDED ___ NOT INCLUDED ___ COST
\$ _____

DELIVERY CHARGES: INCLUDED ___ NOT INCLUDED ___ COST
\$ _____

MISC. EQUIPMENT PACKAGE: INCLUDED ___ NOT INCLUDED ___ COST
\$ _____

PRODUCTS LIABILITY INSURANCE: INCLUDED ___ NOT INCLUDED ___

Bidder hereby represents that Bidder has:

Reviewed the Bidding Documents and Applicable Laws that may affect the provision of the apparatus and equipment, determined the availability of labor, equipment, and materials that are necessary to provide the apparatus and equipment, requested clarification of the provisions of the Bidding Documents or of any aspect of the solicitation that the Bidder does not understand, and notified Cascade Locks of any errors, ambiguities, or inconsistencies in the Contract Documents and foreseeable problems that Bidder has detected.

Bidder acknowledges that the Contract Documents are sufficient in scope and detail to convey adequate understanding of all conditions for providing the apparatus and equipment, and Bidder waives any claim that Bidder is mistaken about conditions that will affect the performance of the contract or the requirements of the Bidding Documents.

Bidder acknowledges that Cascade Locks is purchasing the apparatus equipment using a grant which will expire, leaving Cascade Locks without funds to purchase the apparatus and equipment if delivery and approval are delayed. Therefore, bidder agrees that delivery and approval shall occur no later than June 30, 2009.

Bidder acknowledges that the agreement is expressly conditioned on delivery and approval of the fire apparatus and equipment on or before June 30, 2009, and agrees that, if delivery and approval cannot occur by that date, any agreement will be voidable at the sole discretion of Cascade Locks.

Initial: Bidder acknowledges that, if chosen as the successful bidder:

_____ 1. Bidder shall provide the required pre-construction conference referred to in § 17 of the supplementary provisions.

_____ 2. Bidder shall provide the required inspections trips referred to in § 18 of the supplementary provisions.

All information regarding the qualifications of Bidder as required by the Bidding Documents has been submitted.

Signature Date

Print Name and Title

Signature Date

Print Name and Title

Federal I. D. Number or Social Security Number

Affix corporate seal if appropriate.

INSTRUCTIONS TO BIDDERS FOR PROCUREMENT OF ONE (1) OR MORE FIRE APPARATUS AND EQUIPMENT

1.1 GOODS TO BE PROCURED: Cascade Locks, Oregon Fire and EMS ("Cascade Locks") is accepting sealed bids for procurement of one or more fire apparatus and equipment as more fully described in the specifications and other contract documents.

2 DEFINITIONS:

2.1 Unless the context clearly indicates otherwise, the following definitions apply to these Instructions to Bidders:

2.1.1 "Cascade Locks" means Cascade Locks, Oregon Fire and EMS.

2.1.2 "Contract Documents" means Cascade Locks' General Provisions for Procurement of Goods, Supplementary Provisions, the Fire Apparatus Specifications, these Instructions to Bidders, exhibits that are incorporated in other contract documents by reference, Seller's bid, the sales agreement signed by both parties, and Cascade Locks' purchase orders. References to "the contract", "this contract", "the agreement", or "this agreement" in these Instructions to Bidders or in any contract document shall be deemed to include all contract documents.

2.1.3 "Contract price" means the total amount payable for the goods under the contract documents.

2.1.4 "Goods" means the goods to be provided by the Seller as described in the specifications.

2.1.5 "Seller" shall mean the successful bidder that enters into a contract with Cascade Locks for sale of the goods.

2.1.6 "Work" or "Services" shall mean work that is ancillary to the sale which the Seller is required to perform under the contract documents.

2.2 Unless the context clearly indicates otherwise, definitions contained in ORS Chapter 72 and ORS Chapters 279A and 279B apply to words, terms, and phrases that are used in these Instructions to Bidders.

3 TIME AND PLACE FOR RECEIVING BIDS:

3.1 Bids must be received by Cascade Locks at 140 WaNaPa, P.O. Box 308, Cascade Locks, Oregon 97014 no later than 12:00 p.m.(noon) on September 8, 2008. At that time, bids will be publicly opened and read. Bidders mailing bids should allow extra mail delivery time to ensure timely receipt of their bids by Cascade Locks. **BIDS RECEIVED BY FACSIMILE WILL NOT BE ACCEPTED.** Bids received after the specified time and date cannot be considered, and will be returned unopened to the bidder. The timeliness of the delivery of the bid to Cascade Locks shall be determined by the clock on the wall of the Council Chambers. Bids shall be irrevocable for a period of thirty (30) days from the day they are opened.

3.2 Each bid shall be delivered in a sealed envelope identified on the exterior of the envelope as follows:

Procurement of One (1) or more Fire Apparatus and Equipment
Opening 12:00 p.m. (noon), September 8, 2008

4 REQUIREMENTS OF CONTRACT DOCUMENTS:

4.1 Cascade Locks' General Provisions for Procurement of Goods, Supplementary Provisions, Fire Apparatus Specifications, the bid form, and the agreement are attached to and incorporated in these Instructions to Bidders.

4.2 Each bidder shall examine the attached contract documents and take such other reasonable and prudent actions that the bidder deems necessary to ascertain the requirements of the contract documents. Unless the bid clearly indicates otherwise on the bid form, the bidder will be deemed to understand the contract documents. A bidder shall not, after submitting its bid, assert that there was any misunderstanding concerning the nature, quality, or description of the goods and services to be provided.

5 GENERAL PROVISIONS AND SUPPLEMENTARY PROVISIONS:

5.1 Cascade Locks' General Provisions for Procurement of Goods are designed to cover procurement of a wide variety of goods and ancillary services, and some of the general provisions are not appropriate for this procurement. The Supplementary Provisions supplement, modify, and supersede the General Provisions. General Provisions that are not specifically negated or modified by the Supplementary Provisions shall apply to this procurement.

5.2 Any bid that attempts to modify or abrogate any of the General Provisions or Supplementary Provisions including, but not limited to, provisions on payment and warranties, may be rejected as non-responsive.

6 FIRE APPARATUS SPECIFICATIONS:

6.1 Cascade Locks has determined that the goods described in the attached specifications are fit for the particular purpose for which they are required. However, Cascade Locks is relying on the skill and judgment of each bidder to provide goods that comply with Cascade Locks' specifications and are suitable for Cascade Locks' intended use.

6.2 The bid shall include current brochures, published specifications, and other information published by the manufacturer of the goods identified in the bid. Such information will be used to determine whether the goods proposed in the bid will meet Cascade Locks' specifications.

6.3 The bid shall describe any special equipment, techniques, processes, storage conditions, safety precautions, maintenance, training, and other ancillary goods and services that will be required for the use of the apparatus and equipment proposed by the bidder.

6.4 When goods are described in the specifications by using the brand name of a proprietary product or the name of a product supplied by a particular manufacturer, unless the

specification or description states otherwise, the description is intended to establish the type, function, and quality of the goods required. A bidder may propose supplying a different product that is functionally equivalent to the goods identified in the specifications. The bidder shall be responsible for providing sufficient information on proposed substitutions to facilitate adequate comparison to the goods described in the specifications.

6.5 Any substantial deviation from Cascade Locks' Specifications must be fully and precisely explained. With respect to substitutions for proprietary products identified by brand names in the specifications, and other substantial deviations from Cascade Locks' specifications, the bidder shall:

6.5.1 Describe exactly how its product differs from goods specified by Cascade Locks and the reasons why its product is functionally equivalent to the goods specified by Cascade Locks; and

6.5.2 Certify that the bidder's product is suitable for the intended use of the goods, and will function as well as, or better than, the goods specified by Cascade Locks.

6.6 Cascade Locks may either reject a bid for noncompliance with Cascade Locks' Specifications or waive noncompliance when Cascade Locks determines that it is in the public interest to do so. Cascade Locks reserves the exclusive right to determine whether products proposed by a bidder comply with Cascade Locks' Specifications or are otherwise suitable for Cascade Locks' intended use.

7 CONTACT INFORMATION: The Contract Administrator, Jeff Pricher, Chief, Cascade Locks Fire & EMS Department, is the sole point of contact in Cascade Locks for this procurement. All correspondence pertaining to this bid should be directed to Chief Jeff Pricher, 140 WaNaPa, P.O. Box 308, Cascade Locks, Oregon 97014. The telephone number is (541) 374-8510, fax: (541) 374-8752.

8 PROTESTS: Any prospective bidder who contends that the provisions of the contract documents or any aspect of the bidding process will encourage favoritism in the award of the contract for procurement of the goods, or substantially diminish competition, must submit a written protest with the Contract Administrator at least five (5) days prior to the date on which the bids are due. Failure to file a protest will be deemed a waiver of any claim by a bidder or prospective bidder that the procurement process violates any provision of ORS Chapter 279A or Chapter 279B or the Cascade Locks Contract Review Board Rules. If protests, inquiries, or comments by bidders raise issues that require clarification by Cascade Locks, addenda will be issued by the Contract Administrator.

9 ADDENDA: Neither the provisions of these Instructions to Bidders nor the contract documents will be modified by oral interpretations or statements. If Cascade Locks decides to revise any part of these Instructions to Bidders or the contract documents, addenda will be provided to all bidders who receive these Instructions to Bidders. Receipt of an addendum by a bidder must be acknowledged by signing and returning, a copy of the addendum with the bid form.

10 BID FORM:

10.1 Bidders shall complete the bid form provided by Cascade Locks. All pages of the bid form must be left in proper sequence and all blanks on the bid form must be filled in. Bids will

be deemed non-responsive if the bid form is altered, incomplete, conditional, or otherwise irregular.

10.2 If the bid is submitted by a partnership, it must be signed by a partner. If the bid is submitted by a corporation, it must be signed by a corporate officer.

10.3 The bid must include a statement on whether or not the bidder is a resident bidder as defined in ORS 279A.120. "Resident bidder" means a bidder who has paid unemployment taxes or income taxes in this state during the 12 calendar months immediately preceding submission of the bid and has a business address in this state.

11 WITHDRAWAL OF BIDS: Any bid may be withdrawn at any time prior to the time set for opening bids, by providing a written request for withdrawal of the bid to the Contract Administrator. The request shall be executed by the bidder or a duly authorized representative. After bids are opened they shall be irrevocable for a period of thirty (30) days from the day of opening.

12 ACCEPTANCE OF BID:

12.1 Cascade Locks may reject any bid if Cascade Locks determines that:

12.1.1 There is collusion between bidders,

12.1.2 The bid is not responsive,

12.1.3 Prices in the bid are unbalanced, or

12.1.4 The bid is not in compliance with the terms of the contract documents and all applicable public bidding laws, rules, and ordinances.

12.2 Cascade Locks reserves right to determine responsibility of bidders pursuant to ORS 279B.110 and to debar bidders pursuant to ORS 279B.130.

12.3 Pursuant to ORS 279B.100, Cascade Locks reserves the right to reject any or all bids if Cascade Locks finds that it is in the public interest to do so.

12.4 Within thirty (30) days after bids are opened Cascade Locks will either award the contract or reject all bids. The award will be made based on the criteria set forth in Section 13 below.

12.5 Pursuant to ORS 279A.120, to determine the lowest responsible bidder, Cascade Locks will add a percent increase on the bid of a nonresident bidder equal to the percent, if any, of the preference given to that bidder in the state in which the bidder resides.

12.6 Terms or discounts which are conditioned upon payment within a certain time will not be considered for purposes of comparison of bids.

12.7 Pursuant to ORS 279A.120, Cascade Locks shall give preference to goods that have been manufactured or produced in Oregon if price, fitness, availability, and quality are otherwise equal.

12.8 Pursuant to ORS 279A.125, Cascade Locks shall give preference to procurement of goods manufactured from recycled materials if the requirements of ORS 279A.125(2) can be met.

12.9 The Contract Administrator will issue a sales agreement for the goods to the lowest responsible bidder within thirty (30) days after bids are opened. The sales agreement will be in the form that is attached to these Instructions to Bidders. If the successful bidder does not sign and return the sales agreement within ten (10) days after it is issued by the Contract Administrator, Cascade Locks may enter into a sales agreement with another bidder.

13. AWARD OF CONTRACT:

13.1 Award of Contract will be based on the following criteria:

13.2	Ability to deliver apparatus and equipment on time	50%
13.3	Lowest Price	30%
13.4	Experience	10%
13.5	Financial Ability to perform	<u>10%</u>
		100%

CASCADE LOCKS' GENERAL PROVISIONS FOR PROCUREMENT OF GOODS

1 DEFINITIONS AND INTERPRETATION:

1.1 Unless particular provisions of the Contract Documents state otherwise, the following definitions apply to all Contract Documents:

1.1.1 "Addendum" a document issued by Cascade Locks before Bids are due that changes the Solicitation Documents.

1.1.2 "Agreement" means the Contract Document signed by the Parties that incorporates all other Contract Documents by reference.

1.1.3 "Amendment" means a written agreement between the Parties that changes provisions of the Contract Documents.

1.1.4 "Applicable Laws" means all statutes, rules, regulations, orders, ordinances, and other legal requirements of Governmental Agencies that affect any aspect of the sale, transportation, storage, or use of Goods or performance of Services.

1.1.5 "Bid" means the written offer to sell the Goods and to perform Services in connection with the sale, including a "Bid Schedule" and other documents submitted by Seller in response to Solicitation Documents. If a Request for Proposals was issued, "Bid" is synonymous with "Proposal."

1.1.6 "Bidder" means a person or an entity who submits a Bid.

1.1.7 "Contract Administrator" means the person authorized by the Council to administer the Contract for Cascade Locks.

1.1.8 "Contract Documents" mean the documents that govern the contractual rights and obligations of the Parties concerning the Goods and Services, including these General Provisions, Supplementary Provisions or Special Provisions, Specifications, Drawings, Addenda pertaining to other Contract Documents, the Bid accepted by Cascade Locks, the Agreement, Purchase Order(s), and Amendments.

1.1.9 "Contract Price" means the total amount payable to Seller for the Goods and Services as determined by the Contract Documents.

1.1.10 "Contract Time" means the time during which Seller must deliver the Goods and perform the Services which may be stated as a certain number of days or a certain date by which the Goods will be delivered and Services will be completed or as a term of months or years during which Goods and Services will be provided on a periodic basis.

1.1.11 "Council" means the City Council for Cascade Locks, Oregon.

1.1.12 "Document" and "Record" mean any book, paper, photograph, drawing, model, video or sound recording, electronic record, or other material which contains verbal, numerical, or graphic information.

1.1.13 "Drawings" means Contract Documents which illustrate the design, dimensions, and details of Goods in pictorial or graphic form.

1.1.14 "Environmental Laws" means Applicable Laws pertaining to hazardous substances, environmental health hazards, environmental pollution, or preservation of natural resources.

1.1.15 "Equipment" means any machinery, equipment, hardware, apparatus, and other mechanisms.

1.1.16 "Goods" means Goods, as defined in ORS 72.1050, which Seller will sell to Cascade Locks, including Equipment.

1.1.17 "Governmental Agency" means any federal, state, or local governmental body or agency with jurisdiction over the Goods or Services.

1.1.18 "Hazardous Substance" means any substance regulated by an Environmental Law which may pose a hazard to human health or the environment, including "Hazardous Substances" as defined in ORS 465.200 and "Hazardous Chemicals" regulated by ORS 654.750 et seq. or OAR Chapter 437, Division 4.

1.1.19 "Lump Sum" and the abbreviation "L.S." mean an undivided fixed price for a Pay Item that is not measured by units.

1.1.20 "Party" or "Parties" means Cascade Locks or Seller or both.

1.1.21 "Pay Item" means a part of the Goods and Services for which a specific Unit Price or Lump Sum is listed in the Bid Schedule.

1.1.22 "Premises" means real property, including land and structures attached to land.

1.1.23 "Product Data" means illustrations, schedules, performance charts, instructions, brochures, diagrams, and other documents provided by the Seller that contain technical information concerning Goods and Services.

1.1.24 "Proprietary Product" means Goods which are described in the Specifications by brand name or which are held under patent or trademark by a particular person or entity.

1.1.25 "Purchase Order" or "Order" means a Contract Document issued by Cascade Locks to Seller which requires Seller to provide certain Goods at the Contract Price stated in the Bid.

1.1.26 "Seller" means the successful Bidder who has entered into an Agreement with Cascade Locks for providing Goods and performing ancillary Services.

1.1.27 "Services" means all personal services and labor that the Seller will provide in connection with the sale of Goods.

1.1.28 "Sole Source Product" means Goods that must be obtained from a particular source, vendor, or manufacturer for sale to Cascade Locks.

1.1.29 "Solicitation Documents" means all documents issued by Cascade Locks to solicit Bids or Proposals, including the Instructions to Bidders or the Request for Proposals, proposed Contract Documents, and Addenda.

1.1.30 "Special Provisions" or "Supplementary Provisions" means a Contract Document that supplements, modifies, and supersedes these General Provisions.

1.1.31 "Specifications" means a Contract Document that contains technical descriptions of the Goods and Services.

1.1.32 "Specified Product" means a Sole Source Product, Proprietary Product, or generic Goods with specific features, components, constituents, or qualities that are described in the Specifications at the time the Agreement is signed.

1.1.33 "Subcontractor" means a person or entity that enters into a written "Subcontract" with Seller or another Subcontractor at another tier for performing Services.

1.1.34 "Substitute" means Goods that the Seller proposes to provide instead of a Specified Product.

1.1.35 "Supplementary Provisions" or "Special Provisions" means a Contract Document that supplements, modifies, and supersedes these General Provisions.

1.1.36

1.1.37 "Third-Party Claim" means any demand, claim, action, or other adversarial proceeding that is asserted, filed, prosecuted, or appealed against a Party by a person or entity other than a Party and any resulting expenses and liabilities, including damages, penalties, judgments, attorney fees, mediation costs, arbitration costs and litigation costs.

1.1.38 "Unit Price" means the price for a Pay Item that is measured by units which

will vary in quantity. Goods and Services covered by a Unit Price are called "Unit Price Items."

1.2 Generally, unless particular provisions of the Contract Documents state otherwise, or unless the context indicates otherwise, the following provisions will be applied in interpretation of the Contract Documents:

1.2.1 Words defined in the Contract Documents are capitalized.

1.2.2 References to specific sections or subsections will be capitalized and will mean the sections and the subsections of the Contract Document in which the references are made.

1.2.3 Words in the present tense include the future and vice versa. Words and phrases used as nouns include the singular and plural forms.

1.2.4 A word or phrase that is not defined in the Contract Documents will have the definition stated in Applicable Laws, and if there is no definition in the Contract Documents or Applicable Laws, the meaning accepted in Seller's trade.

1.2.5 "Shall," "will," and "must" signify mandatory obligations. "May" signifies a discretionary or permissive act.

1.2.6 The phrase "without limitation" will be deemed to follow the words "include," "includes," and "including" when referring to a list, class, or group of persons, entities, things, conditions, acts, omissions, events, obligations, rights, remedies, or liabilities.

1.2.7 Modifying words such as "all" and "any" and articles such as "the" and "an" may be omitted, but including or omitting an article or modifier should not affect the interpretation of a provision of the Contract Documents.

2 CONTRACT DOCUMENTS:

2.1 The Contract Documents supersede Solicitations Documents that are not expressly incorporated in the Contract Documents by the Agreement. The Contract Documents constitute the entire agreement between the Parties concerning the Goods and Services. References to "this Contract" or "the Contract" in any Contract Document will include all Contract Documents.

