



ROANOKE COUNTY

Purchasing Division

5204 Bernard Drive, Suite 300F, P.O. Box 29800
Roanoke, Virginia 24018-0798
TEL: (540) 772-2061 FAX: (540) 772-2074

Kate Hoyt
Buyer

P.O. Box 29800
5204 Bernard Drive SW, Suite 300F
Roanoke, VA 24018
Phone: (540) 283-8149
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February 10, 2020

REQUEST FOR PROPOSALS #2020-051

Commercial Tanker
for
Roanoke County Fire & Rescue Department

Sealed Proposals Due:

March 9, 2020
2:00 PM
(Local Prevailing Time)
One (1) unbound original
Five (5) bound complete copies
One (1) electronic copy (USB preferred)

RFP #2020-051 COMMERCIAL TANKER

GENERAL INFORMATION

Roanoke County is seeking proposals from qualified vendors to provide a 2000 gallon commercial Freightliner M2 cab tanker with a 1000 gpm pump, as specified herein.

One unbound original, five (5) bound complete copies and one electronic copy (USB preferred) of the proposals, in a sealed envelope/package, will be received at and until **March 9, 2020, at 2:00 PM (local prevailing time)**, in the Roanoke County Purchasing Division at 5204 Bernard Drive, Suite 300F, Roanoke, Virginia 24018. NO faxed proposals will be accepted. It is the responsibility of the Offeror to ensure that its proposal is received in the Purchasing Division by the above date and time. Any proposal received after the above time and/or date will be returned to the Offeror unopened. Your response must be submitted in a sealed envelope/package, clearly marked "**RFP #2020-051 COMMERCIAL TANKER**" on the outside of the envelope/package. The Offeror assumes responsibility for having its proposal delivered on time at the place specified. An agent of the Offeror authorized to make financial and delivery commitments must sign the proposal. As this is a formal, sealed Request for Proposal no information regarding the contents of the proposal or the identity of the Offerors will be discussed until after the negotiation process.

Roanoke County shall provide the mechanism for the evaluation of all information received. Roanoke County reserves the right to make the final determination of responsible Offerors and to waive informalities and/or irregularities and to accept or reject any or all offers. Proposals shall be as thorough and detailed as possible so that the County may properly evaluate the capabilities of the Offeror to provide the required services. It is not the intent of the specifications to be proprietary, or to exclude any individual, business or firm.

RFP QUESTIONS

Any inquiries regarding submittal of proposal or any questions concerning specifications shall be in writing and sent via mail, fax or email to:

Kate Hoyt, Buyer
5204 Bernard Drive SW, Suite 300F
Roanoke, VA 24018

Phone: (540) 283-8149
khoyt@roanokecountyva.gov

Written responses, including any questions will be provided on our Purchasing Website in the form of an Addendum. It is the responsibility of the Offeror to periodically check our website for any addendum or sign up for County Email Notification. Questions received within five (5) days of the proposal closing date will be attempted to be answered, but will not be reason to delay the closing time of the proposals.

NO CONTACT POLICY

After the date and time of issuance of this Request for Proposals by the County, any contact initiated by any Offeror with any County representative, other than the purchasing representative listed herein, concerning this Request for Proposals is prohibited. Any such unauthorized contact may cause disqualification of the Offeror from this procurement transaction.

SCOPE OF WORK/ SPECIFICATIONS

The County of Roanoke is soliciting proposals from qualified firms for a 2000 gallon commercial cab tanker with 1000 a gpm pump, equipped per the specifications herein. A Specifications List is included beginning on page 17 of this RFP document. Successful offerors must complete the Specification Form by confirming compliance with each specification listed.

REFERENCES

All Offerors shall include a list of five references, from local governments and similar projects only, who could attest to the firm's knowledge, quality of work, timeliness, diligence, flexibility, and overall expertise. Include names, contact persons, and phone numbers of all references on the attached Reference Form.

References may or may not be reviewed or contacted at the discretion of the County. Typically, only references of the top ranked short listed Offeror or Offerors are contacted. The County reserves the right to contact references other than, and/or in addition to, those furnished by an Offeror.

EVALUATION CRITERIA

Roanoke County shall provide the mechanism for the evaluation of all information received, the final determination of responsible Offerors, and reserves the right to waive informalities and to accept or reject any or all proposals.

The criteria below will be utilized in the evaluation of qualifications for development of the shortlist of those Offerors to be considered for interviews/demonstrations and/or potential negotiations. Offerors are encouraged to address each evaluation criteria in the order listed and to be specific in presenting their qualifications.

- A. Overall quality of proposal submitted
- B. Overall qualifications and experience of the firm and any subcontractors, including experience in providing these services;
- C. Capability and experience of the project staff including experience with similar work and as evidenced by submission of resumes of personnel to be assigned to this work;
- D. Work plan, schedule and methodology;
- E. Past record and performance of the firm with respect to schedule compliance, cost control and quality of work; and
- F. Proposed cost of services.

BASIS FOR AWARD

Information and/or factors gathered during interviews, negotiations and any reference checks, in addition to the evaluation criteria stated in the RFP, and any other information or factors deemed relevant by the County, shall be utilized in the final award. Respondents are encouraged to submit proposals that the respondent feels best meets the needs of Roanoke County. The County will make the final determination of the proposal that best meets the needs of Roanoke County.

COOPERATIVE PROCUREMENT

The procurement of goods and/or services provided for in this Request for Proposals is being conducted pursuant to Virginia Code, Section 2.2-4304.

Therefore, the Offeror or Bidder is advised, and by submitting a response to this procurement, such Offeror or Bidder agrees that any resulting contract from this procurement may in addition to the County of Roanoke, may also be extended to other public agencies or bodies in the Commonwealth of Virginia to permit those public agencies or bodies to purchase such goods and/or services at contract prices, in accordance with the terms, conditions, and specifications of this procurement. The successful Offeror or Bidder shall deal directly with each public agency or body seeking to obtain any goods and/or services pursuant to any contract that may result from this procurement and in accordance with Virginia Code, Section 2.2-4304.

The County of Roanoke shall not be responsible or liable for any costs, expenses, or any other matters of any type to either the successful Offeror or Bidder or the public agency or body seeking to obtain any goods and/or services pursuant to this cooperative procurement provision.

GENERAL TERMS, CONDITIONS, AND INSTRUCTIONS-RFP (04/12/2012)

READ CAREFULLY - Proposals must be submitted in accordance with instructions given in this document. All information requested must be submitted. Failure to do so may result in the proposal being considered non-responsive and, therefore, rejected.

Wherever the term Roanoke County, County or Roanoke County Board of Supervisors is used it is understood to include the Roanoke County School Board, in addition, any contract awarded from this solicitation may be used by Roanoke County Public Schools and any other public entity for which the County of Roanoke acts as a fiscal or purchasing agent.

SUBMISSION AND RECEIPT OF PROPOSALS

- (a) To be considered, all proposals must be delivered in a sealed envelope, clearly marked with the words "Proposal Documents", proposal number and the title of the Request for Proposal and received in the Roanoke County Finance Department/Purchasing Division no later than the specified date and time for the Request for Proposal opening. Failure to timely submit such proposal shall disqualify the Offer and such proposal will be returned to the Offeror unopened. **NO FAXED PROPOSALS WILL BE ACCEPTED.**
- (b) Unless otherwise specified, Offerors must use the Request for Proposal price form furnished by the County. Failure to do so shall be grounds for rejection of the proposal.
- (c) Proposals having any erasures or corrections must be initialed in ink by the Offeror. An authorized officer of the company must sign proposals in ink. Such authorization shall be a part of the proposal document. All quotations must either be typewritten or printed in ink.
- (d) The original proposal response must not be permanently bound as to allow for document scanning for internal recordkeeping and one (1) electronic copy on CD/DVD is preferred.

IMPORTANT NOTICE EFFECTIVE 3/14/2011 - ADDENDUMS, BIDS, RFPs, TABULATIONS AND NOTICES OF AWARD:

Vendors may visit <http://roanokecountyva.gov/list.aspx> to sign up to receive emails or text message notices about bids, proposals, addendums, bid tabulation and awards. Vendors can sign up to receive notification in selected commodity/service categories. It is the vendor's responsibility to keep information current in the system in order to receive the notifications. The sign up only requires an email address and/or a cell phone number for receiving text messages (if your phone is capable) and your choice of categories.