2.2 Supplementary Provisions or Special Provisions that are incorporated in the Contract Documents by the Agreement supplement, modify, and supersede the General Provisions.

2.3 An exhibit or other document incorporated by reference in a Contract Document will be an integral part of that Contract Document.

2.4 If the Specifications omit details of the technical characteristics of the Goods or Services, details consistent with the intended use of the Goods, as described in the Contract Documents, will be inferred.

2.5 The Contract Documents are intended to be complementary, but inconsistencies may occur. Unless a particular provision of the Contract Documents states otherwise, inconsistencies within the Contract Documents will be resolved by the following order of priority (the document named in Subsection 2.5.1 takes priority over all others and so on in descending order):

2.5.1 Amendments.

2.5.2 Agreement.

2.5.3 Addenda pertaining to the Contract Documents.

2.5.4 Supplementary Provisions or Special Provisions.

2.5.5 General Provisions.

2.5.6 Specifications.

2.5.7 Drawings.

2.5.8 Purchase Orders.

2.5.9 Seller's Bid.

2.6 Addenda and Amendments of a later date will take priority over those of an earlier date.

2.7 If Specifications are inconsistent, the document or provision that will result in the better quality of Goods and Services will take priority.

2.8 Provisions of the Contract Documents regarding Purchase Orders or Orders apply only to requirements contracts, output contracts, and other contracts which allow Cascade Locks to procure Goods and Services in units or lots by issuing a discrete Purchase Order during the Contract Time for each unit or lot.

2.9 Seller shall notify the Contract Administrator of ambiguities or inconsistencies in the Contract Documents. If the Contract Administrator determines that there is an ambiguity or inconsistency, the Contract Administrator will issue a written interpretation that is consistent with the provisions of this section to clarify the matter which will be an integral part of the Contract Document that it interprets.

3 ADMINISTRATION OF CONTRACT:

3.1 The Contract Administrator is named in the Contract Documents. The Council may designate a new Contract Administrator at any time. Subject to limitations stated in the Contract Documents, the Contract Administrator may delegate authority to other representatives of Cascade Locks, and references to the Contract Administrator in the Contract Documents will include such representatives. The Council or the Contract Administrator will give Seller notice of any delegation of or change in authority that is made pursuant to this subsection. Seller will not rely on any directive, decision, or action that is made by anyone who is not authorized to act on behalf of Cascade Locks in accordance with the Contract Documents.

3.2 Unless particular provisions of the Contract Documents state otherwise, all actions and decisions of Cascade Locks under the Contract Documents will be taken or made by the Contract Administrator. The Contract Administrator cannot take any actions or make any decisions that change the Contract Price.

3.3 Seller shall designate at least one representative of Seller who is authorized take actions and make decisions necessary for administration of the Contract. Seller shall give the Contract Administrator notice of the names of Seller's representatives and the scope of their authority.

4 AMENDMENTS: Unless particular provisions of the Contract Documents state otherwise, the Contract Documents may be changed only by written Amendments that are signed by authorized representatives of the Parties and not by oral agreements.

5 SEVERANCE: If a provision of the Contract Documents is held to be invalid, it will not affect the validity of any other provision. The Contract Documents will be construed as if the invalid provision had never been included.

6 WAIVER: Compliance with requirements of the Contract Documents may be waived only by a written waiver signed by the Party waiving its rights. Waiver of one requirement will not be deemed to waive any other requirement.

7 APPROVALS: If any act, thing, or document is subject to the approval of the Contract Administrator under the Contract Documents, the approval must be given in the same manner as

notices under Section 8 unless a particular Contract Document states otherwise. Approval will not be withheld arbitrarily.

8 NOTICES:

8.1 Notices required by the Contract Documents must be written and must be given by personal delivery, mail, or facsimile transmission, unless a particular method of notice is required by Applicable Law.

8.2 The Parties' addresses and facsimile numbers for notices are stated in the Agreement. Each Party will notify the other of any change of address or facsimile number.

8.3 Notices mailed within Oregon will be deemed given on the second day following the date postmarked. Notices mailed outside Oregon will be deemed given upon the fifth day following the date postmarked.

9 SUCCESSORS:

9.1 The successors, assigns and legal representatives of Seller and Cascade Locks will be subject to all provisions of the Contract Documents.

9.2 Seller will not assign any of Seller's rights or responsibilities under the Contract Documents without the prior approval of Cascade Locks.

10 SELLER'S RECORDS: Seller shall allow representatives of Cascade Locks to examine and copy records that are pertinent to the Contract at reasonable times while the Contract is in effect, within six years after termination of the Contract, and while any dispute between the Parties concerning the Contract is unresolved.

11 MERCHANT STATUS: Seller is and Cascade Locks is not a "merchant" of the Goods within the meaning given that term by ORS Chapter 72.

12 GOODS:

12.1 Goods provided by Seller must conform to the Specifications and Drawings, subject to Amendments for substitutions made pursuant to Section 18.

12.2 Equipment must be new, current models of standard production. Equipment must be cleaned, conditioned, installed, and connected in accordance with instructions of the manufacturer.

13 WARRANTIES:

13.1 Standard warranties of manufacturers of Goods provided by the Seller will apply to the extent that they enhance warranty protection for Cascade Locks.

13.2 Goods will be subject to the warranties provided by ORS 72.3120, 72.3130, and 72.3140. If the Contract Documents state Cascade Locks' intended use of the Goods, Cascade Locks will rely on Seller's skill or judgment to furnish suitable Goods and ORS 72.3150 will apply to the Goods.

13.3 Any disclaimers of warranties in documents provided by Seller will not diminish Seller's obligations under warranties stated in this section or other provisions of the Contract Documents.

14 SERVICES:

14.1 Seller is responsible for all Services required by the Contract Documents. Seller shall:

14.1.1 Furnish and pay for all equipment, tools, labor, personal services, documents, and incidentals that are required by the Contract Documents, or that should be inferred from the Contract Documents as necessary to perform the Services;

14.1.2 Perform the Services in accordance with the Contract Documents and generally accepted trade standards and practices; and

14.1.3 Determine and control the means or methods used for the Services unless the Contract Documents require specific means or methods.

14.2 Seller shall provide and properly supervise competent, qualified workers. Workers must have any licenses and certificates required by law for performing Services to which they are assigned.

15 PREMISES:

15.1 Provisions referring to the Premises apply only to Services that are performed at Premises owned or occupied by Cascade Locks.

15.2 Cascade Locks will allow Seller to have access to and use of the Premises to the extent necessary for performance of the Services. Seller shall confine the Services to the areas specified in the Contract Documents. If practicable, Seller shall not interfere with regular use of the Premises. Upon completion of Services, Seller shall leave the Premises clean and ready for use by Cascade Locks.

16 SAFETY AND PROTECTION OF PROPERTY:

16.1 Seller, at Seller's expense, shall implement reasonable precautions to prevent injury to persons and damage to property that may result from the Services, including safety measures and facilities required by Applicable Laws.

16.2 Seller will be responsible for all damage to Cascade Locks' real and personal property resulting from the Services, and Seller shall compensate Cascade Locks immediately following receipt of notice from the Contract Administrator describing the damage and stating the costs of repairing or restoring such damage.

17 SUBCONTRACTORS:

17.1 Services that are performed by a person who is not an employee of Seller must be performed with a Subcontractor who qualifies as an independent contractor under ORS 670.600 or an employee of a Subcontractor. Seller shall not enter into Subcontracts for Services or allow a Subcontractor to assign its interest in a subcontract or to enter into a subcontract at a lower tier without the approval of Cascade Locks. Seller will be responsible for Services performed by a Subcontractor.

17.2 Subcontractors will not perform Services at the Premises until they provide the same proof of liability insurance coverage and proof of workers' compensation coverage that is required of Seller under the Contract Documents.

18 SUBSTITUTES:

18.1 References to the Goods in the Contract Documents will mean the Specified Product unless a Substitute is approved pursuant to this section. Seller must request approval of a Substitute before delivery. The Contract Administrator will not approve a Substitute that could have resulted in lower bids from all bidders if approval had been requested during the bidding process. Seller shall provide a written explanation of Seller's reasons for not requesting approval of the Substitute before bidding.

18.2 A request for substitution must include Product Data required by the Contract

Administrator for evaluation of the proposed Substitute including the following information:

18.2.1 Technical characteristics of the Substitute;

18.2.2 Past performance and reliability of the Substitute when used for the same purpose as the intended use for the Specified Product.

18.2.3 Costs of providing, using, and maintaining the Substitute; and

18.2.4 Warranties, requirements for maintenance of the Substitute, and availability of maintenance and repair service.

18.3 Seller shall certify that all information regarding the Substitute provided by the Seller is true and complete and that the performance of the Substitute will be equal or superior to the Specified Product.

18.4 The Contract Administrator has complete discretion to approve or reject a Substitute. Approval of a Substitute will be documented by an Amendment. The Contract Administrator may revoke approval of Substitute, and require Seller, at Seller's expense, to replace the Substitute if it does not conform to Seller's representations after it is in use.

18.5 Seller shall pay all costs arising from a request for substitution regardless of whether the request is approved, including costs incurred by Cascade Locks in reviewing the request.

18.6 If the cost of using an approved Substitute is less than the cost of using the Specified Product, the Contract Price will be reduced accordingly by an Amendment. The Contract Price will not be increased for use of the Substitute unless substitution was unavoidable.

19 DELIVERY: Seller will deliver the Goods F.O.B. to Cascade Locks' address as stated in the Contract Documents. Shipment with any reservation is prohibited. The Goods must be delivered by the time stated in the Purchase Order, or if there will be a single delivery, by the time stated in the Agreement. Itemized packing slips must accompany all deliveries. Cascade Locks' Purchase Order number or contract number must be on Seller's invoice, packing slips, and all shipping containers.

20 RISK OF LOSS: Seller will have the risk of loss until the Goods have been delivered to Cascade Locks and are approved after inspection by the Contract Administrator.

21 PATENTED OR COPYRIGHTED ITEMS:

21.1 Seller warrants that Cascade Locks' use of the Goods will not infringe upon any patent, copyright, or any other proprietary right of any third party.

21.2 Seller shall pay all license fees, royalties, and other costs required by Applicable Laws or otherwise for use of the Goods or any component or constituent of the Goods that is subject to patent or copyright held by a third party. Seller shall submit a nonexclusive, perpetual license for County to use computer software incorporated in the Goods.

22 CANCELLATION: Cascade Locks may cancel any Purchase Order by written notice to Seller before the Goods are delivered. Upon receipt of the notice Seller shall stop performance. If Cascade Locks cancels a Purchase Order under this provision, Seller will be entitled only to reasonable expenses incurred in stopping delivery and for care, custody, and transportation of the Goods after receipt of Cascade Locks' notice. Seller will not be entitled to recover lost profits.

23 INSPECTION AND TESTING:

23.1 If the Specifications require that Goods be tested prior to acceptance, Seller shall have the tests conducted at Seller's expense by a third-party approved by the Contract

Administrator. Seller shall provide the test results to the Contract Administrator prior to or concurrent with delivery.

23.2 Goods furnished under the Contract Documents will be subject to inspection and testing by Cascade Locks at times and places determined by Cascade Locks. If the Contract Administrator determines that the Goods are not in compliance with the Specifications, the Contract Administrator may reject the Goods and require Seller to either cure defects or make an equitable price reduction. If Seller refuses to cure defects within a time deemed reasonable by the Contract Administrator, Cascade Locks may enforce Cascade Locks' remedies for default. Nothing in this provision impairs Cascade Locks' rights to enforce warranties, revoke acceptance of the Goods or enforce any other remedies under ORS Chapter 72.

24 COMPLIANCE WITH APPLICABLE LAWS:

24.1 The Contract Documents will be interpreted and construed in accordance with the laws of the State of Oregon.

24.2 Seller shall comply with all Applicable Laws regardless of whether they are cited or stated verbatim in the Contract Documents.

24.3 Pursuant to ORS 279B.220, Seller shall:

24.3.1 Make payment promptly, as due, to all persons providing to Seller labor or material for the Goods and Services.

24.3.2 Pay all contributions or amounts due the Industrial Accident Fund from Seller or any Subcontractor incurred in the performance of the Services.

24.3.3 Not permit any lien or claim to be filed or prosecuted against Cascade Locks on account of any labor or material furnished.

24.3.4 Pay to the Department of Revenue all sums withheld from employees pursuant to ORS 316.167.

24.4 Pursuant to ORS 279B.230, Seller shall promptly, as due, make payment to any person or entity that furnishes medical, surgical, and hospital care or other needed care and attention, incident to sickness or injury, to the employees of Seller, of all sums which Seller agrees to pay for such services and all moneys which Seller collected or deducted from the wages of Seller's employees pursuant to any law, contract or agreement for the purpose of providing or paying for such service.

24.5 Pursuant to ORS 279B.235, no person will be employed for the Services for more than 10 hours in any one day, or 40 hours in any one week, except in cases of necessity, emergency, or where the public policy absolutely requires it. Persons employed to provide the Services will be paid at least time and a half pay for legal holidays specified in a collective bargaining agreement or in ORS 279C.540 (1)(b)(B) to (G) and for time worked in excess of 10 hours a day or in excess of 40 hours a week, whichever is greater. In addition, Seller shall comply with all other requirements of ORS 279B.235.

24.6 Seller shall not provide or offer to provide any appreciable pecuniary or material benefit in connection with this Contract to any officer or employee of Cascade Locks in violation of ORS Chapter 244.

25 HAZARDOUS SUBSTANCES:

25.1 Seller shall comply with all Environmental Laws. Seller shall not bring Hazardous Substances to the Premises other than the Goods and Hazardous Substances that are required for the Services, as approved by the Contract Administrator.

25.2 If Seller or a Subcontractor causes a release of a Hazardous Substance, contamination of the Premises, or any other condition that violates an Environmental Law, Seller

shall immediately notify the Contract Administrator and give notice to any Governmental Agencies that is required by Environmental Laws. Seller shall perform all remedial acts required by Environmental Laws, including containment and cleanup. The notice to the Contract Administrator must describe the nature, location, and time of the occurrence; containment and cleanup actions; contacts with Governmental Agencies; actions taken by Governmental Agencies; and any injuries to persons or damage to property.

25.3 If the Goods contain Hazardous Chemicals regulated by ORS 654.750 or OAR Chapter 437, Division 4, material safety data sheets for those Goods must be submitted to the Contract Administrator before the Goods are delivered. Before Services begin at the Premises, the Parties will exchange material safety data sheets, label information, and instructions for precautionary measures for Hazardous Chemicals that are at kept at the Premises by Cascade Locks or that will be used for the Services by Seller or a Subcontractor. Seller shall implement precautions required to protect persons who perform the Services and other persons at the Premises from exposure to Hazardous Chemicals that may result from the Services.

25.4 Seller shall bear all expenses for precautionary and remedial actions required by this section.

26 NO THIRD PARTY BENEFICIARIES: Subcontractors and the principals and employees of Seller and any Subcontractors are not third party beneficiaries of this Contract. Notwithstanding the provisions of Subsection 24.4, Cascade Locks is not obligated to pay any person or entity that performs Services other than Seller.

27 LIABILITY OF COUNTY'S OFFICERS, EMPLOYEES, AND AGENTS: Officers, employees, and agents of Cascade Locks will not have any direct, personal liability to Seller for actions taken on behalf of Cascade Locks.

28 NO AGENCY: Seller, Subcontractors, and their principals, employees, and agents are not agents of Cascade Locks as that term is used in ORS 30.265.

29 INDEMNIFICATION:

29.1 Except as provided in Subsection 29.2, or as otherwise provided by Applicable Law, Seller will be responsible for, and shall defend and indemnify Cascade Locks and its officers, employees, and agents from Third-Party Claims arising from the Services, including Third-Party Claims arising from:

29.1.1 Injury to any person or damage to property;

29.1.2 Defects in the Goods that are existing at the time the Goods are delivered, regardless of whether Cascade Locks inspects or accepts the Goods;

29.1.3 Breach of Seller's obligations under the Contract Documents or subcontracts;

29.1.4 Infringement of any interest described in Subsection 21.2; or

29.1.5 Violation of Applicable Law by Seller or a Subcontractor.

29.2 Seller will not be responsible for Third-Party Claims resulting solely from the negligence or other wrongful acts or omissions of Cascade Locks or Cascade Locks' officers, employees, or agents.

30 LIABILITY INSURANCE:

30.1 At all times while Seller is providing Services at the Premises, Seller shall, at its own expense, maintain:

- 30.1.1 A commercial or comprehensive general liability insurance policy;
- 30.1.2 A comprehensive automobile liability insurance policy including owned and non-owned automobiles; and
- 30.1.3 An employer's liability insurance policy.

30.2 The coverage under each insurance policy must be equal to or greater than the limits for claims made under the Oregon Tort Claims Act with minimum coverage of \$1,000,000 per occurrence (combined single limit for bodily injury and property damage claims) or \$1,000,000 per occurrence for bodily injury and \$500,000 per occurrence for property damage. Unless the Supplementary Provisions or the Special Provisions allow "claims made" coverage, "occurrence" coverage must be provided. Each policy must be issued by a responsible insurance company that is licensed to do business in the State of Oregon.

30.3 Insurance provided pursuant to this section will be primary insurance for all Third-Party Claims. Cascade Locks and Cascade Locks' officers, employees, and agents must be named as additional insureds.

30.4 Prior to starting the Services, Seller shall provide a certificate of insurance for each policy which obligates the insurer to give written notice to the Contract Administrator 30 days prior to termination or restriction of coverage. A certificate of self-insurance issued by the Oregon Department of Transportation pursuant to ORS 806.140 may be provided in lieu of a certificate of automobile liability insurance coverage. Certificates of insurance will be subject to approval by Cascade Locks City Attorney. Cascade Locks may reject a certificate which states that the issuing company will merely "endeavor to mail" written notice. Seller shall keep certificates current until final payment for the Services.

31 WORKERS' COMPENSATION:

31.1 Seller is a "subject employer" as defined in ORS 656.005 and shall comply with ORS 656.017. All persons performing Services at the Premises must be covered by workers' compensation insurance regardless of whether they are classified as "nonsubject workers" under ORS 656.027.

31.2 Before Services are performed at the Premises, Seller shall provide to the Contract Administrator a certificate of insurance for workers' compensation coverage in a form acceptable to Cascade Locks Counsel or a certificate of self insurance issued by the Director of the Oregon Department of Consumer and Business Services pursuant to ORS 656.430.

32 TAXES: Cascade Locks generally is not subject to taxation. Seller will be responsible for paying all taxes on the sale of the Goods.

33 CONTRACT TIME AND SCHEDULE:

33.1 Time is of the essence of this Contract. Seller shall deliver the Goods and complete the Services within the Contract Time and in accordance with any performance schedule stated in the Contract Documents.

33.2 The Contract Administrator will consider an Amendment extending the Contract Time if the Contract Administrator determines that delivery of the Goods or performance of the Services are delayed by occurrences beyond Seller's control. The Contract Time will not be extended because of inadequate labor, equipment, or materials; negligence or fault of Seller, Seller's suppliers, or Subcontractors; or other deficiencies within Seller's control or responsibility.

34 CONTRACT PRICE:

34.1 The Contract Price constitutes the total compensation payable to Seller for all components and constituents of Goods and Services provided by Seller. The Contract Price will include only Pay Items listed in the Bid Schedule.

34.2 The Contract Price may be stated as a Lump Sum or in Unit Prices or as a combination of one or more Lump Sums and Unit Prices.

34.3 If the Bid Schedule specifies "Lump Sum" payment, Seller will be paid only the amount stated in the Bid Schedule for that Pay Item.

34.4 The quantities appearing in the Bid Schedule for Unit Price Items are approximate, and Cascade Locks does not warrant that the actual quantities will correspond with the Bid Schedule. The amount payable for a Unit Price Item will be equal to the actual quantity of the Unit Price Item provided by Seller times the Unit Price stated in the Bid Schedule.

35 PAYMENT:

35.1 Seller is entitled to payment under this section only for Goods and Services provided in accordance with the Contract Documents as determined by the Contract Administrator. By making a payment Cascade Locks will not be deemed to have accepted defective Goods or Services or to have waived any breach of contract.

35.2 Seller shall submit invoices to Cascade Locks, 140 WaNaPa, P.O. Box 308, Cascade Locks, Oregon 97014, as soon as possible following the end of each calendar month, but no later than thirty days following the end of the calendar month in which the Goods or Services were provided. Progress payments for invoices approved by the Contract Administrator will be made monthly within 30 days after receipt of the invoice.

35.3 If ORS 279A.120 applies to Seller, prior to the final payment, Seller must certify to the Contract Administrator that upon signing the Agreement, Seller reported to the Oregon Department of Revenue the total Contract Price, the term of payment, the length of the contract and such other information required by the Department of Revenue.

35.4 Cascade Locks may withhold from payments liquidated damages, the cost of correcting defective Goods and Services, and other amounts for which Seller is responsible under the Contract Documents.

35.5 Cascade Locks' obligation to make payments is conditioned upon appropriation of funds pursuant to the Oregon Local Budget Law. Cascade Locks has appropriated funds for the Contract for the fiscal year that ends on June 30 following the date the Agreement is signed. If Cascade Locks determines that funds will not be appropriated for any subsequent fiscal year, Cascade Locks will terminate the Contract by notice to Seller.

36 LIQUIDATED DAMAGES:

36.1 If the Goods are not delivered or the Services are not completed within the Contract Time, Cascade Locks will suffer inconvenience and monetary damage, but ascertaining the actual loss sustained by Cascade Locks may be difficult. In the absence of liquidated damages, Cascade Locks may not have an adequate remedy if performance is delayed by Seller.

36.2 The Agreement may establish reasonable liquidated damages which Seller shall pay to Cascade Locks for failure to deliver Goods or perform Services within the Contract Time or in accordance with any performance schedule. If liquidated damages are not specified, Cascade Locks will be entitled to recover actual damages resulting from avoidable delays caused by Seller.

37 DEFAULT:

37.1 A Party will be in default under the Contract Documents if that Party fails to comply

with any provision of the Contract Documents within fifteen days after the other Party gives notice specifying the breach. If the breach specified in the notice cannot be completely cured within the fifteen day period, no default will occur if the Party receiving the notice begins curative action within the fifteen day period and diligently proceeds to cure the breach.

37.2 Notwithstanding Subsection 37.1, Cascade Locks may declare a default immediately by notice to Seller if the Contract Administrator determines that:

37.2.1 Seller has repeatedly or intentionally breached material provisions of the Contract Documents; or

37.2.2 Seller's breach of contract creates an unreasonable risk of injury to any person or damage to property.

37.3 If a default occurs, before either Party may proceed with litigation, the Parties must first seek in good faith to resolve the dispute through negotiation or mediation.

37.4 If a default occurs and it is not resolved under Subsection 37.3, the Party injured by the default may enforce its rights under the Contract Documents by any equitable or legal remedies available under Oregon law. Exercising one remedy will not impair any other remedy. Either Party may terminate the Contract for default, but enforcement of any other remedy will not be construed as an election to terminate unless notice of termination is given.

37.5 The Council reserves exclusive authority to initiate litigation on behalf of Cascade Locks. Litigation arising out of the Contract Documents must be conducted in Circuit Court of the State of Oregon for **Hood River County**.

38 TERMINATION WITHOUT DEFAULT:

38.1 In addition to Cascade Locks' rights to terminate under Subsection 35.5, Section 37.4 and Applicable Laws, Cascade Locks may terminate the Contract if the Council determines that termination is in the best interest of the public. Cascade Locks will endeavor to give Seller written notice thirty days prior to termination under this section, but failure to give such notice will not affect Cascade Locks' action.

38.2 Termination under this section will not affect the rights of the Parties existing at the time of termination. If Seller is not in default, Seller will be paid only for Services performed prior to termination and reasonable expenses incurred in stopping delivery and for care, custody, and transportation of the Goods after receipt of Cascade Locks' notice. Seller will not be entitled to payment for lost profits for any Goods or Services that are not provided prior to termination.

39 ACTION UPON TERMINATION: Unless the Contract Administrator directs otherwise, upon receiving a notice of termination, Seller shall stop the Services, terminate Subcontracts, stop orders for Goods, vacate the Premises, and deliver to the Contract Administrator all documents in Seller's possession and control concerning the Goods and Services.

SUPPLEMENTARY PROVISIONS

1. PURPOSE OF SUPPLEMENTARY PROVISIONS

1.1 These supplementary provisions are part of the contract documents for procurement of fire apparatus and equipment.

1.2 The following supplementary provisions modify and supplement Cascade Locks' General Provisions for Procurement of Goods. The general provisions are designed to cover procurement of a wide variety of goods and ancillary services, and some of the general provisions are not appropriate for this contract. These supplementary provisions supersede contrary general provisions. General provisions that are not specifically negated or modified by these supplementary provisions shall apply to the goods and services covered by the contract documents.

2. MODIFICATIONS TO GENERAL PROVISIONS

2.1 Each bid must be accompanied by bidder's accurate and fire department specific written specifications covering the apparatus and equipment which it is proposing to furnish and to which the apparatus furnished under the contract must conform.

2.2 If conflicts arise during construction between these specifications and the bidder's proposal the Fire Apparatus Specifications shall prevail.

2.3 Such details and other construction features not specifically covered in the Fire Apparatus Specifications shall conform to all State and Federal requirements, and the NFPA Pamphlet No. 1901 "Standard for Automotive Fire Apparatus" in effect at the time the contract is signed.

3. **DELIVERY AND APPROVAL.** Bidder acknowledges that Cascade Locks is purchasing the apparatus and equipment using a grant which will expire, leaving Cascade Locks without funds to purchase the apparatus and equipment if delivery and approval are delayed. Therefore, Bidder agrees that delivery and approval shall occur no later than June 30, 2009.

4. **UNDERWRITERS LABORATORIES TESTING.** Any test equipment required or expense incurred for the ULI pump test shall be borne by the contractor supplying this equipment. Any statements of "Third Party Tested" will not be acceptable. Underwriter Laboratories will be the only testing authority approved by the fire department. The original and notarized copy of the Underwriter Laboratories' certificate shall be delivered to the fire department upon completion. There will be no exceptions to this requirement due to legal requirements by the fire department.

5. **RELIABILITY OF CONTRACTOR** Contractor shall furnish satisfactory evidence that he has the ability to construct the apparatus specified, and shall state in the bid proposal the location of the factory where the apparatus is to be built, and also where future service work will be performed. Proposals will only be considered which are submitted by full time fire apparatus manufacturers who are current members of the Fire Apparatus Manufacturers Association (FAMA).

5.1 All bidders shall provide with their proposal, pictures of similar apparatus as that being specified, and the names, telephone numbers, and contact persons, of twenty completed deliveries where similar apparatus have been furnished and are in service. Bidders shall provide the name and telephone number of a contact person for each department listed. Failure to provide pictures and required users list with the bid proposal will be cause for rejection of that proposal.

5.2 The local representative shall state the number of years they have been representing the manufacturer, the location of their main office, any local offices, main service center, and any local service centers authorized to repair this particular fire apparatus. A signed and notarized letter from the manufacturing company shall be included in the bidder's proposal to verify this requirement. The local service center shall provide with their proposal, pictures of, and the names, telephone numbers, and contact persons stating where the company has been in service. Bidders shall provide the name and telephone number of a contact person. Failure to provide this with the bid proposal will be cause for rejection of that proposal.

6. SUBMISSION OF PROPOSALS.

6.1 Each proposal shall be submitted in sequence with the attached specifications for ease of checking compliance of bids with bidder's specifications.

6.2 All proposals shall be submitted on manufacturer's letterhead, and not a reproduction of these specifications. Each bid proposal shall be signed by an Officer of the manufacturing company being bid.

7. PROPOSAL GUARANTEE. Each proposal must be accompanied by a Bidder's Bond or Cash in the amount of **10%** of the bid submitted as a proposal guarantee. It is agreed by the contractor that the proposal guarantee will be forfeited in the event this proposal is accepted and the contract is not executed. No bidder may withdraw his proposal for at least 30 days after the scheduled closing time for the receipt of bids. Bid bond shall be signed by an Officer of the manufacturing company offering the bid. Personal or Company checks are not acceptable as a Bonding medium. All bidders must have the ability to provide the requested Bidder's Bond when called for in these specifications.

7.1 The bid bonds shall be provided only by the fire apparatus manufacturer; and not by a local supplier or chassis company.

8. LOCAL SERVICE CENTER & INSURANCE REQUIREMENTS. The local warranty service center and dealer must submit with their bid proposal their company's Certificate of Insurance listing the proposed manufacturer's product liability insurance coverage. General Commercial liability insurance shall be in a minimum amount of two (2) million dollars. Certificates of insurance shall name the bidding company, insurance company, policy number, and effective dates of the insurance policy. Bids submitted without the required Certificate, or Certificates listing less than two (2) million dollars of underlying coverage, will be considered non responsive and automatically rejected.

9. MANUFACTURER INSURANCE REQUIREMENTS.

9.1 Each bidder must submit with their bid proposal a Certificate of Insurance listing the proposed manufacturer's product liability insurance coverage. Liability insurance shall be a minimum amount of ten (10) million dollars with underlying coverage of \$2,000,000.00 and \$8,000,000.00 umbrella coverage. Submitted Certificate shall name the apparatus manufacturer, insurance company, policy number, and effective dates of the insurance policy. Bids submitted without the required Certificate, or for Certificates listing less than two (2) million dollars of underlying coverage, plus the eight (8) million dollar umbrella coverage, will be considered non responsive and automatically rejected.

9.2 The manufacturer shall maintain full insurance coverage on the purchaser's cab and chassis from time of first possession by the manufacturer until the apparatus is delivered to the purchaser. Cascade Locks reserves the right to require proof of insurance from the manufacturer's insurance carrier prior to entering into a contract for the apparatus.

10. DRAWINGS. A CAD program produced line drawing of the exact apparatus being proposed, according to the fire department specifications, must be furnished with the bid. Since the blueprint drawing is required of all bidders, any bid submitted without a drawing as specified will be considered non responsive and automatically rejected. Drawing must include the left side with chassis cab, right, and rear views of the vehicle, and is to fully detail all compartment sizes, door openings, crew cab layout, pump panels, and hosebed arrangement.

10.1 Drawing must be a large size "C" 18" x 24", and shall be a drawing of the exact apparatus as proposed, not a drawing of another similar unit. All submitted drawings will become a part of the bid proposal.

10.2 A drawing of "production model units" will not be acceptable.

11. COMPLETION DATE. Bidder acknowledges that Cascade Locks is purchasing the apparatus and equipment using a grant which will expire, leaving Cascade Locks without funds to purchase the apparatus and equipment if delivery and approval are delayed. Therefore, Bidder agrees that delivery and approval shall occur no later than June 30, 2009.

12. CONTRACT AWARD.

12.1 Contract will be awarded to the lowest responsible bidder submitting a responsive bid. The criteria listed in § 13 of the Instructions to Bidders shall be used to evaluate the bids.

12.2 A Dun & Bradstreet financial rating may be used, at the discretion of Cascade Locks, as a determining factor of the financial strength and stability of the manufacturing company being bid, and could be considered when the final decision has been made to the successful bidder. The bidder shall include in their bid proposal the Dun & Bradstreet number and Contact Person at the Body Builder place of financial banking company. This documentation shall demonstrate to the fire department the financial stability of the manufacturing company and display an example of future service and customer support.

13. WAIVER OF IRREGULARITIES. Cascade Locks reserves the right to waive any irregularity in the bids received if such waiver is in the best interest of the purchaser. In no way will Cascade Locks assume any liability for the contractor's negligence.

14. ACCEPTANCE TESTS AND REQUIREMENTS. Acceptance tests on behalf of the purchaser shall be performed prior to delivery or within 10 days after delivery, by the manufacturer's representative in the presence of such person or persons as the purchaser may designate. The tests shall be as follows:

14.1 The apparatus, loaded with a full complement of hose and men, a full water tank, and equipment as specified in "Carrying Capacity" on this page, shall meet the tests on paved roads, dry and in good condition. Tests shall be on the basis of two runs, in opposite directions over the same route, the engine not operating in excess of the manufacturer's maximum rpm. From a standing start, through the gears, the vehicle shall attain a true speed of 35 mph within 25 seconds. From a steady speed of 15 mph the vehicle shall accelerate to a true speed of 35 mph within 14 seconds. The vehicle shall attain a minimum top speed of 65 mph on a level road. The apparatus shall be able to maintain a speed of at least 50 mph on any grade up to and including 6 percent.

14.2 Manufacturers pump test and Certification tests shall be conducted by the manufacturer in accordance with requirements of NFPA #1901. Certificate of testing shall be furnished to the purchaser.

14.3 In the event the apparatus fails to meet the test requirements on first trial, a second trial may be made at the option of the Contractor within thirty days of the date of the first trial. Such trials shall be final and conclusive and failure to comply with these requirements shall be cause for rejection. Failure to make such changes as the Chief of the Fire Department may consider necessary to conform to any clause of the specifications within thirty days after notice is given to the Contractor to make such changes shall also be cause for rejection of the apparatus.

15. RISK OF LOSS OF APPARATUS AND EQUIPMENT. Responsibility for the apparatus and all equipment shall remain with the contractor until the apparatus and equipment is delivered to the purchaser. The fire department will be responsible to provide all equipment items required by NFPA that are not otherwise addressed in these specifications. The items shall be installed by the fire department.

16. PAYMENT. Full payment for the completed fire apparatus will be due after the time of delivery and approval of the completed apparatus. Final delivery price shall not include any Local, State or Federal taxes. The Bidder shall not be liable for any State or Federal mandated tax or program after sale or delivery of the apparatus.

17. PRE-CONSTRUCTION CONFERENCE AT FIRE DEPARTMENT. A pre-construction conference shall be conducted at the Cascade Locks Fire Department Headquarters, at which time all final designs and equipment mounting locations will be approved, prior to any sheet metal being cut. A factory trained dealer shall be present during the pre-construction conference to answer any design questions relating to the layout of the apparatus. All expenses for travel, meals, and lodging shall be paid by the successful bidder. **BIDDER SHALL INDICATE INTENTION TO PROVIDE THE REQUIRED PRE-CONSTRUCTION CONFERENCE ON THE BID FORM.**

18. INSPECTION TRIPS. One (1) Inspection trip for Cascade Locks Fire Department personnel shall be made to the facility during the course of construction of the apparatus. Successful bidder shall consult with the Chief of the Cascade Locks Fire Department as to the

proper timing of the inspection trip. Air travel (for distances over 250 miles), meals, and lodging expenses shall be paid by the successful bidder. BIDDER SHALL INDICATE INTENTION TO PROVIDE THE REQUIRED INSPECTION TRIP(S) ON THE BID FORM.

19. DOCUMENTATION. The manufacturer must supply at time of delivery, at least one copy of:

1. Engine manufacturer's certified brake horsepower curve showing the maximum no load governed speed.
2. Manufacturer's record of pumper construction details.
3. Pump manufacturer's certification of suction capability.
4. Pump manufacturer's certification of hydrostatic test.
5. Certification of inspection and testing by Underwriter's Laboratories Incorporated.
6. A copy of the apparatus manufacturer's approval for stationary pumping applications.
7. Weight documents from a certified scale showing actual loading on the front axle, rear axle, and overall vehicle (with water tank full but without personnel, equipment, or hose).
8. At least two copies of the operation manual covering the fire apparatus as delivered.

19.1 A test data plate shall be provided at the pump operator's position which gives the rated discharges and pressures together with the speed of the engine as determined by the manufacturer's test for this unit. Plate must comply with requirements of NFPA #1901.

19.2 A permanent data plate shall be affixed in the drivers compartment specifying and quantity and type of the following fluids used in the vehicle.

19.3 Permanent placards shall be affixed and visible to all seated occupants instructing the occupants to wear their seat belts. A permanent placard shall be affixed to the rear step area to instruct that riding on the rear step is prohibited.

20. TRAINING.

20.1 Fire Department personnel shall be properly instructed as to the proper use of the apparatus including, but not limited to, chassis, fire pump system, the apparatus and all equipment. Training shall be made by a factory trained specialist who shall be responsible for complete instruction as to operation and maintenance of the chassis, and the completed vehicle.

20.2 Training specialists shall remain at the Fire Department for a sufficient amount of time to provide thorough training of all personnel, or as instructed by Chief of the Department. All meals, motel and travel costs shall be the responsibility of the successful bidder.

21. DELIVERY. The apparatus shall be delivered under its own power, complete and ready for operation. Delivery by rail or truck freight is not acceptable.

22. SPECIAL INSTRUCTIONS TO BIDDERS.

22.1 Bidders are requested to read the complete bid invitation carefully and submit

their proposals in strict accordance with the requirements set forth. Any questions regarding this procurement must be submitted in writing and be received by the Cascade Locks Fire Chief a minimum of five (5) business days prior to the bid opening date. Clarifications, corrections and / or changes will be sent out in writing VIA fax to all prospective bidders.

22.2 The complete apparatus body shall be manufactured and assembled within the United States. Apparatus that are manufactured and assembled outside of the continental USA will not be considered.

23. QUALIFICATIONS OF THE BIDDERS. Bids will only be considered from manufacturers with an established reputation in the field of fire apparatus construction of twenty (20) or more years. The manufacturer shall be able supply the following information: the location of the factory where the apparatus is to be built, a list of a minimum of 20 fire apparatus/year for at least the last 7 years and purchasers thereof and, in addition, a list of regional users with a contact person's phone number and name.

24. AUTHORIZED REPAIR FACILITY. All bidders must specify in their bid proposal the location of the closest authorized Warranty and Repair Facility. Enclosed in the bid packet will be the Name of the Company, person or persons of contact to authorize the repairs, the complete address with city, state and zip code as well as the phone number listing the area code. There shall be an Insurance Certificate listing the coverage that will be made available to the Fire Department to protect the interest of the new fire apparatus while under possible repairs at the Warranty and Repair Facility. In no way will Cascade Locks assume any liability for the contractor's Warranty and Repair Facility negligence. Cascade Locks reserves the right to inspect the facilities that will be made available to them for possible repairs.

25. AUTHORIZED REPAIR PERSONNEL. All bidders shall show that they are in a position to render prompt service and to furnish replacement parts throughout the useful life of the apparatus. All repair personnel shall be professionally trained on all components on the completed apparatus. The purchaser reserves the right to make the final determination as to the bidder's ability.