Although 'Notify Me' will be the only way to receive automatic notification, all BIDS/RFP Information will continue to be posted on our website, , and can be picked up at the Purchasing Division, 5204 Bernard Drive, Suite 300F, Roanoke, VA 24018. Phone # (540) 772-2061.

Questions should be directed to:

Kate Hoyt, Buyer
5204 Bernard Drive SW, Suite 300F
Roanoke, VA 24018

Phone: (540) 283-8149
khoyt@roanokecountyva.gov

ACCEPTANCE OR REJECTION OF PROPOSALS

The County of Roanoke reserves the right to accept or reject any or all offers. The County also reserves the right to award the contract for any such materials, goods or services the County deems will best serve its interests. It further reserves the right to award the contract on a split order basis, lump sum or individual basis, or such combinations as shall best serve the interest of the County. Roanoke County reserves the right to make a site visit to the facility prior to proposal award.

PROPOSAL GUARANTY

The Offeror must guarantee not to withdraw a proposal during the period of ninety (90) days following the due date or until a contract is signed; that if such proposal is accepted the Offer will accept and perform under the terms of this RFP, the proposal and any subsequent negotiation and resulting contract.

Modification or withdrawal of a proposal will be executed as outlined in the Roanoke County Procurement Code.

Roanoke County encourages free and open competition. Whenever possible, specifications, proposal invitations, and conditions are designed to accomplish this objective, consistent with the necessity to satisfy Roanoke County's needs and the accomplishment of a sound economical operation. The Offeror's signature on this proposal guarantees that the price offered has been established without collusion with other eligible Offerors and without effort to preclude Roanoke County from obtaining the lowest possible competitive price. The award (s) will be made to the responsible Offeror(s) whose proposal is determined to be most advantageous to Roanoke County based on the evaluation factors set forth in this Request for Proposal.

Costs of developing and delivering responses to the Request for Proposals are entirely the responsibility of the Offeror.

All materials submitted in response to the RFP become the property of Roanoke County upon delivery to the Roanoke County Purchasing Office and are subject to public inspection in accordance with the Virginia Freedom of Information Act.

SELECTION PROCESS/AWARD OF CONTRACT

As this is a Request for Proposal, no information regarding the identity of neither the vendors nor the contents will be released until after the negotiation process.

Proposals may be ranked without interviews; hence, firms are encouraged to submit their initial proposals as comprehensively as possible.

The selection process will be in accordance with **Section 2.2-4301** of the Code of Virginia:

3(a). Procurement of Professional Services. *The public body shall engage in individual discussions with two or more Offerors deemed fully qualified, responsible and suitable on the basis of initial responses and with emphasis on professional competence, to provide the required services. Repetitive informal interviews shall be permissible. The Offerors shall be encouraged to elaborate on their qualifications and performance data or staff expertise pertinent to the proposed project, as well as alternative concepts. The Request for Proposal shall not, however, request that Offerors furnish estimates of man-hours or cost for services. At the discussion stage, the public body may discuss nonbinding estimates of total project costs, including, but not limited to, life-cycle costing, and where appropriate, nonbinding estimates of price for services. Proprietary information from competing Offerors shall not be disclosed to the public or to competitors.*

At the conclusion of discussion, outlined in this subdivision, on the basis of evaluation factors published in the Request for Proposal and all information developed in the selection process to this point, the public body shall select in the order of preference two or more Offerors whose professional qualifications and proposed services are deemed most meritorious. Negotiations shall then be conducted, beginning with the Offeror ranked first. If a contract satisfactory and advantageous to the public body can be negotiated at a price considered fair and reasonable, the award shall be made to that Offeror. Otherwise, negotiations with the Offeror ranked first shall be formally terminated and negotiations conducted with the Offeror ranked second, and so on until such a contract can be negotiated at a fair and reasonable price. Notwithstanding the foregoing, if the terms and conditions for multiple awards are included in the Request for Proposal, a public body may award contracts to more than one Offeror.

Should the public body determine in writing and in its sole discretion that only one Offeror is fully qualified, or that one Offeror is clearly more highly qualified and suitable than the others under consideration, a contract may be negotiated and awarded to that Offeror.

3(b). Procurement of other than professional services. *Selection shall be made of two or more Offerors deemed to be fully qualified and best suited among those submitting proposals, on the basis of the factors involved in the Request for Proposal, including price if so stated in the Request for Proposal. Negotiations shall then be conducted with each of the Offerors so selected. Price shall be considered, but need not be the sole determining factor. After negotiations have been conducted with each Offeror so selected, the public body shall select the Offeror which, in its opinion, has made the best proposal, and shall award the contract to*

that Offeror. When the terms and conditions of multiple awards are so provided in the Request for Proposal, awards may be made to more than one Offeror.

Should the public body determine in writing and in its sole discretion that only one Offeror is fully qualified, or that one Offeror is clearly more highly qualified than the others under consideration, a contract may be negotiated and awarded to that Offeror.

INVOICES

The contractor must send all invoices directly to the payment address shown on the purchase order/contract and must submit invoices for items ordered, delivered and accepted by Roanoke County. All invoices must show the purchase order/contract number. All contractors need to be properly registered as a payment vendor for the County. An on-line **Vendor Payment Registration** is found on the Purchasing website. All vendors previously registered are still in the system as a payment vendor. This system will no longer be used for notification of IFB/RFP's.

PERFORMANCE BOND

At the time of or prior to the execution of the contract, the County reserves the right to require the successful Offeror to furnish a performance and/or labor and material payment bond with corporate surety, satisfactory to the County of Roanoke, in the amount of the contract price.

QUALITY

All materials used for the manufacture or construction of any supplies, materials or equipment covered by this contract shall be of the best quality available.

ACCEPTANCE OF MATERIAL

Until such time as all the conditions in the contract are fulfilled, the County reserves the right to refuse and return material, at the seller's expense.

WARRANTY/RETURNS

Clearly specify your warranty of product and handling of returns, including turnaround time on faulty equipment. Warranties and other technical data are to be included.

DELIVERY

Time is of the essence for delivery of any items, products or service procured as a result of this contract. If delivery is not made at the time specified on the Request for Proposal or subsequent negotiations, the County reserves the right to call in any and all bonds or other security given for performance, to cancel the order, or any part thereof, without obligation, to declare the seller in default, and to disqualify the seller from bidding on future County contracts.

DEFAULT

In case of failure to provide goods/services as specified herein, Roanoke County, after due written notice, may procure goods/services from other sources and hold the contractor responsible for any and all excess cost occasioned thereby.

COPYRIGHT OR PATENT RIGHTS

The Offeror warrants that there have been no violations of copyrights or patent rights in the manufacture, production or sale of the goods shipped or ordered as a result of this proposal. The Offeror agrees that the County of Roanoke shall be indemnified and held harmless from any and all liability or expense occasioned by any such violations.

TAX EXEMPTION

The County of Roanoke is exempt from any taxes imposed by State and/or Federal Government. Upon notification, the County will furnish a certificate of tax exemption.

CERTIFICATION AND ABILITY

The County of Roanoke reserves the right to request from the Offeror, a separate manufacturer's certification of all statements made in the proposal. The County may request any or all s to furnish proof of experience, ability and financial standing.

COMPLIANCE WITH LAWS

The Offeror is responsible for compliance with all Local, State and/or Federal laws and regulations. The County of Roanoke shall be held harmless from any liability.

AUTHORITY TO TRANSACT BUSINESS IN VIRGINIA

A Contractor organized as a stock or non stock corporation, limited liability company, business trust, or limited partnership or registered as a registered limited liability partnership shall be authorized to transact business in the Commonwealth as a domestic or foreign business entity if so required by Title 13.1 or Title 50 of the Code of Virginia or as otherwise required by law. Any business entity described herein that enters into a Contract with the County pursuant to the Virginia Public Procurement Act 2.2-4300 et seq. shall not allow its existence to lapse or its certificate of authority or registration to transact business in the Commonwealth, if so required under Title 13.1 or Title 50 of the Code of Virginia, to be revoked or cancelled at any time during the term of the Contract. The County may void any Contract with a business entity if the business entity fails to remain in compliance with the provisions of this section. All corporations, LLC's and LLP's shall be registered with the State Corporation Commission. To determine whether your firm should register, please contact the SCC.