26. WARRANTY. The body builder shall warrant each new motorized fire apparatus manufactured for a period of One (1) year from the date of delivery. A copy of the warranty shall be provided in the bidder's proposal for review by the purchaser.

27. PAINT WARRANTY. The PPG paint performance guarantee will cover the areas of the vehicle finished with the specified product for a period of five (5) years beginning the day the vehicle is delivered to the purchaser. A copy of the warranty shall be provided in the bidder's proposal for review by the purchaser.

28. PREMIUM EXTRUDED ALUMINUM BODY WARRANTY. The body builder shall warrant to the original purchaser only that the aluminum body, under normal use and with reasonable maintenance, be structurally sound and will remain free from corrosion perforation for a period of five (5) years. A copy of the warranty shall be provided in the bidder's proposal for review by the purchaser.

FIRE APPARATUS SPECIFICATIONS

CARRYING CAPACITY

The Gross Axle Weight Rating (“GAWR”) or Gross Vehicle Weight Rating (“GVWR”) of the chassis shall be adequate to carry the fully equipped apparatus including full water and other tanks, the specified hose load, unequipped personnel weight, ground ladders, and a miscellaneous equipment allowance according to National Fire Protection Association (“NFPA”) recommendations.

A permanent placard shall be affixed and visible to the driver which states the maximum number of personnel the vehicle is designed to carry.

The height of the fully loaded vehicle's center of gravity shall not exceed the chassis manufacturer's maximum limit.

Apparatus weight loading shall be in strict accordance with requirements of NFPA-1901.

ENGINEERED APPARATUS

The apparatus shall be designed and the equipment mounted with due consideration to distribution of load between the front and rear axles, so that all specified equipment, including filled water tank, a full complement of personnel, and equipment will be carried without injury to the apparatus. Weight balance and distribution shall be in accordance with the National Fire Protection Association and the Society of Automotive Engineers.

Special consideration will be given to accessibility of various components that require periodic maintenance, ease of operations, and symmetrical proportions.

DESIGN REQUIREMENTS

Specified design features of the apparatus have been carefully selected because of their safety, integrity and consistency with existing apparatus. It is expected that all bidders will adhere to the compartmentation layout, etc., since these features can be produced by all fire apparatus manufacturers.

All aspects of the vehicle shall be properly engineered with priority given to firefighter safety, as well as ease of operation and maintenance of the apparatus. The vehicle shall be free from hazardous protrusions, angles or sharp corners which might bring injury to a firefighter or equipment. Previously delivered units will be judged for compliance to these factors.

All water, air, fuel, hydraulic and/or oil lines on the chassis and apparatus shall be properly located, and securely tie wrapped to prevent scuffing or abrasion. Durable type grommets or loom material shall be used to protect the lines wherever a line passes through the apparatus body or frame rail sections.

All grease fittings, bleeders, filler plugs, drains and check points shall be located so as to be easily accessible. No special tools shall be required to access these components for normal service or maintenance of the vehicle.

All parts and components on the vehicle shall be positioned for ease of inspection, and recognition of wear or failure. Easily removable access or cover plates shall be provided for all items requiring periodic service or adjustment. Access panels shall be of the hinged or quick disconnect design allowing ease of access.

Design of the apparatus shall be such that no disassembly of the body or any of its parts is required for normal maintenance.

All components of the chassis and apparatus shall be protected against rain, snow or other adverse weather conditions.

MODEL

The cab and chassis shall include design considerations for one hundred (100) percent on-road applications, a high horsepower engine, including high speed operations and a consideration for above normal starts and stops. This chassis shall be designed and manufactured for heavy duty service with adequate strength and capacity of all components for the intended load to be sustained. The chassis shall be designed for a duty rating of one hundred (100) percent loaded full time.

APPARATUS TYPE

The apparatus shall be classified as a Pumper type apparatus and shall be equipped with a permanently mounted fire pump which has a minimum rated capacity of 1750 gallons per minute. The apparatus shall include a water tank and hose body whose primary purpose is to combat structural and associated fires.

TRUCK TYPE

The chassis shall be manufactured as a truck style and designed to include permanently mounted compartments behind the cab, known as the body. The body of the truck shall be supplied and installed by the apparatus manufacturer.

AXLE CONFIGURATION

The chassis shall offer a single rear drive axle with a single front steer axle configuration (4 X 2).

GAWR FRONT

The gross apparatus weight rating and the gross capacity weight rating shall be adequate to carry the weight of equipment and the apparatus, with water tanks full and other tanks at full capacity, miscellaneous equipment and all personnel weights considered as recommended by the most current edition of NFPA 1901.

The chassis front GAWR shall be not less than 18,000 pounds.

GAWR REAR

The chassis rear GAWR shall be not less than 27,000 pounds.

PUMP PROVISION

The chassis shall include provisions to mount a drive line pump in the middle of the chassis, behind the cab, more commonly known as the midship location.

WATER TANK CAPACITY

The chassis shall include a carrying capacity of approximately 1000 gallons. The water tank shall be supplied and installed by the apparatus manufacturer.

CAB STYLE

The cab shall be a custom, enclosed model, built specifically for the fire service by a company specializing in cab and chassis design for all fire service applications.

The cab shall be manufactured for heavy-duty service utilizing adequate strength and capacity for the application of protecting firefighters.

The insulation shall be installed throughout the cab as well as around the engine compartment and tunnel reducing engine noise and offering a quieter cab. All interior and exterior seams shall be sealed for optimum noise reduction in addition to the most favorable efficiency for heating and cooling retention.

The cab shall incorporate a fully enclosed design, allowing for a spacious cab area with no partition between the front and rear sections of the cab. The walls of the vehicle shall include roof supports allowing for an open design. The outside dimension of the cab shall be not less than 94 inches wide with a minimum interior width of not less than 88 inches.

The cab overall length shall be not less than 130 inches in length with at least 54.00 inches from the centerline of the front of the axle to the back of the cab. All interior measurements shall include the area within the interior trimmed surfaces and not to any unfinished surface.

The cab shall include a driver and officer area with two (2) cab door openings. This style of cab shall also include a crew area offering up to (8) seating positions.

The cab shall incorporate a (2) step configuration from the ground to the cab floor for each door opening. The lower step shall be constructed of heavy duty safety grating which meets or exceeds Federal Specification RRG-1602-latest revision and performs under dry, greasy, muddy, soapy and icy conditions and offers open drainage.

The front of the cab shall include a cast molded module accommodating up to (4) Hi/Low beam headlights and (2) turn signal lights or up to (4) warning lights.

MEDICAL CABINET IN CAB

The medical cabinet needs to be mounted in an appropriate location in the passenger cab. The medical cabinet must be a suitable size but no less than 42" high x22" wide x28" deep. The cabinet must include (2) adjustable shelves and a hinged door with locking push-button latch. The finish of the medical cabinet shall match the interior finish of the cab. Interior lighting must also be included in the cabinet.

CAB FRONT

The front cab shall be constructed of at least .090 of an inch thick, one hundred percent primary aluminum plate which shall be attached to the front cab skin to offer an appealing exterior. The cab will encompass the front of the aluminum cab structure at the bottom of the windshield to the lower section of the cab.

The front cab shall include accommodations up to four (4) Hi/Low beam headlights and two (2) turn signal lights or up to four (4) warning lights.

CAB FRONT GRILLE

The cab shall be stainless steel flat front grille with adequate air intake to meet the engine manufacturer's air flow requirements.

CAB ENGINE TUNNEL

The cab interior shall include a fixed type engine tunnel cover. The engine tunnel shall be an integral part of the cab constructed one hundred percent primary aluminum plate.

The engine tunnel shall be insulated with multi-layer insulating material, consisting of foam, a sound barrier of 1.00 pounds per square foot with a facing which resists heat transfer. This insulation shall be held in place by adhesive and mechanical seals.

CAB ENTRY DOORS

The cab shall include a driver and officer area with two cab door openings.

The cab shall include four (4) entry doors as high as possible for ease of entering and egress when outfitted with a Self-Contained Breathing Apparatus ("SCBA").

All cab and crew doors shall be of substantial weight for the optimum strength and rigidity for the best performance in all cab crash testing. Any cab with front and crew doors manufactured of less than the material thickness of .125 inch in both the extrusion and exterior skin shall not be considered.

The doors shall include a double rolled style automotive rubber seal around the perimeter of each door frame and door edge which ensures a weather tight fit.

Each door hinge shall be piano style and be constructed of stainless steel.

CAB ENTRY DOOR TYPE

All entry doors shall be of a flush, full height design and shall be located on the sides of the cab.

CAB STRUCTURAL WARRANTY

The cab structure shall be warranted for a period of ten (10) years. Warranty conditions may apply and shall be listed in the detailed warranty document that shall be provided upon request.

CAB CRASH TEST ECE-29

The cab shall have successfully achieved survival of the International crash test ECE-29, Addendum 28, Revision 1 as indicated below.

As part of the ECE regulation 29 test, the frontal area of the cab is struck by a 3,700 pound pendulum weight. The weight is brought back to a sixty degree angle and then the weight is released and allowed to swing forward, imparting some 32,600 pounds foot of force to the cab front face. The cab shall be so constructed that after the test, there will be minimal intrusion of the cab structure into the passenger area. The doors shall remain usable for both entry and exit. Also, as part of the test the cab roof must withstand a static load bearing test. The cab shall withstand a weight of over 60,000 pounds without permanent damage or collapse. The above tests shall be witnessed by and attested to by an independent third party. The test results shall be recorded on/by cameras, high speed imagers, accelerometers and strain gauges, with notarized copies of the letters verifying the test results and videos of said test shall be available upon request.

CAB AND BODY PAINT EXTERIOR

The cab and body shall be painted prior to the installation of glass accessories and all other cab trim to ensure complete paint coverage and the maximum in corrosion protection of all metal surfaces.

The cab and body shall be painted with the specific colors designated by the customer with a minimum thickness of 2.00 mils of paint, followed by a clear top coat not to exceed 2.00 mils.

PAINT MANUFACTURER

The cab and body shall be painted with PPG Industries, DuPont, or equal paint.

PAINT COLORS

The lower paint color shall be Red, and the upper portion of the cab shall be white. Paint numbers will be given to the successful bidder at the pre-construction conference.

EXTERIOR PAINT WARRANTY

The cab and chassis shall be covered by a limited manufacturer paint warranty which shall be in effect for 5 years from the first owner's date of purchase or in service or the first 100,000 actual miles, whichever occurs first.

LOW VOLTAGE ELECTRICAL SYSTEM

The chassis shall include a single starting electrical system which shall include a 12 volt direct current system, suppressed per SAE J551. The wiring shall be appropriate gauge cross link with 311 degree Fahrenheit insulation. All SAE wires in the chassis and body shall be color coded and shall include the circuit number and function where possible. The wiring shall be protected by 275 degree Fahrenheit minimum high temperature flame retardant loom.

The wiring system shall be multiplex type in both the cab and body. Weldon, Class 1, or equal multiplex system shall be acceptable.

APPARATUS WIRING PANEL

An apparatus wiring panel shall be installed on the officer side bulkhead.

ENGINE

The chassis shall be powered by a Cummins diesel engine as described below:

MODEL: ISL

NUMBER OF CYLINDERS: Six

BORE AND STROKE: 4.49" x 5.69"

DISPLACEMENT: 543 cu. In. (8.9L)

RATED BHP: 400 @ 2100 RPM

380 @ 2200 RPM

TORQUE: 1200 @ 1300 RPM

COMPRESSION RATIO: 16.6:1

GOVERNED RPM: 2200

Standard Equipment on the engine to include the following:

GOVERNOR: Limiting speed type

TURBOCHARGER: Pneumatically-actuated, variable-geometry (VG) design.

INJECTORS: Electronically Controlled / High Pressure Common Rail (HPCR).

FUEL PRIMING PUMP: High capacity fuel lift pump for L Series engines.

AIR CLEANER: Farr or equal with fresh air intake.

OIL FILTER: A full flow / by-pass combination.

LUBE OIL COOLER: High efficiency non-drainback, thermostatically controlled with full flow cooling.

FUEL FILTERS: Two fuel filters providing 3 / 10 micron absolute filtration with check valve.

STARTER: A DELCO, 12 volt, 39 MT-HD starter motor.

AIR COMPRESSOR: A Wabco 18.7 cfm compressor shall be provided.

EMISSION CONTROLS

The engine shall be supplied with a Cooled Exhaust Gas Recirculation (EGR) system and with a Cummins Particulate Filter exhaust after treatment system.

EMISSION CERTIFICATION COMPLIANCE

The Cummins engine is certified 2007 EPA 07 Compliant

AUXILIARY ENGINE COMPRESSION BRAKE

A "JACOBS" Engine Brake shall be supplied.

The Driver's dash shall include an OFF / LOW / HIGH engine brake control switch.

Activation of the engine brake shall occur at zero throttle position. The transmission ECU shall be programmed to operate in the pre-select downshift mode to maximize the retarding power of the engine brake.

The brake lights shall illuminate when the Jacobs Brake is in operation.

The Jacobs Brake shall be inoperative when the chassis is in pump mode.

The "JACOBS" engine brake shall be covered under the standard five year Cummins engine warranty.

FLUID FILLS

The chassis shall accommodate fluid fills for the engine oil, the windshield washer fluid and the power steering fluid through the grille or the doghouse. This area shall also accommodate checks for the engine oil, and power steering fluid.

ELECTRONIC LOW ENGINE OIL INDICATOR

The engine oil shall be monitored electronically and shall send a signal to activate a light in the instrument panel when levels fall below normal. The light shall activate in a low oil situation upon turning on the master battery and ignition switches without the engine running.

ENGINE WARRANTY

The Cummins engine shall be warranted for a period of five (5) years or 100,000 miles, whichever occurs first.

COOLING SYSTEM FAN

The engine cooling system shall incorporate a heavy-duty composite fan which shall be belt driven on the engine.

ENGINE COOLING SYSTEM

There shall be a heavy-duty aluminum cooling system designed to meet the demands of the fire industry. The cooling system shall have the capacity to keep the engine properly cooled under all conditions of road and pumping operations. The cooling system shall be designed and tested to meet or exceed the requirements specified by the engine and transmission manufacturer and all EPA requirements. The complete cooling system shall utilize heavy-duty welds and be mounted to isolate the entire system from any vibration or stress. The individual cores of the cooling system shall be mounted in a manner to allow expansion and contraction at various rates without inducing stress into the adjoining cores.

The cooling system shall provide the maximum cooling capacity for the specified engine as well as offers excellent serviceability. The main components shall include a surge tank, charge air cooler, recirculation shield, radiator and transmission cooler. The system shall utilize a surge tank and shall include a coolant overflow tank as an option.

ENGINE COOLANT

The cooling package shall include Extended Life Coolant (ELC) installed. The use of ELC provides longer life and change intervals providing improved performance. The coolant shall contain propylene glycol and de-ionized water to keep the coolant from freezing to a temperature of -34 degrees F.

LOW COOLANT INDICATOR LIGHT AND TONE ALARM

The instrument panel shall feature a low engine coolant indicator light which shall be located in the center of the instrument panel. An audible tone alarm shall also be provided to warn of a low coolant incident.

ENGINE PUMP HEAT EXCHANGER

A single bundle type coolant to water heat exchanger shall be installed between the engine and the radiator. The heat exchanger shall be designed to prohibit water from the pump from coming in contact with the engine coolant. This shall allow the use of water from the discharge side of the pump to assist in cooling the engine.

COOLANT HOSES

The cooling systems hose shall be formed silicone hose and formed aluminized steel tubing and include with stainless steel constant torque clamps.

ENGINE AIR INTAKE

The engine air intake system shall include an ember separator air intake filter.

EXHAUST SYSTEM

The exhaust system shall include a diesel particulate filter and a diesel oxidation catalyst to meet current EPA standards. The system shall be designed and installed using 0.065 inch aluminized steel plumbing from the diesel particulate filter to the discharge which shall terminate horizontally on the officer side of the vehicle ahead of the rear tires. The exhaust system shall be mounted on the underside of the frame outboard, maximizing space for the body compartments. All joints along plumbing following the diesel particulate filter shall be connected with lapping band style clamps.

The system shall include a 5.00 inch diameter plumbing which shall be 0.065 inch thick stainless steel exhaust between the engine turbo and the diesel particulate filter. The tubing shall include a thermal cover in order to retain heat between the engine turbo and diesel particulate filter. The entire exhaust system shall be bolted to the frame and include system joints connected with zero leak clamps between the turbo and diesel particulate filter.

TRANSMISSION

The drive train shall include an Allison Gen IV model EVS 3000 torque converting, automatic transmission which shall include electronic controls. The transmission shall feature two (2) 10-bolt PTO pads located on the converter housing.

The transmission gear ratios shall be:

1st- 3.49:1; 2nd- 1.86 to 1; 3rd- 1.41 to 1; 4th- 1.00 to 1; 5th- 0.75 to 1; 6th-0.64 to 1; Rev- 5.03 to 1.

TRANSMISSION MODE PROGRAMMING

The transmission, upon start-up, will select the fifth speed operation without the need to press the mode button. Sixth gear shall be engaged by selecting the mode button.

TRANSMISSION SHIFT SELECTOR

An Allison pressure sensitive range selector touch pad, or lever control, shall be provided and located to the right of the driver within clear view and easy reach.

ELECTRONIC LOW TRANSMISSION OIL LEVEL INDICATOR

The transmission fluid shall be monitored electronically and shall send a signal to activate a light in the instrument panel when levels fall below normal.

TRANSMISSION PRE-SELECT WITH AUXILIARY BRAKE

When the auxiliary brake is engaged, the transmission shall automatically seek shifting to second gear to decrease the rate of speed assisting the secondary braking system and slowing the vehicle speed.

TRANSMISSION WARRANTY

The Allison EVS series transmission shall be warranted for a period of five (5) years with unlimited mileage. Parts and labor shall be included in the warranty.

TRANSMISSION COOLING SYSTEM

The transmission shall include an air to oil cooler integrated into the lower portion of cooling package. The transmission cooling system shall meet all transmission manufacturer requirements. The cooling system shall feature a circuit provision located within the hydraulic transmission oil which shall provide for rapid warm up to the optimum transmission operating temperature.

DRIVELINES

All drivelines shall be heavy duty metal tube and equipped with Spicer 1760 series universal joints. The shafts shall be dynamically balanced prior to installation to alleviate future vibration. A splined slip joint shall be provided in each driveshaft and shall be coated with Glide coat[®].

FUEL FILTER/WATER SEPARATOR

The fuel system shall have a Fleetguard fuel filter/water separator as a primary filter. The fuel filter shall have a see through cover to allow visual inspection of fuel and filter condition and a drain valve.

An instrument panel lamp and audible alarm which indicates when water is present in the fuel-water separator shall also be included.

FUEL LINES

The fuel system lines shall be reinforced nylon tubing rated for diesel fuel with brass fittings installed from the tank to engine including the return.

FUEL TANK

The fuel tank shall have a minimum capacity of fifty (50) gallons. The baffled tank shall be made of 12 gauge aluminized steel. The tank exterior is painted with a black anti-corrosive exterior metal treatment finish.

The tank shall have a vent port to facilitate venting to the top of the fill neck for rapid filling without "blow-back" and a roll over ball check vent for temperature related fuel expansion and draw.