By my signature on this solicitation, I certify compliance with federal, state, and local laws and regulations applicable to the performance of the services described herein.

RULING LAW

This request for proposals and any contract executed pursuant hereto of which this request for

proposal shall be an internal part shall be governed, controlled and interpreted in accordance with the law of the Commonwealth of Virginia without reference to its conflict of law principles. Each party to such contract shall there by submit to the exclusive jurisdiction of the Circuit Court of the County of Roanoke or, in the event that jurisdiction is authorized, to the United States District Court for the Western District of Virginia, sitting at Roanoke, Virginia.

NONDISCRIMINATION PROVISIONS

During the performance of this contract, the contractor will not discriminate against any employee or applicant for employment because of age, race, religion, color, sex or national origin, except where religion, sex or nation origin is a bona fide occupational qualification reasonably necessary to the normal operation of the contractor. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause. The contractor, in all solicitations or advertisements for employees placed by or on behalf of the contractor, will state that such contractor is an equal opportunity employer.

INSURANCE

The CONTRACTOR shall purchase and maintain such insurance as will protect him from claims set forth below which may arise out of or result from the CONTRACTOR'S execution of the WORK, whether such execution be by himself or by any SUBCONTRACTOR or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:

Claims under workmen's compensation, disability benefit and other similar employee benefit acts; and

Claims for damages because of bodily injury, occupational sickness or disease, or death of his employees; and

Claims for damages because of bodily injury, sickness liability coverage which are sustained (1) by any person as a result of an offense directly or indirectly related to the employment of such person by the CONTRACTOR, or (2) by any other person; and

Claims for damages because of bodily injury, sickness, or disease, or death of any person other than his employees; and

Claims for damages because of injury in or destruction of tangible property, including loss of use resulting there from.

Certificates of insurance acceptable to the OWNER shall be filed with the OWNER prior to coverage's afforded under the policies will not be canceled unless at least fifteen (15) days prior WRITTEN NOTICE has been given to the OWNER.

The CONTRACTOR shall procure and maintain, at his own expense, during the CONTRACT TIME, liability insurance as hereinafter specified:

CONTRACTOR'S General Public Liability and Property Damage Insurance including vehicle coverage issued to the CONTRACTOR and protecting him from all claims for personal injury, including death, and all claims for destruction of or damage to property, arising out of or in connection with any operations under the CONTRACT DOCUMENTS, whether such operations be by himself or by any SUBCONTRACTOR under him, or anyone directly or indirectly employed by the CONTRACTOR or by a SUBCONTRACTOR under him. Insurance shall be written with a limit of liability of not less than \$1,000,000 for all damages arising out of bodily injury, including death, at any time resulting there from, sustained by any one person in any one accident; and a limit of liability of not less than \$1,000,000 aggregate for any such damages sustained by two or more persons in any one accident. Insurance shall be written with a limit of liability of not less than \$1,000,000 for all property damage sustained by any one person in any one accident; and a limit of liability of not less than \$1,000,000 aggregate for any such damage sustained by two or more persons in any one accident.

The CONTRACTOR shall procure and maintain, at his own expense, during the CONTRACT TIME, in accordance with the provisions of the laws of the state in which the WORK is performed. Workmen's Compensation Insurance, including occupational disease provisions, for all of his employees at the site of the PROJECT and in case any WORK is sublet, the CONTRACTOR shall require each SUBCONTRACTOR similarly to provide Workmen's Compensation Insurance, including occupational disease provisions for all of the latter's employees unless such employees are covered by the protection afforded by the CONTRACTOR. In case any class of employees engaged in hazardous WORK under this CONTRACT at the site of the PROJECT is not protected under Workmen's Compensation statute, the CONTRACTOR shall provide, and shall cause each SUBCONTRACTOR to provide, adequate and suitable insurance for the protection of his employees not otherwise protected.

SPECIAL INSTRUCTIONS:

ANTITRUST

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

AVAILABILITY OF FUNDS

It is understood and agreed between the parties herein that Roanoke County shall be bound hereunder only to the extent of the funds available or which may hereafter become available for the purpose of this contract.

ASSIGNMENT OF CONTRACT

A contract shall not be assignable by the in whole or in part without the written consent of Roanoke County.

CONTRACT

Any contract resulting from this proposal shall consist of the following documents: the General Terms and Conditions and the Specifications, both of which are contained in the Request for Proposal, together with the Offeror's response, which consists of this document, the Price Schedule and other related documents attached hereto or submitted with this Request for Proposal.

MODIFICATION OF CONTRACT

This RFP and any subsequent contract constitute the entire agreement between the Offeror and Roanoke County. No alteration, amendment, or modification in the provisions of the contract shall be effective unless it is put in writing, signed by all parties and attached.

CANCELLATION OF CONTRACT

Roanoke County reserves the right to cancel and terminate any resulting contract, with a 30-day written notice to the contractor. Any contract cancellation notice will not relieve the contractor of the obligation to deliver and/or perform on all services prior to the effective date of cancellation. Cancellation of the contract would become effective the thirty-first day after notification. Data for cancellation of the contract will be gathered by Roanoke County. The opinion of Roanoke County as to lack of performance will be final and without appeal.

IMMIGRATION REFORM AND CONTROL ACT OF 1986

By signing this proposal, the Offeror certifies that the firm does not and will not during the performance of this contract employ illegal alien workers or otherwise violate the Federal Immigration Reform and Control Act of 1986.

KICKBACKS

I certify and warrant that by my signature on this solicitation, neither I nor the Offeror for whom I am authorized to act has offered or received any kickback from any other Offeror, supplier, manufacturer, or subcontractor in connection with proposal on this contract, subcontractor in order, in the form of any payment, loan, subscription, advance, deposit of money, services or anything, present or promised, unless consideration of substantially equal or greater value is exchanged. Further, no person shall demand or receive any payment, loan, subscription, advance, and deposit of money, service, or anything of more than nominal value, present or promised, unless consideration of substantially equal or greater value is exchanged.

DEBARMENT

By my signature on this solicitation, I certify that this person/firm/corporation is not currently barred from bidding on contracts by any agency of the Commonwealth of Virginia or the federal government of the United States of America, nor is this person/firm/corporation a part of any firm/corporation that is currently barred from bidding on contracts by any agency of the Commonwealth of Virginia or the federal government of the United States of America. I have attached an explanation of the previous debarment(s) and copies of notice(s) of reinstatement(s).

INDEMNIFICATION

To the fullest extent permitted by law, the Vendor shall indemnify and hold harmless the County of Roanoke and their agents and employees from and against all claims, damages, losses and expenses, including but not limited to, attorneys' fees, arising out of or resulting from the performance of the Work, provided that any such claim, damage, loss or expense (1) is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself) including the loss of use resulting there from, and (2) is caused in whole or in part by any negligent act or omission of the Vendor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity which would otherwise exist as to any party or person described in this paragraph.

The County cannot legally agree to any clause indemnifying the contractor from any damages arising out of the contract or holding the contractor harmless. The submission of a bid or proposal means that the contractor agrees not to request such language in the resulting contract.

DRUG-FREE WORKPLACE

During the performance of this contract, the contractor agrees to (i) provide a drug-free workplace for the contractor's employees; (ii) post in conspicuous places, available to employees and applicants for employment, a statement notifying employees that the unlawful manufacture, sale distribution, dispensation, possession, or use of a controlled substance or marijuana is prohibited in violation of such prohibition; (iii) state in all solicitations or advertisements for employees placed by or on behalf of the contractor that the contractor maintains a drug-free workplace; and (iv) include the provisions of the foregoing clauses in every subcontract or purchase order of over \$10,000, so that the provisions will be binding upon each subcontractor or vendor.

For the purposes of this section, "drug-free workplace" means a site for the performance of work done in connection with a specific contract awarded to a contractor in accordance with this chapter, the employees of whom are prohibited from engaging in the unlawful manufacture, sale, distribution, dispensation, possession or use of any controlled substance or marijuana during the performance of the contract.

DATA ON CONVICTIONS FOR CERTAIN CRIMES AND CHILD ABUSE AND NEGLECT

The Proposer certifies that none of the persons who will provide services requiring direct contact with students on school property during school hours or during school-sponsored activities has been convicted of any of the following felony or misdemeanor offenses: felony sex or violence offenses, other felony offenses or misdemeanor sex offenses within the past ten years.