The tank is designed with dual draw tubes and sender flanges. The tank shall have 2.00 inch NPT fill ports for right or left hand fill. A 0.5 inch NPT drain plug shall be centered in the bottom of the tank.

FRONT AXLE

The front axle shall be a non-drive front axle. The axle shall include a conventional style hub with a standard knuckle. The weight capacity for the axle shall be rated to not less than 18,000 pounds FAWR.

FRONT WHEEL BEARING LUBRICATION

The front axle wheel bearings shall be lubricated with clear oil. The oil level can be visually checked via clear inspection windows in the front axle hubs.

FRONT SHOCK ABSORBERS

Two (2) shock absorbers shall be provided and installed as part of the suspension system.

FRONT SUSPENSION

The front suspension shall include taper leaf springs with a military double wrapped front eye. Both spring eyes shall have a case hardened threaded bushing installed with lubrication counter bore and lubrication land off cross bore with grease fitting. The spring capacity shall be rated at 18,000 pounds.

STEERING COLUMN/ WHEEL

The cab shall include a steering column that shall be a seven (7) position tilt and 2.25 inch telescopic type with an 18.00 inch steering wheel located on the left side of the cab designating the driver's position. The steering wheel shall be covered with black absorbite padding.

The steering column shall contain a horn button, self-canceling turn signal switch, four-way hazard switch and headlamp dimmer switch.

POWER STEERING PUMP

The hydraulic power steering pump shall be rated at not less than 18,000 lb. FEW and shall be gear driven from the engine. The pump shall be a balanced, positive displacement, sliding vane type.

FRONT AXLE CRAMP ANGLE

The chassis shall have a front axle cramp angle of 52 degrees to the left and right.

CHASSIS ALIGNMENT

The chassis frame rails shall be cross checked to insure the length and to make sure each is square. The front and rear axles shall be laser aligned, additionally the tires and wheels shall be aligned and toe-in set on the front tires. The completed apparatus shall be rechecked for proper alignment once the chassis has been fully loaded.

REAR AXLE

The rear axle shall have a rating of not less than 27,000 lb. The axle shall be built of superior construction and quality components to provide the rugged dependability needed to stand up to the fire industry's demands. The axle shall include a rigid differential case for high axle strength and reduced maintenance.

The axle shall include single reduction gearing.

REAR WHEEL BEARING LUBRICATION

The rear axle wheel bearings shall be lubricated with oil.

REAR AXLE DIFFERENTIAL LUBRICATION

The rear axle differential shall be lubricated with oil.

VEHICLE TOP SPEED

The top speed of the vehicle shall be approximately 70 MPH +/-2 MPH at governed engine RPM.

REAR SUSPENSION

The single rear axle shall feature a slipper type spring suspension with either a torque arm or torque spring/

The rear suspension capacity shall be rated at not less than 27,000 pounds.

FRONT TIRES

The front tires shall be 315/80R-22.5 20PR "L" tubeless radial highway tread, rated at not less than 18,000 lb.

REAR TIRES

The rear tires shall be 12R-22.5 16PR "H" tubeless radial all weather tread, rated at not less than 27,000 lb.

FRONT WHEELS

The front wheels shall be hub piloted, 9.00 inch X 22.50 inch aluminum type wheels. The hub piloted mounting system shall be designed to deliver performance and shall include two-piece flange nuts.

REAR WHEELS

The rear wheels shall be hub piloted, 8.25 inch x 22.50 inch aluminum wheels. The hub piloted mounting system shall be designed to deliver performance and shall include two-piece flange nuts.

BRAKE SYSTEM

A rapid build-up air brake system shall be provided. The air brakes shall include a two (2) air tank, three (3) reservoir system with a total of not less than 4152 cubic inch of air capacity. A floor mounted treadle valve shall be mounted inside the cab for graduated control of applying and releasing the brakes. An inversion valve shall be installed to provide a controlled service brake application during an unlikely event including primary air supply loss.

The rear axle spring brakes shall automatically apply in any situation when the air pressure loss below 25 PSI with a mechanical means for releasing the spring brake chambers if necessary. An audible alarm shall designate when the system air pressure is below 60 PSI.

A four (4) sensor, four (4) modulator anti-lock braking system (ABS) shall be installed on the front and rear axles in order to prevent the brakes from locking or skidding while braking during hard stops or on icy or wet surfaces. This in turn shall allow the driver to maintain steering control under heavy braking and in most instances, shorten the braking distance. The electronic monitoring system shall incorporate diagonal circuitry which shall monitor wheel speed during braking through a sensor and tone ring on each wheel. A dash mounted ABS lamp shall be provided to notify the driver of a system malfunction. The ABS system shall automatically disengage the auxiliary braking system device when required.

FRONT BRAKES

The front brakes shall be 16.5" x 6" S-cam drum type.

REAR BRAKES

The rear brakes shall be 16.50 inch X 7.00 inch S-cam drum type.

Upon application of the push-pull valve in the cab, the rear brakes will engage via mechanical spring force. This is accomplished by dual chamber rear brakes, satisfying the Federal Motor Vehicle Safety Standards ("FMVSS") parking brake requirements.

PARK BRAKE ACTUATION VALVE

A manual hand control push-pull style valve shall operate the parking brake system. The control shall be yellow in color.

The parking brake actuation valve shall be mounted on the driver's dash within easy access.

FRONT BRAKE SLACK ADJUSTERS

The front brakes shall include automatic slack adjusters shall be installed on the chassis which features a simple, durable design offering reduced weight. The automatic slack adjusters shall feature a manual adjusting nut which cannot inadvertently be backed off and threaded grease fittings for easy serviceability.

REAR BRAKE SLACK ADJUSTERS

The rear brakes shall include automatic slack adjusters shall be installed on the chassis which features a simple, durable design offering reduced weight. The automatic slack adjusters shall feature a manual adjusting nut which cannot inadvertently be backed off and threaded grease fittings for easy serviceability.

AIR DRYER

The brake system shall include an air dryer that incorporates an internal turbo cutoff valve that closes the path between the air compressor and air dryer purge valve during the compressor "unload" cycle. The turbo cutoff valve allows purging of moisture and contaminants without the loss of turbo boost pressure. The air dryer shall be located on the right frame rail behind the officer step.

BRAKE CHAMBERS

The axle shall include brake chambers which shall convert the energy of compressed air into mechanical force and motion. This shall actuate the brake camshaft, which in turn shall operate the foundational brake mechanism forcing the brake shoes against the brake drum.

AIR COMPRESSOR

The air compressor provided for the engine which shall be capable of producing a minimum of 18.7 CFM. The air compressor shall feature a higher delivery efficiency translating to more air delivery per horsepower absorbed.

AIR GOVERNOR

An air governor which shall cut-in and cut-out pressures on the vehicle shall be provided and shall be adjusted so that the maximum pressure in the air system and the minimum cut-in pressure. .

AIR SUPPLY MOISTURE EJECTORS

Manual drain valves with lanyards shall be installed on all reservoirs of the air supply system.

AIR SUPPLY LINES

A dual air system plumbed with color coded reinforced nylon tubing air lines shall be installed on the chassis.

Brass compression type fittings shall be used on the nylon tubing. All drop hoses shall include fiber reinforced neoprene covered hoses.

WHEELBASE

The chassis wheelbase shall be not less than 195.00 inches.

FRAME

The frame shall consist of single side rails and cross members forming a ladder style frame. In addition, an inner liner shall be provided. The sides of the rails shall be constructed of "C" channel, 110,000 psi minimum yield high strength low alloy steel.

The frame shall carry a lifetime warranty to the original purchaser. A copy of the frame warranty shall accompany the bid.

FRAME PAINT

The frame shall be powder coated prior to any attachment of components. After assembly of the axles and suspension components, the entire assembly will be painted black for corrosion

FRONT BUMPER

A one piece, two (2) rib wrap-around style, polished stainless steel front bumper shall be provided. The material shall be 10 gauge 304 stainless steel, 12" high.

FRONT BUMPER EXTENSION LENGTH

The front bumper shall be extended 24.00 inches ahead of the cab.

AIR HORNS

The front bumper shall include two (2) air horns which shall measure 24.50 inches long with a 6.00 inch round flare. The air horn shall be a trumpet style and shall include a chrome finish.

AIR HORN LOCATION

The air horns shall be recess mounted in the front bumper face, one (1) on the driver side of the bumper in the inboard position relative to the left hand frame rail and one (1) on the officer side of the bumper in the inboard position relative to the right hand frame rail.

AIR HORN AIR RESERVOIR

One (1) air tank, with a 1200 cubic inch reservoir, shall be installed on the chassis to act as a supply tank for operating air horns. The reservoir shall be isolated with a 90 PSI pressure protection valve on the reservoir supply side to prevent depletion of the air to the air brake system.

CAB TILT SYSTEM

The entire cab shall be capable of tilting 45.00 degrees to allow for easy maintenance of the engine and transmission. The lift system shall include an ignition interlock. It shall be necessary to activate the master battery switch with the park brake set in order to tilt the cab. Two cab tilt cylinders shall be provided with velocity fuses in each cylinder port. A steel safety assembly shall be installed on the right side cab lift cylinder to prevent accidental cab lowering. The safety assembly shall fall over

the lift cylinder when the cab is in the "Up" position. A cable release system shall also be provided to clear the safety assembly from the lift cylinder when lowering the cab.

CAB TILT CONTROL RECEPTACLE

The cab tilt shall include a receptacle which shall be located on the right hand chassis rail rear of the cab to provide a place to plug in the cab tilt remote control pendant.

CAB WINDSHIELD

The cab windshield shall have a minimum of 2808 sq. in. area and be of the wraparound design for maximum visibility. All glass utilized for the windshield or windows shall include an automotive tint. The left and right windshield shall use the same interchangeable glass.

CAB GLASS FRONT DOORS

The front cab doors shall include a window which shall have the capability to roll down completely into the door housing. This shall be accomplished manually utilizing a crank style handle on the door. There shall be a right angle triangular shaped fixed window ahead of the front cab door windows. The windows shall be mounted in a black anodized aluminum frame with lower drain slots. The glass utilized for these windows shall include a green automotive tint unless otherwise noted.

WINDOW TINT FRONT

The cab windshield shall have a standard green automotive tint which shall allow seventy-five (75) percent light transmittance.

The cab driver and officer door glass shall have a standard green automotive tint which shall allow seventy-five (75) percent light transmittance.

CAB GLASS REAR DOOR OFFICER SIDE

The rear officer's side crew door shall include a window which is 26.00 inches wide X 31.00 inches high. This window shall have the capability to roll down completely within the door housing. This shall be accomplished manually utilizing a crank style handle on the inside of the door. The window shall be mounted in a black anodized aluminum frame with lower drain slots. The glass utilized for this window shall include a green automotive tint unless otherwise noted.

WINDOW TINT OFFICER SIDE

The officer side window shall include a standard green automotive tint which shall allow seventy-five (75) percent light transmittance.

CAB GLASS REAR DOOR DRIVER SIDE

The rear driver's side crew door shall include a window which shall have the capability to roll down within the door housing. This shall be accomplished manually utilizing a crank style handle on the inside of the door.

WINDOW TINT DRIVER SIDE

The driver side window shall include a standard green automotive tint which shall allow seventy-five (75) percent light transmittance.

CAB GLASS SIDE MID RH FIXED

The cab shall include a window on the officer's side behind the front and ahead of the crew doors. This window shall be fixed within this space and shall be rectangular in shape. The window shall be mounted in a black rubberized frame. The glass utilized for this window shall include a green automotive tint unless otherwise noted.

WINDOW TINT MIDDLE OFFICER SIDE

The window on the officer side of the cab located between the driver and officer doors shall include a standard green automotive tint which shall allow seventy-five (75) percent light transmittance.

CAB GLASS SIDE MID DRIVER SIDE

The cab shall include a window on the driver's side behind the front door and ahead of the crew door and above the wheel well. This window shall be fixed within this space and shall be rectangular in shape. The window shall be mounted using self locking window rubber. The glass utilized for this window shall include a green automotive tint unless otherwise noted.

WINDOW TINT MIDDLE DRIVER SIDE

The window on the driver side of the cab located between the driver and officer doors shall include a standard green automotive tint which shall allow seventy-five (75) percent light transmittance.

CAB INSULATION

The cab ceiling and walls shall include 1.00 inch thick foam insulation. The insulation shall include a foil facing which includes grid reinforcement. The insulation shall act as a barrier absorbing noise as well as assisting in sustaining the desired climate within the cab interior.

CLIMATE CONTROL

The cab shall include a front overhead heater/defroster which shall be provided and installed above the windshield between the sun visors. The temperature and blower controls shall be located on the heater/defroster unit.

The cab shall also include a combination heater air-conditioning unit mounted on the engine tunnel. This unit shall offer eight (8) adjustable louvers, a temperature control valve and two (2) blowers offering three (3) speeds which shall be capable of circulating 550 cubic feet of air per minute. The unit shall be rated for not less than 42,500 BTU of cooling and 36,000 BTU of heating.

CLIMATE CONTROL ACTIVATION

The heating controls, and air conditioning if included, shall be located on the climate control unit.

A/C CONDENSER LOCATION

A roof mounted A/C condenser shall be installed centered on cab forward of raised roof.

INTERIOR TRIM FLOOR MAT

The floor of the cab shall be covered with a multi-layer mat consisting of .25 inch sound absorbing closed cell foam and a .06 inch non-slip vinyl surface with a pebble grain finish. The covering shall be held in place by a pressure sensitive adhesive with aluminum cornering trim. All exposed seam shall be sealed to reduce moisture and debris.

INTERIOR TRIM VINYL

The cab interior shall include trim on the front and rear crew ceiling, the cab walls and the rear wall of the cab.

HEADER TRIM

The cab interior shall include the header above the driver and officer positions. The positions shall include robust styling grooves which shall offer durability and additional structure to the panel.

INTERIOR TRIM SUNVISOR

The header shall include one (1) sun visor above the driver and officer seating positions and above the windshield.

CAB INTERIOR TRIM LH DASH

The driver side dash shall be a (1) piece panel.

CAB INTERIOR CENTER DASH

All gauges and controls within the panels shall be backlit for night vision and clearly identified representative of their specific function. The center panel shall be within comfortable reach of both the driver and officer due to its ergonomic and aesthetically pleasing design.

TRIM OFFICER DASH

A Mobile Data Terminal (MDT) provision shall be provided above the glove compartment.

STEP TRIM

The cab steps shall include non-slip plating on the steps.

INTERIOR DOOR TRIM

The doors of the cab shall include an aluminum panel. The panel shall be located on the interior of the door and shall include a painted finish.

CAB DOOR TRIM REFLECTIVE

A reflective chevron sign shall be installed on the lowest portion of the inner door panel, one (1) on each door. A stripe of reflective tape shall be installed at the outer edge of each door.

INTERIOR GRAB HANDLE

A rubber covered 11.00 inch grab handle shall be provided on the inside of the cab on the hinge post at the officer door and rear crew doors. The handle shall assist personnel in exiting and entering the cab.

GRAB HANDLE DOORS

Each front door shall include one (1) ergonomically contoured handle mounted horizontally on the interior door panels.

CAB INTERIOR FLOOR MAT COLOR

The cab interior floor mat shall be gray in color.

INTERIOR TRIM VINYL COLOR

The cab interior vinyl trim surfaces shall be gray in color.

INTERIOR TRIM COLOR

The cab interior trim surfaces shall be black or gray in color.

CAB PAINT INTERIOR

The interior metal surfaces shall be painted with a silver gray texture finish.

SWITCH PANEL CENTER

The switch panel shall include a panel with six (6) rocker switches.

SEATBELT WARNING SYSTEM

A seatbelt warning system shall be installed for each seat within the chassis. The system shall provide visual and audible warning when any seat is occupied (sixty pounds minimum), the corresponding seat belt remains unfastened, and the park brake is released.

Once activated, the visual and audible indicators shall remain active until all occupied seats have the seat belts fastened.

SEAT MATERIAL

The seats shall include a covering of high strength, wear resistant fabric made of durable ballistic polyester. A PVC coating shall be bonded to the back side of the material to help protect the seats from UV rays and from being saturated or contaminated by fluids.

SEAT COLOR

All seats supplied on the chassis shall be gray in color. This material shall be semi-resistant to UV rays and from being saturated or contaminated by fluids.

SEAT BACK LOGO

The seat back shall include a black and red capital logo. The logo shall be centered on the standard headrest of the seat back and on the left side of a split headrest.

DRIVER SEAT

The driver's seat shall be an air ride type, tapered and padded seat and cushion.

OFFICER SEAT

The officer's seat shall be an air ride SCBA seat, with collision restraint series SCBA bracket and back insert pad.

REAR FACING OUTER SEAT QUANTITY

The crew area shall include two (2) rear facing fixed SCBA crew seats, which include one (1) located directly behind the driver seat and one (1) located directly behind the officer seat. Both seats shall have a collision restraint SCBA bracket and back insert pad.

FORWARD FACING SEATS

The crew area shall include two (2) forward facing fixed SCBA crew seats, with both seats mounted inboard. Both seats shall have a collision restraint SCBA bracket and back insert pad.

FORWARD FACING SEAT FRAME

The forward facing center seating positions shall include an enclosed seat frame which is located and installed on the rear wall. A slide out compartment shall be provided under the seat frame for storage of equipment.

WINDSHIELD WIPER SYSTEM

The cab shall include a parallel arm wiper system which shall clear the windshield of water, ice and debris. There shall be two (2) windshield wipers, one (1) for the driver and one (1) for the officer, which shall be affixed to a rod style arm. The system shall include dual motors which shall initiate the arms in which both the driver and officer windshield wipers are attached, initiating a back and forth motion for each wiper. The wiper motors shall be activated by an intermittent wiper control located within easy reach of the driver's position.

Windshield washers shall be provided and attached to each wiper arm.

CAB DOOR HARDWARE

The cab entry doors shall be equipped with exterior pull or paddle handles, suitable for use while wearing firefighter gloves. All doors shall include keyed alike locks that are designed to prevent accidental lockout.

The interior latches shall be flush paddle type, which are incorporated into an upper door panel.

CAB EXTERIOR GRAB HANDLES

The cab shall include an exterior assist handle behind each cab door.

REARVIEW MIRRORS

The cab exterior shall include heated bus style mirrors with remote control in the cab and independent convex mirror. Mirrors shall be mounted on the front corners of the cab.

CAB FENDERS

Full width wheel well liners shall be installed on the extruded cab to limit road splash and enable easier cleaning. Outer fenderette shall be polished stainless or polished aluminum.

Cab fenderette shall match the rear axle wheel well fenderette in style and finish.

IGNITION

A master battery switch, an ignition on switch, and a pushbutton starter switch shall be provided for the battery and electrical system.

BATTERIES

The single start electrical system shall include three (3) group 31 batteries in compliance with NFPA-1901 electrical requirements. The battery cables shall have encapsulated ends with heat shrink and sealant.

BATTERY BOX

The batteries shall be contained within a black powder coated steel battery box which shall be located on the driver side of the chassis, securely bolted to the frame rails. The box shall include drain holes in the bottom for sufficient drainage of water and shall include durable tile flooring in the bottom of the tray under each battery to allow for air flow and drainage.

BATTERY CABLES

The starting system shall include cables which shall be protected by high temperature flame retardant loom, sealed and encapsulated at the ends with heat shrink and sealant.