The Proposer further understands and acknowledges (1) that if he makes a materially false statement regarding any of the above offenses, he will be guilty of a Class 1 misdemeanor and may forfeit profits derived from the contract. Further, the Proposer understands and acknowledges that before any person is permitted to provide such services subsequent to this

certification, he must complete a new certification regarding such person in a form satisfactory to the School Board. The required certification form is attached hereto.

PROPRIETARY INFORMATION

Ownership of all data, materials, and documentation originated and prepared for the County of Roanoke pursuant to the REQUEST FOR PROPOSAL shall belong exclusively to the County and be subject to public inspection in accordance with the Virginia Freedom of Information Act. Trade secrets or proprietary information submitted by an Offeror shall not be subject to public disclosure under the Virginia Freedom of Information Act; however, the Offeror must invoke the protections of Section 2.2-4342F of the Code of Virginia, in writing, either before or at the time the data or other material is submitted.

The Offeror must specifically identify the data or materials to be protected and state the reasons why protection is necessary on the "Notice of Proprietary Information Form" below. In addition, the proprietary or trade secret material submitted must be identified by some distinct method such as highlighting or underlining in the Proposal and must indicate only the specific words, figures, or paragraphs that constitute trade secret or proprietary information.

The classification of an entire proposal document, line item prices, and/or total proposal prices as proprietary or trade secrets is not acceptable and may result in rejection of the proposal.

NOTICE OF PROPRIETARY INFORMATION FORM
RFP #2020-051

Confidentiality References Protection in Accordance with the Code of Virginia, Section 2.2-4342

Section Title	Page #	Reason(s) for Withholding from Disclosure

INSTRUCTIONS: Identify the data or other materials to be protected and state the reasons by using the codes listed below. Indicate the specific words, figures, or paragraphs that constitute trade secrets or proprietary materials. The classification of an entire bid or proposal document, line item prices, and/or total bid or proposal prices as proprietary or trade secret is not acceptable and will result in rejection of the bid or proposal.

- A) This page contains information relating to "trade secrets", and "proprietary information" including processes. Operations, style of work, or apparatus. Identify confidential statistical data. Amount or source of any income...of any person (or) partnership. See Virginia Public Procurement Act. Section 2.2-4342. Unauthorized disclosure of such information would violate the Trade Secrets Act 18 U.S.C. 1905.
- B) This page contains proprietary information including confidential, commercial or financial information, which was provided to the Government on a voluntary basis and is of the type that would not customarily release to the public. See Virginia Public Procurement Act, Section 2.2-4342; 5 U.S.C. 552 (b) (4); 12 C.F.R. 309.5(c) (4).
- C) This page contains proprietary information including confidential, commercial or financial information. The disclosure of such information would cause substantial harm to competitive position and impair the Government's ability to obtain necessary information from contractors in the future. 5 U.S.C. See Virginia Public Procurement Act. Section 2.2-4342; 552 (b) (4); 12 C.F.R. 309.5(c) (4).4342; 552 (b) (4); 12 C.F.R. 309.5 (c) (4).

SIGNATURE SHEET
RFP #2020-051 COMMERCIAL TANKER

My signature certifies that the proposal as submitted complies with all Terms and Conditions as set forth in the RFP.

My signature also certifies that the accompanying proposal is not the result of, or affected by, any unlawful act of collusion with another person or company engaged in the same line of business or commerce, or any act of fraud punishable under Title 18.2, Chapter 12, Article 1.1 of the Code of Virginia, 1950 as amended, Furthermore, I understand that fraud and unlawful collusion are crimes under the Virginia Governmental Frauds Act, The Virginia Government Bid Rigging Act, and Virginia Antitrust Act and Federal Law, and can result in fines, prison sentences, and civil damage awards.

My signature also certifies that this firm has no business or personal relationships with any other companies or persons that could be considered as a conflict of interest or potential conflict of interest to the County Of Roanoke, and that there are no principals, officers, agents, employees, or representatives of this firm that have any business or personal relationships with any other companies or persons that could be considered as a conflict of interest or a potential conflict of interest to the County Of Roanoke, pertaining to any and all work or services to be performed as a result of this request and any resulting contract with the County Of Roanoke.

I hereby certify that I am authorized to sign as a Representative for the Firm:

COMPANY NAME _____

ADDRESS _____ PHONE # _____

_____ FAX # _____

_____ EMAIL _____

FEIN _____ VA BUSINESS LICENSE NO. _____

STATE CONTRACTOR'S NUMBER (IF APPLICABLE) _____

VIRGINIA SCC # OR STATEMENT DESCRIBING WHY FIRM IS NOT REQUIRED TO BE SO
AUTHORIZED PER VA CODE §2.2-4311.2 _____

SIGNATURE _____ DATE _____

NAME _____ TITLE _____

To receive consideration for award, this signature sheet must be returned to the Purchasing Division, as it shall be a part of your response.

REFERENCE FORM
RFP #2020-051 COMMERCIAL TANKER

Name of Entity _____

Contact _____ Title _____

Telephone _____ Length of Business Relationship _____

Email _____

Name of Entity _____

Contact _____ Title _____

Telephone _____ Length of Business Relationship _____

Email _____

Name of Entity _____

Contact _____ Title _____

Telephone _____ Length of Business Relationship _____

Email _____

Name of Entity _____

Contact _____ Title _____

Telephone _____ Length of Business Relationship _____

Email _____

Name of Entity _____

Contact _____ Title _____

Telephone _____ Length of Business Relationship _____

Email _____

RFP# 2020-052
SPECIFICATION FORM
2000 Gallon Commercial Cab Tanker with 1000 GPM Pump

Manufacturer Complies:

	YES	NO
1. GENERAL		
1.1 These specifications are intended to provide the County of Roanoke with a 2000 gallon commercial Freightliner M2 112 cab tanker with a 1000 gpm pump as described herein and equipped as specified.		
1.2 The bid forms provided herein shall be completed and returned with the appropriate "YES" or "NO" box marked by each paragraph in the <i>Manufacturer Complies</i> column.		
1.3 Each manufacturer shall offer a point of reference as to where each specification item can be found in their proposal, i.e. Page #X		
1.4 Exceptions that a manufacturer intends to make shall be set forth at time of the bidding in a separate letter listing any and all such exceptions. Any bid not accompanied by such letter of deviations will be construed as meeting in full the requirements set forth herein. Prospective suppliers who may wish to bid on components other than as specified in these specifications will ensure all components are equal to, or exceed specifications in all respects. Further, full and complete information/specifications on each "substituted" item must be provided with submitted bid, in order to be considered. A bid with exceptions not clearly explained will be determined non-responsive.		
1.5 The apparent silence of these specifications and any supplemental specifications, as to any detail or the omission from the specifications of detailed description concerning any point shall be regarded as meaning that only materials of highest quality and correct type, size and design are to be used. Likewise, all workmanship is to be of highest quality. All interpretations of these specifications shall be made on the basis of this statement.		
1.6 Delivery time is of the essence to the County of Roanoke Fire and Rescue Department and will be considered as part of the bid evaluation. Earliest possible delivery time must be provided.		
1.7 Permission to keep or store the apparatus in any building owned by the purchaser or its use by the Fire-Rescue Department during the delivery or acceptance period shall not constitute acceptance of same.		
1.8 Each manufacturer must also submit with their bid the weight distribution for the apparatus proposed. This weight is to be based upon actual in-service weights of similar apparatus.		
1.9 Manufacturer must have a significant number of similar apparatus currently in service. NO PROTO-TYPES. Provide list of number of contacts of like vehicles.		

		YES	NO
1.10	Unless otherwise provided in the invitation to bid, the number of a certain brand, make or manufacturer does not restrict manufacturers to the specific brand, make or manufacturer named; it conveys the general style, type, character and quality of the article desired, and any article which the County, in its sole discretion, determines to be the equal of that specified, considering quality, workmanship, economy of operation and suitability for purpose intended, shall be accepted.		
1.11	Unit must have a Federal or VA state inspection sticker prior to acceptance.		
1.12	Individuals with disabilities, who require assistance or special arrangements in order to participate in the bidding, please contact me. We require that you provide at least 48 hours' notice so that reasonable efforts may be made to provide the proper arrangements. You may be requested to specify the nature of any accommodation or assistance, which may be required for your participation.		
1.13	The design of the apparatus should embody the latest approved automotive engineering practices. The workmanship should be of the highest quality in its respective field. All steel welding should follow American welding Society D1.1-2004 recommendations for structural steel welding. All aluminum welding should follow American welding Society and ANSI D1.2-2003 requirements for structural welding of aluminum. All sheet metal welding should follow American Welding Society B2.1-2000 requirements for structural welding of sheet metal. Flux core arc welding should use alloy rods, type 7000, American welding Society standards A5.20-E70T1 or equivalent. The manufacturer should also be certified to operate a Quality Management System under the requirements of ISO 9001. These standards sponsored by the International organization for Standardization (ISO) specify the quality systems that shall be established by the manufacturer for design, manufacture, installation and service. A copy of the certificate of compliance shall be included with the bid.		
1.14	<p>A road test should be conducted with the apparatus fully loaded and a continuous run of ten (10) miles or more should be made under all driving conditions, during which time the apparatus should show no loss of power or overheating. The transmission drive shaft or shafts, and rear axle shall run quietly and be free from abnormal vibration or noise throughout the operating range of the apparatus. Vehicle should adhere to the following parameters:</p> <p>A) The apparatus, when fully equipped and loaded, should have not less than 25 percent nor more than 50 percent of the weight on the front axle, and not less than 50 percent nor more than 75 percent on the rear axle.</p> <p>B) The apparatus should be capable of accelerating to 35 mph from a standing start within 25 seconds on a level concrete highway without exceeding the maximum governed rpm of the engine.</p> <p>C) The service brakes should be capable of stopping a fully loaded vehicle in 35 feet at 20 mph on a level concrete highway. The air brake system shall conform to Federal Motor vehicle Safety Standards (FMVSS) 121.</p> <p>D) The apparatus, fully loaded, should be capable of obtaining a speed of 50 mph on a level concrete highway with the engine not exceeding the governed rpm (full load).</p>		

		YES	NO
1.15	<p>This unit shall comply with the NFPA standards effective January 1, 2016, except for fire department specifications that differ from NFPA specifications. These exceptions shall be set forth in the Statement of Exceptions.</p> <p>Certification of slip resistance of all stepping, standing and walking surfaces should be supplied with delivery of the apparatus.</p> <p>All horizontal surfaces designated as a standing or walking surface that are greater than 48.00" above the ground must be defined by a 1.00" wide line along its outside perimeter. Perimeter markings and designated access paths to destination points shall be identified on the customer approval print and are shown as approximate. Actual location(s) shall be determined based on materials used and actual conditions at final build. Access paths may pass through hose storage areas and opening or removal of covers or restraints may be required. A plate that is highly visible to the driver while seated should be provided. This plate should show the overall height, length, and gross vehicle weight rating.</p> <p>An official of the company should designate, in writing, who is qualified to witness and certify test results.</p>		
1.16	<p>Apparatus proposed by the bidder shall meet the applicable requirements of the National Fire Protection Association (NFPA) as stated in current edition at time of contract execution. Fire department's specifications that differ from NFPA specifications shall be indicated in the proposal as "non-NFPA".</p>		
1.17	<p>To assure the vehicle is built to current NFPA standards, the apparatus, in its entirety, should be third-party, independent, audit-certified through Underwriters Laboratory (UL) that it is built and complies to all applicable standards in the current edition of NFPA 1901. The certification should include: all design, production, operational, and performance testing of not only the apparatus, but those components that are installed on the apparatus (no exception).</p> <p>A placard should be affixed in the driver's side area stating the third party agency, the date, the standard and the certificate number of the whole vehicle audit.</p>		
1.18	<p>The pump should be tested, approved and certified by Underwriter's Laboratory at the manufacturer's expense. The test results and the pump manufacturer's certification of hydrostatic test; the engine manufacturer's certified brake horsepower curve; and the manufacturer's record of pump construction details shall be forwarded to the Fire Department.</p>		
1.19	<p>Two (2) electrical wiring diagrams, prepared for the model of chassis and body, should be provided. The bidder should provide, at the time of bid and delivery, an itemized print out of the expected amp draw of the entire vehicle's electrical system.</p> <p>The manufacturer of the apparatus shall provide the following:</p> <ul style="list-style-type: none"> • Documentation of the electrical system performance tests. • A written load analysis, which shall include the following: <ul style="list-style-type: none"> ○ The nameplate rating of the alternator. ○ The alternator rating under the conditions specified per: <ul style="list-style-type: none"> ▪ Applicable NFPA 1901 or 1906 (Current Edition). ○ The minimum continuous load of each component that is specified per: <ul style="list-style-type: none"> ▪ Applicable NFPA 1901 or 1906 (Current Edition). ○ Additional loads that, when added to the minimum continuous load, determine the total connected load. ○ Each individual intermittent load. <p>All of the above listed items should be provided by the bidder per the applicable NFPA 1901 or 1906 (Current Edition).</p>		

	YES	NO
2. GUARANTEE AND DELIVERY		
2.1 Each new piece of apparatus should be provided with a minimum one (1) year basic apparatus material and workmanship limited warranty. The warranty should cover such portions of the apparatus built by the manufacturer as being free from defects in material and workmanship that would arise under normal use and service. A copy of the warranty certificate should be submitted with the bid package.		
2.2 A Detroit Diesel should have five (5) year limited engine warranty shall be provided. A copy of the warranty certificate shall be submitted with the bid package.		
2.4 The transmission should have a five (5) year/unlimited mileage warranty covering 100 percent parts and labor. The warranty is to be provided by Allison Transmission and not the apparatus builder. The transmission cooler shall carry a five (5) year parts and labor warranty (exclusive to the transmission cooler).		
2.5 The UPF or Pro Poly water tank should be provided with a lifetime material and workmanship limited warranty. A copy of the warranty certificate shall be submitted with the bid package.		
2.6 Each new piece of apparatus should be provided with a ten (10) year material and workmanship limited warranty on the apparatus body. The warranty should cover such portions of the apparatus built by the manufacturer as being free from defects in material and workmanship that would arise under normal use and service. A copy of the warranty certificate shall be submitted with the bid package.		
2.7 The ROM roll-up doors should have a limited warranty. A seven (7) year limited warranty should be provided on the ROM roll up doors. A copy of the warranty certificate shall be submitted with the bid package.		
2.8 The pump five (5) year limited warranty on parts and two (2) year limited warranty on labor should be provided for the pump. A copy of the warranty certificate shall be submitted with the bid package.		
2.9 The stainless steel plumbing components and ancillary brass fittings used in the construction of the water/foam plumbing system should be warranted for a period of ten (10) years or 100,000 miles . 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 delivery. A copy of the warranty certificate shall be submitted with the bid package.		
2.10 Each new piece of apparatus should be provided with a ten (10) year pro-rated paint and corrosion limited warranty on the apparatus body. The warranty should cover painted exterior surfaces of the body to be free from blistering, peeling, corrosion, or any other adhesion defect caused by defective manufacturing methods or paint material selection that would arise under normal use and service. A copy of the warranty certificate shall be submitted with the bid package.		
2.12 A full service center (paint, warranty work & body shop) within 100 miles of the Roanoke County Fire & Rescue. Mobile Service Vehicles and 24/7 Emergency Service should also be available from the successful bidder. Mileage to the service center shall be included in your proposal.		
2.13 Delivery is to be made by over-the-road drive-through by the manufacturer.		