BATTERY JUMPER STUDS

The starting system shall include battery jumper studs. These studs shall be located in a protected area near the battery box. The studs shall allow the vehicle to be jump started, charged, or the cab to be raised in an emergency in the event of battery failure.

ALTERNATOR

The starting system shall include a 270 amp, 12-volt alternator. The alternator shall include a self-excited integral regulator.

HEADLIGHTS

The cab front shall include (4) rectangular halogen headlamps with separate high and low beams mounted in bright chrome bezels. The headlamps shall be equipped with the "Daytime Running" light feature, which shall illuminate the headlights to 80% brilliance when the ignition switch is in the "On" position and the parking brake is released.

The headlights shall be controlled through a rocker switch on the driver's dash.

TURN SIGNALS

The front fascia shall include two (2) 4.00 inch X 6.00 inch LED amber turn signals shall be installed outboard of the warning lights in matching bezels located above the headlamps.

SIDE MARKER/ TURN SIGNALS

The sides of the cab shall include (2) incandescent round side marker lights which shall be provided just behind the front cab radius corners.

MARKER AND ICC LIGHTS

In accordance with FMVSS, there shall be five (5) cab LED marker lamps designating identification, center and clearance provided. These lights shall be installed on the face of the cab within full view of other vehicles from ground level.

GROUND LIGHTS

Each door shall include an incandescent NFPA compliant ground light mounted to the under side of the cab on each side of the driver and officer sides of the cab below each door. The lights shall include a polycarbonate lens, a housing which is vibration welded and a bulb which shall be shock mounted for extended life. The ground lighting shall be activated by the opening of the respective door as well as rocker switched.

ENGINE COMPARTMENT LIGHT

There shall be an incandescent NFPA compliant light mounted under the engine tunnel for area work lighting on the engine. The light shall include a polycarbonate lens, a housing which is vibration welded and a bulb which shall be shock mounted for extended life.

INTERIOR CAB LIGHTING

The cab shall include an incandescent dome lamp with white lens located over each door. Two additional red lamps shall be provided in the center of the cab. Each lamp shall be activated by its respective door when opened and by an individual switch on the light.

DO NOT MOVE APPARATUS WARNING

The front headliner of the cab shall include a red flashing light, located in the center for greatest visibility. The light shall be clearly labeled "Do Not Move Apparatus". The light shall be interlocked for activation when a cab door is not firmly closed, an apparatus cabinet door is not closed and the parking brake is released.

MASTER WARNING

The optical warning system shall be controlled by a master switch which shall include all "ON" and all "OFF" capability via a rocker switch on the main panel. Any warning light switches left in the "ON" position shall activate when the master switch is activated. This switch shall be clearly labeled for identification.

INBOARD FRONT WARNING LIGHTS MODEL

The cab front fascia shall include dual modules containing headlights in the inboard position which shall not be wired.

LIGHT BAR

A minimum 76" light bar shall be provided on the front of the cab. Light bar shall contain red oscillating LED light pods and two clear halogen lights. Clear lights shall be disabled when the apparatus is in the blocking mode.

AIR HORN SELECTOR SWITCH

A rocker switch shall be installed in the switch panel between the driver and officer to allow control to either the air horn or the electric horn from the steering wheel horn button. The electric horn shall sound by default when the selector switch is in either position which is in accordance with FMVSS requirement.

AIR HORN ACTUATION

The air horn actuation shall be accomplished by the steering wheel horn button and a right side officer's mounted Linemaster style foot switch.

BACKUP ALARM

A backup alarm shall be installed at the rear of the chassis. The alarm will automatically activate when the transmission is placed in reverse.

INSTRUMENTATION

An ergonomically designed instrument panel shall be provided. The gauges shall be backlit with red LED lamps. The instrument panel shall contain the following gauges:

Electronic tachometer with an hour meter shall be included.
One (1) electronic speedometer with an integral odometer/ trip odometer shall be included.
Dual air gauges.
Fuel level gauge with low fuel level warning.
Engine oil pressure gauge.
Coolant temperature gauge.
Transmission oil temperature gauge.
Voltmeter.

RED LAMPS

Stop Engine - indicates critical engine fault.
Park Brake - indicates park brake is set.
Volts - indicates high or low system voltage.
Low Oil Press - indicates low engine oil pressure.
High Coolant Temp - indicates excessive engine coolant temperature.
High Trans Temp - indicates excessive transmission oil temperature.
Low Air - indicates low air pressure in either system one or system two.
Low Coolant Level - indicates low engine coolant level.
Air Filter - indicates excessive engine air intake restriction.
Seat Belt Indicator – indicates when a seat is occupied and corresponding seat belt remains unfastened.

SIGNAL LAMPS

Check Engine - indicates engine fault.
Check Trans - indicates transmission fault.
Wait to Start - indicates active engine air preheat cycle.
ABS - indicates anti-lock brake system fault.
Water in Fuel - indicates presence of water in fuel filter.
Check Message Center – indicates there is a fault message present in the multiplex digital display.
DPF – indicates a restriction of the diesel particulate filter. (3) (5)
HEST – indicates a high exhaust system temperature. (3) (5)
MIL – indicates an engine emission control system fault. (3) (5)
Low Fuel – indicates low fuel. (4)
Left and Right turn signal indicators.
High Idle - indicates engine high idle is active. (1)
OK to Pump – indicates the pump engage conditions have been met. (1)
Pump Engaged – indicates the pump is currently in use. (1)
High beam indicator.

The instrumentation system shall provide a constant audible alarm for the following situations:

Low air pressure.
Low engine oil pressure.
High engine coolant temperature.
High transmission oil temperature.
Low coolant level. (1)
High or low system voltage

Critical engine fault (Stop Engine).

FIRE EXTINGUISHER

A 2.50 pound BC D.O.T approved fire extinguisher shall be shipped loose with the cab.

DOOR KEYS

The cab and chassis shall include a total of four (4) door keys for the manual door locks.

CHASSIS WARRANTY

The chassis manufacturer shall warrant to the original purchaser the custom fire truck chassis for a period of twelve (12) months. The warranty period shall commence on the date the vehicle is delivered to the original purchaser and continue for twelve (12) months thereafter. The warranty shall include conditional items listed in the detailed warranty document which may be provided upon request.

Extended warranties beyond 12 months are to be provided for items listed with extended warranties elsewhere in the specifications/

OPERATOR'S MANUAL AND PARTS LIST

There shall be one (1) chassis operator's manual which includes a parts list including wiring and air plumbing diagrams provided and shipped loose with the vehicle. All standard wiring and plumbing diagrams shall be created specifically to the chassis model.

ENGINE AND TRANSMISSION OPERATION MANUALS

There shall be one (1) set of engine operation and maintenance manuals and one (1) set of transmission operation manuals specific to the models ordered included with the final vehicle in the ship loose items.

CUMMINS ISC/ISL ENGINE SERVICE MANUALS

There shall be one (1) set of the following Cummins ISC/ISL engine service reference manuals which shall be provided with the final vehicle.

Engine Troubleshooting and Repair Manual, part number 4021418
Electronic Control System Troubleshooting and Repair Manual, part number 4021443
Operation and Maintenance Manual, part number 4021427
Wiring Diagram, part number 3666416

FUEL FILL ASSEMBLY

There shall be a stainless steel or aluminum fuel fill assembly furnished in the driver's side behind rear axle for the rear mount fuel tank.

HORIZONTAL CHASSIS EXHAUST

The chassis exhaust system shall be extended to the front of the right rear wheel.

FRONT BUMPER GRAVELSHIELD

There shall be a horizontal gravelshield fabricated from bright 1/8" aluminum treadplate installed at the front bumper to cover the area between the bumper and the cab.

A recessed style hosewell for storage is to be provided in the center of the front bumper extension. Hosewell shall be constructed of .125 aluminum material and have a smooth interior surface.

Hosewell shall have a drain hole in each corner.

WHEEL TRIM PACKAGE

There shall be heavy-duty, rubber mud flaps shall be furnished and installed behind the front and rear wheels of the vehicle. The mud flaps shall extend the full width of the tires and are to be attached with stainless steel fasteners.

There shall also be stainless steel wheel liners and chrome lug nut covers shall be installed on all four outside chassis wheels of the apparatus.

REAR TOWING PROVISIONS

There shall be two tow eyes furnished under the rear of the body and attached directly to each chassis frame rail. There shall be a reinforcement spreader bar connecting the two tow eyes. Tow eyes are to be constructed of 3/8" plate steel with a hole large enough for passing through a tow chain end hook.

TOW PLATE PAINTING

The tow plates shall be painted black.

PUMP

A Hale or Waterous single stage split-drive shaft driven fire pump shall be provided and installed. Pump shall be rated at 1750 GPM.

The pump shall be midship mounted and designed to operate through an integral transmission, including a means for power selectivity to the driving axle or to the pump. The pump shall be driven by a driveline from the chassis transmission. The engine, transmission and driveline components shall provide sufficient horsepower and RPM to enable the pump to meet and exceed its rated performance.

Manuals

Two (2) manuals covering the fire pump transmission and fire pump shall be provided with the apparatus.

FIRE PUMP WARRANTY

The standard pump warranty for the fire pump shall be provided. The manufacturer shall supply details of their warranty information with their bid submission.

LEFT SIDE -- 6" UNGATED INTAKE

One (1) 6" un-gated suction intake shall be installed on the left side pump panel to supply the fire pump from an external water supply. The threads shall be 6" NST. The intake shall be provided with a removable screen.

One (1) 6" chrome plated cap shall be provided. The threads shall be NST and the cap shall be equipped long handles.

RIGHT SIDE -- 6" UNGATED INTAKE

One (1) 6" un-gated suction intake shall be installed on the right side pump panel to supply the fire pump from an external water supply. The intake shall be provided with a removable screen.

One (1) 6" chrome plated cap shall be provided. The threads shall be NST and the cap shall be equipped long handles.

PRESSURE GOVERNOR AND ENGINE-PUMP MONITORING

One (1) pressure governor and monitoring display kit shall be provided on the pump panel.

POWER OPERATED MID-SHIP PUMP SHIFT SPECIFICATIONS

An air powered pump shift shall be installed in the cab driver's area where not subject to accidental engagement. The apparatus pump shift shall be engaged only when apparatus is in a stationary position and the parking brake is engaged.

The following indicator lights shall be included with pump shift.

1. A green indicator light, labeled "PUMP ENGAGED" shall indicate pump shift has successfully been completed.
2. A green indicator light, labeled "OK TO PUMP" shall indicate the chassis transmission is in pump gear and parking brake is engaged.
3. Pump shift and interlocks shall comply with applicable sections of NFPA standards.
4. The pump shift shall have an instruction label and nameplate to indicate function and proper operation.

ELECTRIC PRIMER SPECIFICATIONS

A 12 volt electrically driven positive displacement fire pump primer system shall be installed. The priming pump shall be constructed of heat treated aluminum and hard coat anodized and shall not use oil in the operation. The system shall perform in compliance to applicable NFPA standards.

FIRE PUMP TEST

The pump shall undergo a third party test per applicable sections of NFPA standards, prior to delivery of the completed apparatus.

The acceptance certificate shall be furnished with the apparatus on delivery.

FIRE PUMP TEST LABEL

A fire pump performance and rating label shall be installed on the fire apparatus pump panel. The label shall denote levels of pump performance and testing completed at factory. These shall include GPM at net pump pressure, RPM at such level, and other pertinent data as required by applicable NFPA standards. In addition, the pressure control device, tank to pump flow tests, and other required testing shall be completed.

In addition, the entire pump, suction and discharge passages shall be hydrostatically tested to a pressure as required by applicable NFPA standards. The pump shall be fully tested at the pump manufacturer's factory to the performance specifications as outlined by applicable NFPA standards. Pump shall be free from objectionable pulsation and vibration.

If applicable, the fire pump shall be tested and rated as follows:

- 100% of rated capacity at 150 pounds net pressure.
- 70% of rated capacity at 200 pounds net pressure.
- 50% of rated capacity at 250 pounds net pressure.
- 100% or rated capacity at 165 pounds net pressure.

FIRE PUMP COOLING

The fire pump shall be equipped with 3/8" cooling line from the pump to the water tank. This recirculation line shall be controlled by a pump panel control valve with nameplate label noting it as the "pump cooler".

CHASSIS ENGINE HEAT EXCHANGER COOLING SYSTEM

The apparatus shall be equipped with a heat exchanger for supplementary chassis engine cooling during fire pump operations. A manually opened valve, mounted at the operator's panel, shall direct water from the fire pump to the heat exchanger that is mounted in the engine radiator cooling hose. The system shall provide cooling water from the fire pump to circulate around the engine radiator coolant without mixing or coming in direct contact with the engine coolant. The complete installation shall be done by the fire apparatus manufacturer.

A nameplate label shall be installed on the pump panel noting "engine cooling system" with "on-off" opening directions noted.

STAINLESS STEEL PLUMBING WARRANTY

The bidder shall warrant to each original purchaser only that stainless steel plumbing components and ancillary brass fittings used in the construction of the water/foam plumbing system shall be warranted for a period of ten (10) years. This covers structural failures caused by defective design or workmanship, or perforation caused by corrosion, provided the apparatus is used in a normal and reasonable manner. This warranty is extended only to the original purchaser for a period of ten years from the date of the delivery and shall terminate upon the transfer of possession or ownership by original purchaser.

PUMP PLUMBING SYSTEM

The fire pump plumbing system shall be of rigid schedule 40 stainless steel or flexible piping with stainless steel fittings. Victaulic couplings shall be installed to permit flexing of the plumbing system and allow for quick removal of piping or valves for service. Flexible hose couplings shall be threaded stainless steel or Victaulic connections.

The fire pump and plumbing shall be hydrostatically tested in compliance to applicable sections of NFPA standards, with test results submit with the delivery documentation.

FIRE PUMP MASTER DRAIN

The fire pump plumbing system and fire pump shall be piped to a single pump panel mounted master pump drain assembly.

ADDITIONAL LOW POINT DRAINS

The plumbing system shall be equipped with additional low point manually operated drain valves to allow total draining of the fire pump plumbing system. These valves shall be accessible from the side of the vehicle and labeled.

PLUMBING SYSTEM

The plumbing system shall be unpainted.

HOSE THREADS

The hose threads shall be National Standard Thread (NST) on all base threads on the apparatus intakes and discharges.

WATER TANK TO PUMP LINE

One (1) 3" water tank to fire pump line shall be provided with a full flow quarter turn ball valve, 3" piping, and with flex hose and stainless steel hose clamps. The tank to pump line shall be equipped with a check valve to prevent pressurization of the water tank.

The line shall be flow tested during the fire pump testing and shall meet applicable requirements of NFPA standards.

The specified intake valve shall be equipped with one (1) air operated control. The handle shall be equipped with color coded engraved type name plate.

The specified valve shall be a three-inch (3") valve with a stainless ball.

FIRE PUMP TO WATER TANK FILL LINE

One (1) 2" fire pump to water tank refill and pump bypass cooler line shall be provided. The valve shall be a full flow quarter turn ball valve with 2" piping and flex hose to tank. The valve control handle shall have a nameplate located near the valve control.

One (1) manually operated pull rod, with quarter turn valve, with locking feature shall be provided on the specified discharge. The handle shall be equipped with color coded engraved type name plate.

The specified valve shall be a two-inch (2") valve with a stainless ball.

LEFT SIDE -- 2-1/2" GATED INTAKE

One (1) 2-1/2" gated suction intake shall be installed on left side pump panel to supply the fire pump from an external water supply. The control valve shall be a quarter turn ball valve and shall have 2-1/2" NST female thread of chrome plated brass.

The intake shall be equipped with a 3/4" drain and bleeder valve, controlled at the base of the pump panel. A nameplate label and removable screen shall be installed.

One (1) 2-1/2" chrome plated plug shall be provided. The threads shall be NST and the plug shall be equipped rocker lugs and chain or cable securement.

The specified intake valve shall be equipped with one (1) manually operated swing type manual control located adjacent the intake. The valve shall be equipped color coded engraved type name plate.

RIGHT SIDE -- 2-1/2" GATED INTAKE

One (1) 2-1/2" gated suction intake shall be installed on right side pump panel to supply the fire pump from an external water supply. The control valve shall be a quarter turn ball valve and shall have 2-1/2" NST female thread of chrome plated brass.

The intake shall be equipped with a 3/4" drain and bleeder valve, controlled at the base of the pump panel. A nameplate and removable screen shall be installed.

One (1) 2-1/2" chrome plated plug shall be provided. The threads shall be NST and the plug shall be equipped rocker lugs and chain or cable securement.

The specified intake valve shall be equipped with one (1) manually operated swing type manual control located adjacent the intake. The valve shall be equipped color coded engraved type name plate.

2" DISCHARGE FRONT CENTER BUMPER

One (1) 2" quarter turn ball valve discharge shall be installed at front center bumper area with stainless steel or brass swivel outlet with 1-1/2" NST male threads. The valve control shall be on pump panel and a nameplate label provided at valve control area.

The plumbing shall be flexible hose with abrasion resistant support mountings. Auxiliary low point drains shall be provided on the discharge line.

A 3/4" quarter turn bleeder valve shall be installed on gated intakes and discharges larger than 1-1/2" in size.

One (1) manually operated pull rod, with quarter turn valve, with locking feature shall be provided on the specified discharge. The handle shall be equipped with color coded engraved type name plate.

The specified valve shall be a two-inch (2") valve with a stainless ball.

One (1) 2-1/2" pressure gauge rated at 0-400 Psi shall be provided. The gauge shall include a color coded label and be installed on the pump instrument panel.

Note: the hose connection for the front discharge shall be polished stainless steel swivel type located above the front bumper deck level.

TWO (2) 1-1/2" CROSSLAY / SPEEDLAY DISCHARGES

Two (2) pre-connect 1-3/4" hose crosslays shall be installed over pump enclosure, with quarter turn 2" diameter ball valves. The outlets shall be a 2" NPT female swivel x 1-1/2" male NST hose threads.

The crosslay hosebeds shall have smooth aluminum sides. The hosebed decking shall be constructed with slots integrated into the hosebed floor.

Each hosebed shall provide for a minimum capacity of 200 feet of 1-3/4" diameter double jacket hose with nozzle, for hose provided by the fire department.

A 3/4" quarter turn bleeder valve shall be installed on gated intakes and discharges larger than 1-1/2" in size.

Two (2) manually operated pull rod, with quarter turn valve, with locking feature shall be provided on the specified discharge. The handle shall be equipped with color coded engraved type name plate.

The specified valve shall be a two-inch (2") valve with a stainless ball.

Two (2) 2-1/2" pressure gauge rated at 0-400 Psi shall be provided. The gauge shall include a color coded label and be installed on the pump instrument panel.

ONE (1) 2-1/2" CROSSLAY / SPEEDLAY DISCHARGE

One (1) pre-connect 2-1/2" hose crosslays shall be installed over pump enclosure, with quarter turn 2" diameter ball valves. The outlets shall be a 2-1/2" NPT female swivel x 2-1/2" male NST hose threads.

The crosslay hosebed shall have smooth aluminum sides. The hosebed decking shall be constructed with slots integrated into the hosebed floor.

Each hosebed shall provide for a minimum capacity of 200 feet of 2-1/2" diameter double jacket hose with nozzle, for hose provided by the fire department.