		YES	NO
2.14	Training on the completed apparatus should be provided after delivery of the completed apparatus. Training should be provided by a factory trained technician (not sales representative). Training should be for three (3) consecutive days with training days to be determined by Roanoke Fire & Rescue.		
2.15	Complete detailed drawings, showing all four sides and top, shall be submitted to the Fire-Rescue Department for approval after award, but before any construction.		
2.16	Furnish upon delivery three (3) each: <ul style="list-style-type: none">• Operator's Manual for the pump;• Parts Manual for the complete unit;• Wiring Diagram for complete unit must be for this specific apparatus as built. Generic diagram NOT acceptable. On USB Flash Drive and CD		
2.17	A penalty of \$200.00 per calendar day will be deducted from the final payment for each day the delivery of the Tanker to the County of Roanoke exceeds the delivery stipulated in the resulting contract, unless prior written approval of late/delayed delivery is given by the County of Roanoke.		
3. COMMERCIAL CHASSIS			
3.1	The chassis shall be a Freightliner M2 - 112 with the following features: Vehicle Configuration: <ul style="list-style-type: none">• CONVENTIONAL CHASSIS• MOST CURRENT MODEL YEAR• SET BACK AXLE - TRUCK• STRAIGHT TRUCK PROVISION• LH PRIMARY STEERING LOCATION		
3.2	General Service: <ul style="list-style-type: none">• TRUCK CONFIGURATION• AA6-001 DOMICILED, USA 50 STATES (INCLUDING CALIFORNIA AND CARB OPT-IN STATES)• FIRE SERVICE• EMERGENCY VEHICLES BUSINESS SEGMENT• LIQUID BULK COMMODITY• TERRAIN/DUTY: 100% (ALL) OF THE TIME, IN TRANSIT, IS SPENT ON PAVED ROADS• MAXIMUM 8% EXPECTED GRADE• SMOOTH CONCRETE OR ASPHALT PAVEMENT - MOST SEVERE IN-TRANSIT (BETWEEN SITES) ROAD SURFACE• FREIGHTLINER LEVEL II WARRANTY		
3.3	Truck Service: <ul style="list-style-type: none">• FIRE TANK/PUMPER - MAIN DRIVELINE DRIVEN SPLIT-SHAFT PTO/PUMP• EXPECTED BODY/PAYLOAD CG HEIGHT ABOVE FRAME "XX" INCHES : 32.0 in		

	YES	NO
3.4 Engine:		
<ul style="list-style-type: none"> DETROIT DD13 12.8L 505 HP @ 1625 RPM, 1900 GOV RPM, 1850 LB/FT @ 975 RPM 		
3.5 Electronic Parameters:		
<ul style="list-style-type: none"> 60 MPH ROAD SPEED LIMIT N/C CRUISE CONTROL SPEED LIMIT SAME AS ROAD SPEED LIMIT PTO MODE ENGINE RPM LIMIT - 1100 RPM N/C PTO MODE BRAKE OVERRIDE – SERVICE BRAKE APPLIED PTO RPM WITH CRUISE SET SWITCH - 700 RPM PTO RPM WITH CRUISE RESUME SWITCH – 800 RPM PTO MODE CANCEL VEHICLE SPEED - 5 MPH PTO MODE RPM INCREMENT - 25 RPM PTO GOVERNOR RAMP RATE - 250 RPM PER SECOND ONE REMOTE PTO SPEED PTO SPEED 1 SETTING - 900 RPM SOFT CRUISE CONTROL ENABLED PTO MINIMUM RPM - 600 ENABLE AUTO ENGINE RPM ELEVATE FOR EXTENDED IDLE 		
3.6 Engine Equipment:		
<ul style="list-style-type: none"> 2016-2019 ONBOARD DIAGNOSTICS/2010 EPA/CARB/FINAL GHG17 CONFIGURATION 2008 CARB EMISSION CERTIFICATION – CLEAN IDLE (INCLUDES 6X4 INCH LABEL ON LOWER FORWARD CORNER OF DRIVER DOOR) STANDARD OIL PAN ENGINE MOUNTED OIL CHECK AND FILL ONE PIECE VALVE COVER SIDE OF HOOD AIR INTAKE WITH NFPA COMPLIANT EMBER SCREEN AND FIRE RETARDANT DONALDSON AIR CLEANER DR 12V 275 AMP 40-SI BRUSHLESS PAD ALTERNATOR WITH REMOTE BATTERY VOLTAGE SENSE (3) DTNA GENUINE, FLOODED STARTING, MIN 3000CCA, 555RC, THREADED STUD BATTERIES BATTERY BOX FRAME MOUNTED STD STANDARD BATTERY JUMPERS STD SINGLES BATTERY BOX FRAME MOUNTED LH SIDE BACK OF CAB WIRE GROUND RETURN FOR BATTERY CABLES WITH ADDITIONAL FRAME GROUND RETURN NON-POLISHED BATTERY BOX COVER NO CAB AUXILIARY POWER WIRING POSITIVE LOAD DISCONNECT WITH CAB MOUNTED CONTROL SWITCH MOUNTED OUTBOARD DRIVER SEAT 		

	YES	NO
3.7 Transmission <ul style="list-style-type: none"> • ALLISON 4000 EVS AUTOMATIC TRANSMISSION WITH PTO PROVISION • ALLISON VOCATIONAL PACKAGE 197 - AVAILABLE ON 4000 PRODUCT FAMILIES WITH VOCATIONAL MODEL EVS • ALLISON VOCATIONAL RATING FOR FIRE TRUCK/EMERGENCY VEHICLE APPLICATIONS AVAILABLE WITH ALL PRODUCT FAMILIES • PRIMARY MODE GEARS, LOWEST GEAR 1, START GEAR 1, HIGHEST GEAR 6, AVAILABLE FOR 4000 PRODUCT FAMILIES ONLY • SECONDARY MODE GEARS, LOWEST GEAR 1, START GEAR 1, HIGHEST GEAR 6, AVAILABLE FOR 4000 PRODUCT FAMILIES ONLY • PRIMARY SHIFT SCHEDULE RECOMMENDED BY DTNA AND ALLISON, THIS DEFINED BY ENGINE AND VOCATIONAL USAGE • SECONDARY SHIFT SCHEDULE RECOMMENDED BY DTNA AND ALLISON, THIS DEFINED BY ENGINE AND VOCATIONAL USAGE • PRIMARY SHIFT SPEED RECOMMENDED BY DTNA AND ALLISON, THIS DEFINED BY ENGINE AND VOCATIONAL USAGE • SECONDARY SHIFT SPEED RECOMMENDED BY DTNA AND ALLISON, THIS DEFINED BY ENGINE AND VOCATIONAL USAGE • ENGINE BRAKE RANGE PRESELECT RECOMMENDED BY DTNA AND ALLISON, THIS DEFINED BY ENGINE AND VOCATIONAL USAGE • ENGINE BRAKE RANGE ALTERNATE PRESELECT RECOMMENDED BY DTNA AND • ALLISON, THIS DEFINED BY ENGINE AND VOCATIONAL USAGE • FUEL SENSE 2.0 DISABLED - PERFORMANCE - TABLE BASED • DRIVER SWITCH INPUT - DEFAULT – NO SWITCHES • VEHICLE INTERFACE WIRING CONNECTOR WITH BLUNT CUTS, AT END OF FRAME • ELECTRONIC TRANSMISSION CUSTOMER ACCESS CONNECTOR MOUNT BACK OF CAB • CHELSEA 870XEFJP-B5XV • PTO MOUNTING, LH SIDE OF MAIN TRANSMISSION • MAGNETIC PLUGS, ENGINE DRAIN, TRANSMISSION DRAIN, AXLE(S) FILL AND • DRAIN • PUSH BUTTON ELECTRONIC SHIFT CONTROL, DASH MOUNTED • TRANSMISSION PROGNOSTICS - ENABLED 2013 • WATER TO OIL TRANSMISSION COOLER, FRAME MOUNTED • TRANSMISSION OIL CHECK AND FILL WITH ELECTRONIC OIL LEVEL CHECK • SYNTHETIC TRANSMISSION FLUID (TES-295 COMPLIANT) 		

		YES	NO
3.8	<p>Front Axle and Equipment</p> <ul style="list-style-type: none"> DETROIT DA-F-18.0-5 18,000# FL1 71.0 KPI/3.74 DROP SINGLE FRONT AXLE MERITOR 16.5X6 Q+ CAST SPIDER CAM FRONT BRAKES, DOUBLE ANCHOR, FABRICATED SHOES FIRE AND EMERGENCY SEVERE SERVICE, NON-ASBESTOS FRONT LINING CAST IRON OUTBOARD FRONT BRAKE DRUMS FRONT OIL SEALS VENTED FRONT HUB CAPS WITH WINDOW, CENTER AND SIDE PLUGS - OIL STANDARD SPINDLE NUTS FOR ALL AXLES MERITOR AUTOMATIC FRONT SLACK ADJUSTERS TRW TAS-85 POWER STEERING POWER STEERING PUMP 2 QUART SEE THROUGH POWER STEERING RESERVOIR ORGANIC SAE 80/90 FRONT AXLE LUBE 		
3.9	<p>Front Suspension</p> <ul style="list-style-type: none"> 18,000# TAPERLEAF FRONT SUSPENSION MAINTENANCE FREE RUBBER BUSHINGS - FRONT SUSPENSION FRONT SHOCK ABSORBERS 		
3.10	<p>Rear Axle and Equipment</p> <ul style="list-style-type: none"> RS-30-185 31,000# U-SERIES FIRE/EMERGENCY SERVICE SINGLE REAR AXLE 5.63 REAR AXLE RATIO IRON REAR AXLE CARRIER WITH STANDARD AXLE HOUSING MXL 17T MERITOR EXTENDED LUBE MAIN DRIVELINE WITH HALF ROUND YOKES DRIVER CONTROLLED TRACTION DIFFERENTIAL- SINGLE REAR AXLE (1) DRIVER CONTROLLED DIFFERENTIAL LOCK REAR VALVE FOR SINGLE DRIVE AXLE BLINKING LAMP WITH EACH MODE SWITCH, DIFFERENTIAL UNLOCK WITH IGNITION OFF, ACTIVE <5 MPH MERITOR 16.5X7 P CAST SPIDER CAM REAR FIRE AND EMERGENCY SEVERE SERVICE NONASBESTOS REAR BRAKE LINING BRAKE CAMS AND CHAMBERS ON FORWARD SIDE OF DRIVE AXLE(S) WEBB HEAVY WEIGHT CAST IRON REAR BRAKE DRUMS REAR OIL SEALS STD WABCO TRISTOP D LONGSTROKE 1-DRIVE AXLE SPRING PARKING CHAMBERS HALDEX AUTOMATIC REAR SLACK ADJUSTERS ORGANIC SAE 80/90 REAR AXLE LUBE 		

		YES	NO
3.11	Rear Suspension		
	<ul style="list-style-type: none"> • 31,000# FLAT LEAF SPRING REAR SUSPENSION WITH RADIUS ROD FOR FIRE/EMERGENCY SERVICE • SPRING SUSPENSION - NO AXLE SPACERS • STANDARD AXLE SEATS IN AXLE CLAMP GROUP • FORE/AFT CONTROL RODS 		
3.12	Brake System		
	<ul style="list-style-type: none"> • AIR BRAKE PACKAGE • WABCO 4S/4M ABS WITH TRACTION CONTROL, WITH ATC OFF-ROAD SWITCH • REINFORCED NYLON, FABRIC BRAID AND WIRE BRAID CHASSIS AIR LINES • FIBER BRAID PARKING BRAKE HOSE • STANDARD BRAKE SYSTEM VALVES • STANDARD AIR SYSTEM PRESSURE PROTECTION SYSTEM • STD U.S. FRONT BRAKE VALVE • RELAY VALVE WITH 5-8 PSI CRACK PRESSURE, NO REAR PROPORTIONING VALVE • WABCO SYSTEM SAVER HP WITH INTEGRAL AIR GOVERNOR AND HEATER • AIR DRYER MOUNTED INBOARD ON LH RAIL • STEEL AIR BRAKE RESERVOIRS, NO TRIPLE OR TORPEDO TANKS • CLEAR FRAME RAILS FROM BACK OF CAB TO FRONT REAR SUSPENSION BRACKET, BOTH RAILS OUTBOARD • BW DV-2 AUTO DRAIN VALVE WITHOUT HEATER ON ALL TANK(S) 		
3.13	Trailer/Body Connections		
	<ul style="list-style-type: none"> • UPGRADED CHASSIS MULTIPLEXING UNIT • UPGRADED BULKHEAD MULTIPLEXING UNIT 		
3.14	Wheelbase & Frame		
	<ul style="list-style-type: none"> • 5325MM (216 INCH) WHEELBASE • 7/16X3-9/16X11-1/8 INCH STEEL FRAME (11.11MMX282.6MM/0.437X11.13 INCH) 120KSI • 2675MM (105 INCH) REAR FRAME OVERHANG • FRAME OVERHANG RANGE: 101 INCH TO 110 INCH • CALC'D BACK OF CAB TO REAR SUSP C/L (CA) : • 150.00 in • CALCULATED EFFECTIVE BACK OF CAB TO REAR SUSPENSION C/L (CA) : 147.00 in • CALC'D FRAME LENGTH - OVERALL : 350.97 • CALCULATED FRAME SPACE LH SIDE : 96.94 in • CALCULATED FRAME SPACE RH SIDE : 226.24 in • CALC'D SPACE AVAILABLE FOR DECKPLATE : 150.45 in • SQUARE END OF FRAME • FRONT CLOSING CROSMEMBER • STANDARD WEIGHT ENGINE CROSMEMBER • STANDARD CROSMEMBER BACK OF TRANSMISSION • STANDARD MIDSHIP #1 XMBR (S), NO XMBERS FROM BOC TO 40" BOC 		

		YES	NO
3.14	<ul style="list-style-type: none"> • STANDARD REAR MOST CROSSMEMBER • STANDARD SUSPENSION CROSSMEMBER 		
3.15 Chassis Equipment	<ul style="list-style-type: none"> • THREE-PIECE 14 INCH CHROME STEEL BUMPER WITH COLLAPSIBLE ENDS AND LH AND RH WING CUTOUTS FOR CAST PRODUCTS SA3502 SPEAKERS • REMOVABLE FRONT TOW HOOKS STORED ON THE CHASSIS FRAME • BUMPER MOUNTING FOR SINGLE LICENSE PLATE • FENDER AND FRONT OF HOOD MOUNTED FRONT MUDFLAPS • GRADE 8 THREADED HEX HEADED FRAME FASTENERS • D15-28195-000 CENTER PUNCH TO MARK CENTERLINE OF REAR SUSPENSION ON TOP FLANGE OF FRAME • CUSTOMER REQUESTED .DXF "DRIVELINE AND CROSSMEMBER ONLY" LAYOUT • TANK BODY 1501 TO 3000 GALLONS 		
3.16 Fuel Tanks	<ul style="list-style-type: none"> • 50 GALLON/189 LITER SHORT RECTANGULAR ALUMINUM FUEL TANK - LH • RECTANGULAR FUEL TANK(S) • POLISHING OF FUEL/HYDRAULIC TANK(S) WITH PAINTED BANDS • FUEL TANK(S) FORWARD • POLISHED STEP FINISH • FUEL TANK CAP(S) • EQUIFLO INBOARD FUEL SYSTEM • NO NATURAL GAS VEHICLE FUEL TANK VENT LINE/STACK • HIGH TEMPERATURE REINFORCED NYLON FUEL LINE 		
3.17 Tires	<ul style="list-style-type: none"> • MICHELIN XZY-3 385/65R22.5 18 PLY RADIAL FRONT TIRES • MICHELIN XDN2 GRIP 315/80R22.5 20 PLY RADIAL REAR TIRES 		
3.18 Hubs	<ul style="list-style-type: none"> • CONMET PRESET PLUS PREMIUM IRON FRONT HUBS • WEBB IRON REAR HUBS 		
3.19 Wheels	<ul style="list-style-type: none"> • ACCURIDE 29300 22.5X9.00 10 HUB PILOT FRONT AND REAR PAINTED STEEL WHEEL • NO FRONT AXLE WHEEL/HUB COVER • FRONT WHEEL MOUNTING NUTS • REAR WHEEL MOUNTING NUTS 		