A 3/4" quarter turn bleeder valve shall be installed on gated intakes and discharges larger than 1-1/2" in size.

One (1) manually operated pull rod, with quarter turn valve, with locking feature shall be provided on the specified discharge. The handle shall be equipped with color coded engraved type name plate.

The specified valve shall be a two-inch (2-1/2") valve with a stainless ball.

One (1) 2-1/2" pressure gauge rated at 0-400 PSI shall be provided. The gauge shall include a color coded label and be installed on the pump instrument panel.

CROSSLAY / SPEEDLAY HINGED COVER

The crosslay hosebed shall be equipped with a single aluminum diamond plate hinged cover. The cover shall have rubber bumpers, latching devices, and lift up handle on each end of the cover. Vinyl covers shall be provided on each side of the cover.

ROLLER GUIDES FOR CROSSLAY HOSE BED

The crosslay hosebed shall be equipped stainless steel "U" shaped roller guide system, one on each end of the hosebed.

LEFT SIDE PUMP PANEL -- 2-1/2" DISCHARGE

One (1) 2-1/2" discharge shall be installed on the left side pump panel area and shall be controlled by a quarter turn ball valve. The discharge shall have 2-1/2" NST male hose threads and a chrome plated elbow with rocker lugs with 2-1/2" NST swivel female x 2-1/2" NST male hose threads. A color coded nameplate label shall be provided adjacent the control handle.

A 3/4" quarter turn bleeder valve shall be installed on gated intakes and discharges larger than 1-1/2" in size.

One (1) chrome plated elbow with rocker lugs shall be provided with 2-1/2" NST swivel female x 2-1/2" NST male hose threads.

One (1) 2-1/2" NST rocker lug chrome plated vented cap and cable or chain securement shall be provided.

One (1) manually operated pull rod, with quarter turn valve, with locking feature shall be provided on the specified discharge. The handle shall be equipped with color coded engraved type name plate.

The specified valve shall be a two and one half-inch (2-1/2") valve with a stainless ball.

One (1) 2-1/2" pressure gauge rated at 0-400 Psi shall be provided. The gauge shall include a color coded label and be installed on the pump instrument panel.

RIGHT SIDE PUMP PANEL -- 2-1/2" DISCHARGE

One (1) 2-1/2" discharge shall be installed on the right side pump panel area and shall be controlled by a quarter turn ball valve. The outlet shall have 2-1/2" NH male hose threads. A chrome plated elbow with rocker lugs shall be provided with 2-1/2" NST swivel female x 2-1/2" NH male hose threads. A color coded nameplate label shall be provided adjacent the control handle.

A 3/4" quarter turn bleeder valve shall be installed on gated intakes and discharges larger than 1-1/2" in size.

One (1) chrome plated elbow with rocker lugs shall be provided with 2-1/2" NST swivel female x 2-1/2" NST male hose threads.

One (1) 2-1/2" NST rocker lug chrome plated vented cap and cable or chain securement shall be provided.

One (1) manually operated pull rod, with quarter turn valve, with locking feature shall be provided on the specified discharge. The handle shall be equipped with color coded engraved type name plate.

The specified valve shall be a two and one half-inch (2-1/2") valve with a stainless ball.

One (1) 2-1/2" pressure gauge rated at 0-400 Psi shall be provided. The gauge shall include a color coded label and be installed on the pump instrument panel.

RIGHT SIDE PUMP PANEL -- 3" DISCHARGE

One (1) 3" discharge shall be installed on the right side pump panel area and shall be controlled by a quarter turn ball valve. The discharge shall have 3" NST male hose threads. A color coded nameplate label shall be provided adjacent the control handle.

A 3/4" quarter turn bleeder valve shall be installed on gated intakes and discharges larger than 1-1/2" in size.

One (1) chrome plated elbow with rocker lugs shall be provided with 3" NST swivel female x 3" NST male hose threads.

One (1) 3" NST rocker lug chrome plated vented cap and cable or chain securement shall be provided.

One (1) valve equipped with a manually operated pull rod, with quarter turn locking feature and a manual slow close device shall be provided on the specified discharge. The handle shall be equipped with color coded engraved type name plate.

The specified valve shall be a three-inch (3") valve with a stainless ball.

One (1) 2-1/2" pressure gauge rated at 0-400 Psi shall be provided. The gauge shall include a color coded label and be installed on the pump instrument panel.

FRONT OF HOSEBED -- 2-1/2" DISCHARGE

One (1) 2-1/2" discharge shall be installed to the front of hosebed area and controlled by a quarter turn ball valve on the pump panel. The discharge shall have 2-1/2" NPT x 2-1/2" NST male hose threads. An engraved nameplate label shall be provided adjacent the control handle.

A 3/4" quarter turn bleeder valve shall be installed on gated intakes and discharges larger than 1-1/2" in size.

One (1) manually operated pull rod, with quarter turn valve, with locking feature shall be provided on the specified discharge. The handle shall be equipped with color coded engraved type name plate.

The specified valve shall be a two and one half-inch (2-1/2") valve with a stainless ball.

One (1) 2-1/2" pressure gauge rated at 0-400 Psi shall be provided. The gauge shall include a color coded label and be installed on the pump instrument panel. The face of the gauge shall have a white dial with black letters.

REAR RIGHT SIDE -- 2-1/2" DISCHARGE

One (1) 2-1/2" discharge shall be installed on the right side rear panel of the apparatus body and shall be controlled by a quarter turn ball valve on the pump panel. The discharge shall have 2-1/2" NPT x 2-1/2" NST male hose threads adapter with 30 degree slant. The outlet shall be equipped with an engraved nameplate label, installed adjacent to the valve control handle.

A 3/4" quarter turn bleeder valve shall be installed on gated intakes and discharges larger than 1-1/2" in size.

One (1) chrome plated elbow with rocker lugs shall be provided with 2-1/2" NST swivel female x 2-1/2" NST male hose threads.

One (1) 2-1/2" NST rocker lug chrome plated vented cap and cable or chain securement shall be provided.

One (1) manually operated pull rod, with quarter turn valve, with locking feature shall be provided on the specified discharge. The handle shall be equipped with color coded engraved type name plate.

The specified valve shall be a two and one half-inch (2-1/2") valve with a stainless ball.

One (1) 2-1/2" pressure gauge rated at 0-400 Psi shall be provided. The gauge shall include a color coded label and be installed on the pump instrument panel.

REAR LEFT SIDE -- 2-1/2" DISCHARGE

One (1) 2-1/2" discharge shall be installed on the left side rear panel of the apparatus body and shall be controlled by a quarter turn ball valve on the pump panel. The discharge shall have 2-1/2" NPT x 2-1/2" NST male hose threads adapter with 30 degree slant. The outlet shall be equipped with an engraved nameplate label, installed adjacent to the valve control handle.

A 3/4" quarter turn bleeder valve shall be installed on gated intakes and discharges larger than 1-1/2" in size.

One (1) chrome plated elbow with rocker lugs shall be provided with 2-1/2" NST swivel female x 2-1/2" NST male hose threads.

One (1) 2-1/2" NST rocker lug chrome plated vented cap and cable or chain securement shall be provided.

One (1) manually operated pull rod, with quarter turn valve, with locking feature shall be provided on the specified discharge. The handle shall be equipped with color coded engraved type name plate.

The specified valve shall be a two and one half-inch (2-1/2") valve with a stainless ball.

One (1) 2-1/2" pressure gauge rated at 0-400 PSI shall be provided. The gauge shall include a color coded label and be installed on the pump instrument panel.

3" MONITOR DISCHARGE

One (1) 3" discharge shall be piped to the area over the pump enclosure with 3" NPT male threads provided. The pipe shall be equipped with Victaulic couplings (if necessary) and shall be properly secured to prevent movement when a monitor or deck gun is attached. The quarter turn ball valve shall be controlled on pump panel.

An 18" extending pipe with warning light shall be provided on the deck gun discharge.

A color coded nameplate label shall be provided adjacent the valve control handle.

A 3/4" quarter turn bleeder valve shall be installed on gated intakes and discharges larger than 1-1/2" in size.

One (1) valve equipped with a manually operated pull rod, with quarter turn locking feature and a manual slow close device shall be provided on the specified discharge. The handle shall be equipped with color coded engraved type name plate.

The specified valve shall be a three-inch (3") valve with a stainless ball.

One (1) 2-1/2" pressure gauge rated at 0-400 Psi shall be provided. The gauge shall include a color coded label and be installed on the pump instrument panel.

FOAM SYSTEM

One (1) Class A electronic foam proportioning system shall be provided. Acceptable brands are FoamPro, or Hale FoamLogix, or equal. Minimum foam capacity shall be 2.0 gallons per minute. The foam proportioning operation shall be designed for direct measurement of water flows, and shall remain consistent within the specified flows and pressures. The system shall be capable of accurately delivering foam solution as required by applicable sections of the NFPA standards.

The system shall be equipped with a digital electronic control display suitable for installation on the pump panel.

A paddlewheel-type flowmeter shall be installed as required.

The foam system shall be installed and calibrated to manufacturer's requirements. In addition the system shall be tested and certified by the apparatus manufacturer to meet applicable NFPA standards.

The foam system design shall be tested and pass environmental testing in accordance to SAE standards.

An installation and operation manual shall be provided for the unit. The system shall have a one (1) year limited warranty by the foam system manufacturer.

1" FOAM TANK CONTROL -- CLASS A

One (1) Class A foam tank shall be plumbed with 1" valve and corrosion resistant hose from the foam tank to the foam inlet of the foam system. The manually opened valve shall be provided on the pump panel with color coded "green" label.

CLASS A FOAM TANK -- 20 GALLON

One (1) minimum twenty (20) gallon Class A foam tank shall be installed separate of the main water tank. The non-corrosive foam tank shall meet applicable sections of NFPA standards. The foam concentrate tank shall be provided with sufficient wash partitions so that the maximum dimension perpendicular to the plane of any partition shall not exceed 36 inches.

The foam concentrate tank shall be provided with a fill tower or expansion compartment having a minimum area of 12 square inches and having a volume of not less than 2 percent of the total tank volume. The fill tower opening shall be protected by a completely sealed air-tight cover. The cover shall be attached to the fill tower by mechanical means. The fill opening shall be designed to incorporate a 1/4 inch removable screen and shall be located so that foam concentrate from a five (5) gallon container can be dumped directly to the bottom of the tank to minimize aeration without the use of funnels or other special devices.

The foam tank fill tower shall be equipped with a pressure/vacuum vent that enables the tank to compensate for changes in pressure or vacuum when filling or withdrawing foam concentrate from the tank. The pressure/vacuum vent shall not allow atmospheric air to enter the foam tank except during operation or to compensate for thermal fluctuations. The vent shall be protected to prevent foam concentrate from escaping or directly contacting the vent at any time. The vent shall be of sufficient size to prevent tank damage during filling or foam withdrawal.

A color coded label or visible permanent marking that reads "FOAM TANK FILL" shall be placed at or near any foam concentrate tank fills opening. A label shall be placed at or near any foam concentrate tank fill opening that specifies the type of foam concentrate the system is designed to use. Any restrictions on the types of foam concentrate that can be used with the system shall also be stated, and a warning message that reads "WARNING: DO NOT MIX BRANDS AND TYPES OF FOAM."

The foam concentrate tank outlet connection shall be designed and located to prevent aeration of the foam concentrate and shall allow withdrawal of 80 percent of the foam concentrate tank storage capacity under all operating conditions with the vehicle level.

The foam tank shall have one (1) 1" drain provision installed.

Tank shall have a lifetime warranty.

FOAM TANK FILL

A truck mounted 12-volt foam tank refill system shall be provided and installed on the apparatus. The refill system shall provide the ability to automatically refill the foam tank from the ground without carrying foam solution up to the foam cell in the hosebed.

The refill system shall be activated by an on/off rocker switch provided on a control panel installed on the pump panel. The foam refill system will automatically shut off when the foam tank is full. The refill system quick connection shall be located beneath the pump panel running board to prevent foam from spilling onto the running board during connection operations.

CLASS A FOAM TANK GAUGE

One (1) foam tank level indicator with LED lights shall be installed at the operator's panel.

WATER TANK - 1000 GALLON

The apparatus shall be equipped with not less than a one-thousand (1000) gallon polypropylene water tank. The tank shall be equipped with a four-inch (4") overflow pipe.

A fill tower measuring approximately 10" x 10" square shall be provided on the water tank.

Water tank shall have a lifetime warranty.

DIRECT TANK FILL

One (1) 2-1/2" diameter direct tank fill inlet shall be provided, including a 2-1/2" female NH swivel, plug and screen.

The valve shall be located and controlled on the rear of body.

TOP MOUNT PUMP ENCLOSURE

The top mount pump enclosure shall be removable and supported from the chassis frame rails. This enclosure will allow independent flexing of the pump enclosure from the body and allow for quick removal. All pump intake discharge controls are to be mounted above the fire pump at a top mounted operator's control panel to provide around-the-truck visibility.

Access to the top mounted control panel shall be provided from both sides of the truck with a large full width walkway ahead of the control panel. The walkway and running boards shall be bolted in place and shall be constructed of slip-resistant NFPA compliant surfaces. There shall be four (4) rubber shock mounted lights furnished in the lower forward facing panel to illuminate the walkway.

Access to the plumbing area shall be provided from both sides of the truck with a large full width walkway ahead of the control panel. The fire pump, valves and controls shall be accessible for service and maintenance as required by applicable sections of NFPA standards. In addition, a removable panel shall be provided on vertical surface on the front surface of the pump enclosure.

Access handrails shall be 1-1/4" in diameter extruded aluminum with chrome plated end brackets shall be provided and installed on each side, for easy access to the walkway.

Engine gauges and master pump gauges shall be mounted on the upper incline plane of the gauge and valve control panel. Both the upper gauge panel and lower valve control panel to be full width and completely removable for access to the pump compartment.

The following controls and equipment shall be provided on the pump panel or within the pump enclosure:

- 1) Electric primer.
- 2) Pump and plumbing area service lights.
- 3) Pressure control device and throttle control.
- 4) Fire pump and engine instruments.
- 5) Pump intakes and discharge controls.
- 6) Master intake and discharge gauges.
- 7) Tank fill control.
- 8) Tank suction control.
- 9) Water tank level gauge.
- 10) Pump panel lights.

Crosslay Installation

The dunnage area atop the pump enclosure shall be notched for the installation of a crosslay hose bed. The hosebed shall have smooth sides and open grating under the hose area. Provisions shall be provided to secure hose and equipment per requirements of applicable NFPA standards.

LEFT SIDE RUNNING BOARD

The left pump panels shall be equipped with a side running board. The running board will extend along the width of the pump enclosure from the forward end of the body module to behind the chassis cab.

The running board shall be constructed of aluminum tread plate, bolted in place with stainless steel fasteners. The step surfaces shall be in compliance to applicable sections of NFPA requirements.

RIGHT SIDE RUNNING BOARD

The right pump panel shall be equipped with a side running board. The running board will extend along the width of the pump enclosure from the forward end of the body module to behind the chassis cab.

The running board shall be constructed of aluminum tread plate, bolted in place with stainless steel fasteners. The step surfaces shall be in compliance to applicable sections of NFPA requirements.

PUMP ENCLOSURE ACCESS DOOR

A pump panel access door shall be provided on each side of the side mount pump enclosure. The door shall be constructed of stainless steel or aluminum tread plate with push button type latches.

LEFT SIDE PUMP PANEL -- BOLTED

A pump panel shall be installed on the on the left hand side of the pump enclosure. The panel shall be fastened to the pump enclosure with stainless steel bolts.

RIGHT SIDE PUMP PANEL -- BOLTED

A pump panel shall be installed on the on the right hand side of the pump enclosure. The panel shall be fastened to the pump enclosure with 1/4" stainless steel bolts.

PUMP PANEL -- TOP MOUNT

The left hand, right hand, and top mount pump panels shall be constructed of black coated stainless steel material and be fastened to the pump enclosure with stainless steel bolts.

LABELS

Safety, information, data, and instruction labels for apparatus shall be provided and installed at the operator's instrument panel.

The labels shall include rated capacities, pressure ratings, and engine speeds as determined by the certification tests. The no-load governed speed of the engine, as stated by the engine manufacturer, shall also be included.

The labels shall be provided with all information and be attached to the apparatus prior to delivery.

COLOR CODED PUMP PANEL LABELING AND NAMEPLATES

Discharge and intake valve controls shall be color coded in compliance to guidelines of applicable sections of NFPA standards.

Permanent type nameplates and instruction panels shall be installed on the pump panel for safe operation of the pumping equipment and controls.

PUMP PANEL LIGHTS -- LEFT SIDE

Full width LED lights with clear lenses shall be installed under an instrument panel light hood on the left side pump panel. The lights shall be controlled by engaging the parking brake.

PUMP PANEL LIGHTS -- RIGHT SIDE

Full width LED lights with clear lenses shall be installed under an instrument panel light hood on the right side pump panel. The lights shall be controlled by engaging the parking brake.

PUMP PANEL LIGHTS -- TOP MOUNT

Full width LED lights with clear lenses shall be installed under an instrument panel light hood on the top pump panel. The lights shall be controlled by engaging the parking brake.

TEST TAPS

Test taps for pump intake and pump pressure shall be provided on the pump instrument panel and be properly labeled.

WATER TANK GAUGE

One (1) water tank level indicator with LED lights shall be installed at the operator's panel.

ADDITIONAL WATER TANK LEVEL LIGHTS

Two (2) Whelen PS-TANK, or equal vertically mounted LED lights shall be installed one each side of the apparatus to allow for monitoring the water tank level from a distance.

An additional tank level light shall be mounted on the rear of the apparatus.

They shall be configured as follows:

- 1)GREEN - Position 1 indicates FULL
- 2)BLUE - Position 2 indicates 3/4
- 3)AMBER - Position 3 indicates 1/2
- 4)RED - Position 4 indicates 1/4

Each light shall remain illuminated until the water level drops below full 3/4, 1/2, or 1/4 levels. When the level drops below 1/4 the RED light will flash to indicate an empty tank.

HOSEBED WIDTH

The width of the hosebed shall be not less than 68" wide.

The hosebed shall hold 1200 feet of 4" Angus HI-Vol LDH hose and 500' feet of Angus Ultima DJ fire hose in the outboard positions.

Hose bed sides shall be not less than 20" tall for clearance of large diameter hose couplings as the hose is removed.

ALUMINUM HOSEBED GRATING SINGLE AXLE

The hose bed compartment deck shall be constructed entirely from maintenance-free, extruded aluminum slats. The slats shall have an anodized, radiused ribbed top surface.

ALUMINUM HOSEBED DIVIDERS

Three (3) hosebed dividers constructed of .250" aluminum shall be installed on the apparatus. Each divider shall have at least two hand holds cut in to assist in climbing into the hose bed.

ALUMINUM HOSEBED COVER

The hosebed shall be equipped with a reinforced hinged .125" aluminum diamond plate cover. The walking surface on the cover shall be a NFPA #1901 compliant surface. Positive hold-open devices shall be provided to hold the door in the open position.

Lift up handles shall be installed on each hose cover.

HARD SUCTION MOUNTING

There shall be two (2) horizontally mounted aluminum hard suction hose brackets mounted on the ladder rack.

ALUMINUM BODY

The body shall be fabricated from either aluminum or stainless steel.

Compartments to be sweepout design and to be water and dust proof. All compartments shall be made to the maximum practical dimensions to provide maximum storage capacity. To ensure maximum storage space, the apparatus shall be constructed without any void spaces between the body and the compartment walls.

All exterior compartments shall have polished aluminum drip moldings installed above the doors where necessary to prevent water from entering the compartments.

Wheel well panels shall be bolted in place. To fully protect the wheel well area from road debris and to aid in cleaning, a full depth radius wheel well liner shall be provided. All seams on the frame side of the body shall be welded and caulked to prevent moisture from entering the compartments.

The rear wheel wells shall be radius cut for a streamlined appearance. A fenderette shall be furnished at each rear wheel well opening, held in place with stainless steel fasteners. Fenderette shall match the front cab fenderette in style and material.

FASTENERS

All aluminum and stainless steel components shall be attached using stainless steel fasteners.

SUB-FRAME

The apparatus body subframe shall be constructed entirely of heavy steel or stainless steel structural channel material.

A minimum of two rear platform support channels shall be provided.

COMPARTMENT LOUVER

A louver with filter shall be installed on the back wall of the specified compartments.

LADDER RACK, LADDERS AND PIKE POLES

An electric or hydraulic ladder rack shall be installed on the right side of the apparatus body, to carry the ladders and hard suction in a horizontal position above the side compartments. There shall be an air operated safety lock provided with control switch on the right side pump operator's panel. The ladder rack actuator control switch shall be weatherproof type and located on the right side pump panel in full view of the rack. A safety interlock will be supplied to prevent operation of the rack when the upper compartment doors are open.

Flashing lights facing front and rear shall be installed on the rack and shall be illuminated whenever the rack is in the lowered position. The outward side of the equipment rack that protrudes beyond the body of the apparatus shall be striped or painted with reflective material.

Cast aluminum ladder brackets with chrome plated quick release type mounting clamps shall be provided which hold the ladders to the pivot arm assembly.

A red warning light shall be provided and mounted in the cab to warn the driver when ladder rack is not in the stowed position.

ROLLUP DOORS

The doors shall be roll up doors.

LEFT SIDE BODY COMPARTMENTS

The left side body compartmentation shall be full height and full depth rescue style for maximum compartmentation, as follows:

LEFT FRONT COMPARTMENT

There shall be one (1) full height and full depth compartment located ahead of the rear wheels. The compartment shall be equipped with a full height single roll up door. Door shall be painted to match the body.

The compartment shall be equipped with the following:

COMPARTMENT LIGHTS

Two (2) incandescent or LED light fixtures shall be installed in each exterior compartment of the apparatus. The lights shall have a clear lens.

COMPARTMENT LIGHT SWITCH

The exterior compartment light will be controlled by an automatic "On-Off" switch located on each compartment door.

LEFT OVER-WHEEL COMPARTMENT

There shall be one (1) compartment above the rear wheels. The compartment shall be equipped with a single roll up door. Door shall be painted to match the body.

The compartment shall be equipped with the following:

COMPARTMENT LIGHTS

Two (2) incandescent or LED light fixtures shall be installed in each exterior compartment of the apparatus. The lights shall have a clear lens.

COMPARTMENT LIGHT SWITCH

The exterior compartment light will be controlled by an automatic "On-Off" switch located on each compartment door.

LEFT REAR COMPARTMENT

There shall be one (1) full height and full depth compartment located behind the rear wheels. The compartment shall be equipped with a full height single roll up door. Door shall be painted to match the body.

The compartment shall be equipped with the following:

COMPARTMENT LIGHTS

Two (2) incandescent or LED light fixtures shall be installed in each exterior compartment of the apparatus. The lights shall have a clear lens.

COMPARTMENT LIGHT SWITCH

The exterior compartment light will be controlled by an automatic "On-Off" switch located on each compartment door.

RIGHT SIDE BODY COMPARTMENTS

The right side body compartmentation shall be as follows:

RIGHT FRONT COMPARTMENT

There shall be one (1) full height and full depth compartment located ahead of the rear wheels. The compartment shall be equipped with a full height single natural finish roll up door.

The compartment shall be equipped with the following:

COMPARTMENT LIGHTS

Two (2) incandescent or LED light fixtures shall be installed in each exterior compartment of the apparatus. The lights shall have a clear lens.

COMPARTMENT LIGHT SWITCH

The exterior compartment light will be controlled by an automatic "On-Off" switch located on each compartment door.

RIGHT OVER-WHEEL COMPARTMENT

There shall be one (1) compartment above the rear wheels. The compartment shall be equipped with a single roll up door. Door shall be painted to match the body.

The compartment shall be equipped with the following:

COMPARTMENT LIGHTS

Two (2) incandescent or LED light fixtures shall be installed in each exterior compartment of the apparatus. The lights shall have a clear lens.

COMPARTMENT LIGHT SWITCH

The exterior compartment light will be controlled by an automatic "On-Off" switch located on each compartment door.

RIGHT REAR COMPARTMENT

There shall be one (1) full height and full depth compartment located behind the rear wheels. The compartment shall be equipped with a full height single roll up door. Door shall be painted to match the body.

The compartment shall be equipped with the following:

COMPARTMENT LIGHTS

Two (2) incandescent or LED light fixtures shall be installed in each exterior compartment of the apparatus. The lights shall have a clear lens.

COMPARTMENT LIGHT SWITCH

The exterior compartment light will be controlled by an automatic "On-Off" switch located on each compartment door.

REAR CENTER COMPARTMENT

There shall be one (1) full height and full depth compartment located at the rear of the apparatus. The compartment shall be equipped with a full height natural finish roll up door to match the rear treadplate.

The compartment shall be equipped with the following:

COMPARTMENT LIGHTS

Two (2) incandescent or LED light fixtures shall be installed in each exterior compartment of the apparatus. The lights shall have a clear lens.

COMPARTMENT LIGHT SWITCH

The exterior compartment light will be controlled by an automatic "On-Off" switch located on each compartment door.

ADJUSTABLE SHELVES

Eight (8) adjustable shelves shall be constructed of .188" thick smooth aluminum plate and be mounted in a compartment with bolt on aluminum shelf brackets.

Locations shall be as directed at the pre-construction conference.

500# ROLLOUT TRAYS

Two (2) rollout equipment trays shall be installed in a standard depth compartment . The 500# rated tracks shall have roller bearings. The tray shall be constructed of .188" smooth aluminum plate, fabricated with four sides.

The unit shall roll fully out of the compartment, with a gas operator to hold tray in both the "in and out" positions.

Locations shall be as directed at the pre-construction conference.

RUB RAILS

Full body length polished rub rails shall be bolted in place on the right and left body sides. The rub rails shall extend outward beyond the body sides for protection of the compartments and doors.

SIDE AND REAR FACES

Front and rear body panels shall be constructed of polished aluminum treadplate or stainless steel.

REAR STEP/TAILBOARD

A single piece rear step/tailboard shall be furnished that is a minimum of 18.00" deep and full width of the apparatus body.

AIR CYLINDER COMPARTMENT IN WHEELWELL

Four (4) breathing air cylinder storage compartments shall be provided and located in the rear wheel well area of the apparatus body.

The door assemblies shall be provided with a gasket between door and body side, bolted in-place and removable for repair or replacement.

Compartment shall be provided with SCBA cylinder scuff protection. A brushed aluminum door with push button trigger latch shall be provided.

HANDRAIL REAR STEP

Two (2) extruded aluminum non-slip handrails, approximately 48" in length, shall be provided and mounted on the rear of the apparatus, one (1) on each side of the body.

STEPS

Chromed or stainless steps complying with NFPA-1901 shall be provided and located as follows:

Three on the front face on each side of the body, total six.
Six on the rear of the body.

LOW VOLTAGE ELECTRICAL SYSTEM SPECIFICATIONS

The electrical system shall include all panels, electrical components, switches and relays, wiring harnesses and other electrical components. The electrical equipment installed by the apparatus manufacturer shall conform to current automotive electrical system standards, the latest Federal DOT standards, and the requirements of the applicable NFPA standards.

A single warning light switch shall activate all required warning lights. This switch will allow the vehicle to respond to an emergency and "call for the right of way". When the parking brake is applied, a "blocking right of way" system shall automatically activate per requirements of the applicable NFPA standards. All "clear" warning lights shall be automatically turned off upon application of the parking brake.

NFPA REQUIRED TESTING OF ELECTRICAL SYSTEM

The apparatus shall be electrically tested upon completion of the vehicle and prior to delivery. The electrical testing, certifications, and test results shall be submitted with delivery documentation per requirements of the applicable NFPA standards. The following minimum testing shall be completed by the apparatus manufacturer:

NFPA REQUIRED DOCUMENTATION

The following documentation shall be provided on delivery of the apparatus:

- a. Documentation of the electrical system performance tests required above.
- b. A written load analysis, including:
 1. The nameplate rating of the alternator.
 2. The alternator rating under the conditions.
 3. Each specified component load.
 4. Individual intermittent loads.

ROCKER SWITCH CONSOLE

One (1) switch console with individual rocker switches to control electrical equipment and emergency lighting shall be installed in the chassis cab dash area.

BATTERY CHARGER AND AIR COMPRESSOR

A KUSSMAUL AUTO AIR model 091-9-1200 air compressor with a 40 amp automatic battery charger shall be supplied on the chassis.

SHORE POWER RECEPTACLE

A Kussmaul 20 amp "Auto-Eject" automatic disconnect device shall be provided and installed on the 110-volt shoreline connection complete with weatherproof cover and matching plug. The Auto-Eject shall be activated by the chassis starter switch to disconnect the plug.

MARKER LIGHTS

LED marker lights shall be installed on the vehicle in conformance to the Department of Transportation requirements.

LICENSE PLATE BRACKET

One (1) license plate bracket shall be provided at the rear bumper. The bracket shall have a light and shall be chrome plated.

TAIL LIGHTS

Two (2) LED tail/brake lights shall be provided. The rectangular 4"x6" light shall be red.

Two (2) turn signals shall be provided. The rectangular LED light shall be 4" x 6" in dimension.

Two (2) backup lights shall be installed on the rear of the apparatus body. The dimensions shall be 4" x 6" and the lens color shall be clear.

Above lights shall be mounted in a polished aluminum bracket.

GROUND LIGHT SWITCH

The ground lights shall automatically activate when the parking brake is applied.

PUMP PANEL GROUND LIGHTS

Two (2) incandescent ground lights shall be installed under the pump panel running boards. One (1) light shall be located on the driver's side and one (1) light located on the officer's side of the apparatus.

REAR STEP GROUND LIGHTS

Two (2) incandescent ground lights shall be installed under rear step of the apparatus.

STEP LIGHT

One (1) incandescent step light with clear lens shall be installed on the rear step of the apparatus body.

STEP / WALKWAY LIGHT SWITCH

The step/walkway light switch shall be installed and wired to the parking brake.

DECK LIGHTS

One (1) floodlight with 50 watt halogen bulbs shall be installed at the front of the hose bed. The lights shall have an "on-off" switch.

BODY REAR SCENE LIGHTS

There shall be rear scene lights installed as high as possible on both sides of the rear of the apparatus body.

HAZARD WARNING LIGHT

A red flashing LED warning light shall be provided and installed in the driver's compartment to indicate an open passenger or apparatus compartment door.

Separate LED cab warning lights shall also be attached to the ladder rack (blue), telescoping lights (amber), and telescoping deck gun (red).

ELECTRIC SIREN

One (1) electronic siren shall be mounted in the cab. The unit shall feature an electronic air horn, wail, yelp, hi-lo siren and shall have a hard wired microphone.

SPEAKER

One (1) 100-watt siren speaker shall be recessed into the front bumper.

FEDERAL MECHANICAL SIREN

One (1) Federal Signal Q2B mechanical siren shall be mounted on the left side of the front bumper. The siren control switch shall be installed in the cab.

One (1) foot switch shall be provided on the driver's side of the cab floor to activate the Federal Signal Q2B siren.

One (1) foot switch shall be provided on the officer's side of the cab floor to activate the Federal Signal Q2B siren.

One (1) push button siren brake to silence the Federal Signal Q2B siren shall be provided on the officer's side dash.

LOWER FRONT WARNING LIGHTS

One (1) pair of oscillating LED lights shall be installed, one each side one the front of the chassis cab.

INTERSECTION WARNING LIGHTS

One (1) pair LED lights shall be installed one each side of the chassis cab.

LOWER REAR SIDE WARNING LIGHTS

One (1) pair of oscillating LED warning lights shall be installed, one each side of the lower apparatus body, at the rear of the body.

UPPER REAR WARNING LIGHTS

One (1) pair of oscillating LED warning lights shall be installed, one each side of the upper apparatus body, at the rear of the body.

Two (2) additional LED lights shall be located in the wheel wells of the apparatus body. These shall be additional warning lights requested for additional safety requirements.

GENERATOR

One (1) 5000 watt, 120/240 volt portable generator shall be provided for mounting on the apparatus. The generator shall have an electric starter with a recoil manual backup starter. The single cylinder, four cycle, air cooled engine shall have an eleven (11) horsepower rating with a fuel tank capacity of 6.6 gallons for a run time of 8 hours at full load with a full tank. The generator shall have the following receptacles:

- Two (2) 20 amp 125 volt duplex straight blade NEMA 5-20R
- One (1) 30 amp 125 volt twist lock NEMA L5-30R
- One (1) 30 amp 125/250 volt twist lock NEMA L14-30R

Data Label

A permanent data label indicating the following information shall be applied:

- 1)Rated voltage
- 2)Phase
- 3)Frequency
- 4)Amperage
- 5)Continuous Watts
- 6)Peak Watts

GENERATOR MOUNTING LOCATION

The generator shall be installed in the lower portion of the right side rear compartment.

LINE VOLTAGE WIRING INSTALLATION

Line voltage wiring in the vehicle shall be through flexible moisture resistant reinforced conduit, with proper seal-tight connectors and hardware.

All wiring connections and terminations shall provide a positive mechanical and electrical connection. Connectors shall be installed in accordance with the manufacturer's instructions. Use of wire nuts or insulation displacement and insulation piercing connectors shall be avoided.

TELESCOPIC 500 WATT FLOODLIGHT

Two (2) side mount bottom raise telescopic light shall be installed. The light pole shall be anodized aluminum and have a knurled twist lock mechanism to secure the extension pole in position. The extension pole shall rotate 360 degrees. The outer pole shall be a grooved aluminum extrusion and qualify as an NFPA compliant handrail. The pole mounting brackets shall have a 2 3/4" offset. Wiring shall extend from the pole bottom with a 4' retractile cord.

Lights shall be installed one each side at the front of the side body compartments. Apparatus builder is to recess mount the light poles so that they do not interfere with the folding steps and do not stick out beyond the sides of the body.

The lamp head shall have one (1) Halogen Infrared (HIR) 900 watt 240 volt bulb. The bulb will draw 3.75 amps and generate 32,000 lumens. The bulb shall be accessible through the front. The lamp head shall incorporate a vacuum deposit polished reflector to produce a uniform beam that lights up an area 100° vertically by 150° horizontally. The lamp head shall have a heat dissipating curved front lens. The curve of the lens shall have a radius of 5.16 inches to optimize light emission.

ELECTRICAL SYSTEM INSTALLATION

The line voltage electrical system shall comply with the applicable NFPA standards and shall comply with applicable sections of the National Electric Code #70 Standards.

Line voltage carrying equipment down stream of the power source shall be "listed" where available and installed in accordance with manufacturer's instructions. The electrical equipment installed shall be suitable for intended use and type locations (wet, dry, or underbody and chassis).

The grounding and bonding shall comply to applicable sections of NFPA standards. The chassis frame rail, body sheet metal, and cab sheet metal shall be properly bonded per NFPA schematic. The bonding copper conductor shall be rated at 115% of current rating of power source.

Over Current Protection Panel

Manually resettable overcurrent devices shall be installed to protect the line voltage electrical system components. A main overcurrent protection device shall be provided that is either incorporated in the power source or is connected to the power source by a power supply assembly.

Overcurrent protection devices shall be provided for each individual circuit and shall be sized at not less than 15 amps in accordance with NEC. Each overcurrent protection device shall be marked to identify the function of the circuit it protects.

The panel shall be located in a plane facing the operator so that all circuit breakers are readily visible under normal operating conditions.

INTERIOR COMPARTMENT FINISH

The apparatus side compartment interiors are to be natural finished with a brushed or DA design.

UNDERCOATING

If fabricated with aluminum, the entire underside of the single axle apparatus body is to be cleaned and properly prepared for application of a sprayed on automotive type undercoating for added corrosion resistance. Undercoating is to be a solvent based, rubberized coating, black in color.

SIMULATED GOLD LEAF LETTERING

The lettering shall be applied in simulated gold leaf material, shaded in black and encapsulated in clear Mylar.

A quantity of sixty (60), four (4) inch letters are to be placed on the cab and on the body as directed by fire department.

CAB AND BODY STRIPE

A straight Scotchlite reflective stripe, 10" minimum in width, shall be applied horizontally around the cab and body in compliance with applicable NFPA 1901 standards.

CHEVRON STRIPING

The entire rear portion of the body shall have a 3M reflective chevron style striping, applied at a 45-degree upward angle pointing towards the center upper portion of the rear panel. In addition, the entire rear door shall have a chevron stripe.

Stripe colors are to be red and yellow.

EXTENSION LADDER

One (1) 35 foot three (3) section aluminum extension ladder shall be provided on the apparatus. The ladder shall meet or exceed all the latest NFPA standards.

ROOF LADDER

One (1) 14 foot aluminum roof ladder with folding steel roof hooks on one end and steel spikes on the other end shall be provided on the apparatus. The ladder shall meet or exceed all latest NFPA Standards.

ROOF LADDER

One (1) 10 foot folding aluminum attic ladder shall be provided. The ladder shall meet or exceed all the latest NFPA Standards.

SUCTION HOSE

Two (2) 6.0" x 10 foot lengths of flexible suction hose shall be supplied. The suction hose shall have light weight couplings provided.

HOSE COUPLINGS

Light weight aluminum couplings shall be provided on the suction hose. A long handle female swivel shall be provided on one end and a rocker lug male shall be provided for the other end.

STRAINER

One (1) barrel strainer shall be provided. The strainer shall be constructed from aluminum with chrome finish and include a tie off loop on the end plate. The strainer shall be provided with a 6.0" NST female rocker lug coupling.

INTERCOM

The vehicle shall be equipped with a Firecom intercom master station. The system comes standard with connections for up to six (6) positions. Additional positions can be added through daisy chaining.

This system shall operate with three (3) mobile radios. Connection of this system to the mobile radios shall be included by a interface cable for each radio. The radio installation is to be provided by the fire department.

Two (2) UH-10 Under-The-Helmet-Headset shall be provided with the intercom system. The red PTT button activates radio transmit. The mic is always live for intercom communication. Appropriate for driver or officer positions.

Four (4) UH-20 Under-The-Helmet-Headset shall be provided with the system. The black PTT button activates Mic for intercom communication only. Appropriate for crew seat positions

Six (6) HM-10 plug-in module for with any single-plug headset at interior positions in the apparatus shall be provided.

One (1) PP-20 water resistant plug-in module for use with any single-plug headset at exterior positions shall be provided. Snap-tight spring-hinged lid protects against moisture. Appropriate for pump panel position.