	YES	NO
3.20 Cab Exterior		
<ul style="list-style-type: none"> • 112 INCH BBC FLAT ROOF ALUMINUM CONVENTIONAL CAB • AIR CAB MOUNTING • BOLT-ON MOLDED FLEXIBLE FENDER EXTENSIONS <ul style="list-style-type: none"> • LH AND RH EXTERIOR GRAB HANDLES WITH SINGLE RUBBER INSERT • HOOD MOUNTED CHROMED PLASTIC GRILLE • CHROME HOOD MOUNTED AIR INTAKE GRILLE • FIBERGLASS HOOD • FACTORY PREP DUAL 25 INCH ROUND STUTTER TONE HOOD MOUNTED AIR HONRS SHIPPED LOOSE FOR PDI INSTALL • DUAL ELECTRIC HONRS • DUAL HORN SHIELDS • ALL UNIT(S) KEYED ALIKE WITH CUSTOMER SPECIFIED KEY NUMBER FT1013 • REAR LICENSE PLATE MOUNT END OF FRAME • HALOGEN HEADLIGHT ASSEMBLY AND INCANDESCENT MARKER/TURN LAMP WITH CHROME BEZEL • LED AERODYNAMIC MARKER LIGHTS • HEADLIGHTS ON WITH WIPERS, WITH DAYTIME RUNNING LIGHTS • OMIT STOP/TAIL/BACKUP LIGHTS AND PROVIDE WIRING WITH SEPARATE STOP/TAIL WIRES TO 7 FEET BEYOND END OF FRAME • STANDARD FRONT TURN SIGNAL LAMPS • NO WORK LIGHT • DUAL WEST COAST BRIGHT FINISH HEATED MIRRORS WITH LH AND RH REMOTE • DOOR MOUNTED MIRRORS • 102 INCH EQUIPMENT WIDTH • LH AND RH 8 INCH BRIGHT FINISH CONVEX MIRRORS MOUNTED UNDER PRIMARY MIRRORS • STANDARD SIDE/REAR REFLECTORS • RH AFTERTREATMENT SYSTEM CAB ACCESS WITH POLISHED DIAMOND PLATE COVER • 63X14 INCH TINTED REAR WINDOW • NO REAR WINDOW • TINTED DOOR GLASS LH AND RH WITH TINTED NON-OPERATING WING WINDOWS • RH AND LH MANUAL WINDOWS • TINTED WINDSHIELD • 2 GALLON WINDSHIELD WASHER RESERVOIR WITHOUT FLUID LEVEL INDICATOR, FRAME MOUNTED 		
3.21 Cab Interior		
<ul style="list-style-type: none"> • OPAL GRAY VINYL INTERIOR • MOLDED PLASTIC DOOR PANEL WITHOUT VINYL INSERT WITH ALUMINUM KICKPLATE LOWER DOOR • MOLDED PLASTIC DOOR PANEL WITHOUT VINYL INSERT WITH ALUMINUM KICKPLATE LOWER DOOR • BLACK MATS WITH SINGLE INSULATION • NO DASH MOUNTED ASH TRAYS AND LIGHTER • FORWARD ROOF MOUNTED CONSOLE WITH UPPER STORAGE COMPARTMENTS WITHOUT NETTING • IN DASH STORAGE BIN 		

		YES	NO
3.21	<ul style="list-style-type: none"> • CENTER STORAGE CONSOLE MOUNTED ON BACKWALL • (2) CUP HOLDERS LH AND RH DASH • GRAY/CHARCOAL FLAT DASH • SMART SWITCH EXPANSION MODULE • HEATER, DEFROSTER AND AIR CONDITIONER • STANDARD HVAC DUCTING • MAIN HVAC CONTROLS WITH RECIRCULATION SWITCH • STANDARD HEATER PLUMBING WITH BALL SHUTOFF VALVES AT SUPPLY LINES ONLY • VALEO HEAVY DUTY A/C REFRIGERANT COMPRESSOR • BINARY CONTROL, R-134A • PREMIUM INSULATION • SOLID-STATE CIRCUIT PROTECTION AND FUSES • 12V NEGATIVE GROUND ELECTRICAL SYSTEM • DOME DOOR ACTIVATED LH AND RH, DUAL READING LIGHTS, FORWARD CAB ROOF • LH AND RH MANUAL DOOR LOCKS • 12V POWER SUPPLY (1) DUAL 2.1 AMP USB CHARGER IN DASH • SEATS INC 911 UNIVERSAL SERIES HIGH BACK AIR SUSPENSION DRIVER SEAT WITH NFPA 1901-2009/2016 COMPLIANT SEAT SENSOR • SEATS INC 911 UNIVERSAL SERIES HIGH BACK NON SUSPENSION PASSENGER SEAT WITH UNDERSEAT STORAGE AND NFPA 1901-2009/2016 COMPLIANT SEAT SENSOR • LH AND RH INTEGRAL DOOR PANEL ARMRESTS • FULL GRAY VINYL DRIVER SEAT COVER AND HEADREST • FULL GRAY VINYL FRONT PASSENGER SEAT COVER AND HEADREST • NFPA 1901-2009 HIGH VISIBILITY ORANGE SEAT BELTS • ADJUSTABLE TILT AND TELESCOPING STEERING COLUMN • 4-SPOKE 18 INCH (450MM) STEERING WHEEL • DRIVER AND PASSENGER INTERIOR SUN VISORS • NO ENTRY/ACCESS/STEP WIRING 		
3.22	<p>Instruments & Controls</p> <ul style="list-style-type: none"> • GRAY DRIVER INSTRUMENT PANEL • GRAY CENTER INSTRUMENT PANEL • BLACK GAUGE BEZELS • LOW AIR PRESSURE INDICATOR LIGHT AND AUDIBLE ALARM • 2 INCH PRIMARY AND SECONDARY AIR PRESSURE GAUGES • ENGINE COMPARTMENT MOUNTED AIR RESTRICTION INDICATOR WITH GRADUATIONS, WITH WARNING LIGHT IN DASH • 97 DB BACKUP ALARM • ELECTRONIC CRUISE CONTROL WITH SWITCHES IN LH SWITCH PANEL • IGNITION SWITCH WITH NON REMOVABLE KEY • ICU3S, 132X48 DISPLAY WITH DIAGNOSTICS, 28 LED WARNING LAMPS AND DATA LINKED • HEAVY DUTY ONBOARD DIAGNOSTICS INTERFACE CONNECTOR LOCATED BELOW LH DASH • 2 INCH ELECTRIC FUEL GAUGE • FUEL FILTER RESTRICTION INDICATOR • EMISSIONS LIMITED IDLE ADJUST • ELECTRICAL ENGINE COOLANT TEMPERATURE GAUGE • 2 INCH TRANSMISSION OIL TEMPERATURE GAUGE • ENGINE AND TRIP HOUR METERS INTEGRAL WITHIN DRIVER DISPLAY 		

		YES	NO
3.22	<ul style="list-style-type: none"> CUSTOMER FURNISHED AND INSTALLED PTO CONTROLS ELECTRONIC STABILITY CONTROL ELECTRIC ENGINE OIL PRESSURE GAUGE OVERHEAD INSTRUMENT PANEL POWER AND GROUND WIRING PROVISION OVERHEAD ELECTRONIC MPH SPEEDOMETER WITH SECONDARY KPH SCALE, WITHOUT ODOMETER STANDARD VEHICLE SPEED SENSOR ELECTRONIC 3000 RPM TACHOMETER VT-HU CONNECTIVITY PLATFORM HARDWARE 2 YEARS DETROIT CONNECT BASE PACKAGE (VIRTUAL TECHNICIAN, DETROIT CONNECT PORTAL ACCESS) FOR VT-HU CONNECTIVITY PLATFORM IGNITION SWITCH CONTROLLED ENGINE STOP (1) RH FOOT SWITCH WITH DASH SWITCH FOR HORN BUTTON TO CONTROL AIR HORN, DEFAULT TO ELECTRIC <85 PSI DIGITAL VOLTAGE DISPLAY INTEGRAL WITH DRIVER DISPLAY SINGLE ELECTRIC WINDSHIELD WIPER MOTOR WITH DELAY MARKER LIGHT SWITCH INTEGRAL WITH HEADLIGHT SWITCH ONE VALVE PARKING BRAKE SYSTEM WITH DASH VALVE CONTROL AUTONEUTRAL AND WARNING INDICATOR SELF CANCELING TURN SIGNAL SWITCH WITH DIMMER, WASHER/WIPER AND HAZARD IN HANDLE INTEGRAL ELECTRONIC TURN SIGNAL FLASHER WITH HAZARD LAMPS OVERRIDING STOP LAMPS 		
3.23	Design		
	<ul style="list-style-type: none"> PAINT: ONE SOLID COLOR 		
3.24	Color		
	<ul style="list-style-type: none"> CAB COLOR A: L0006EB WHITE ELITE BC BLACK, HIGH SOLIDS POLYURETHANE CHASSIS PAINT STANDARD E COAT/UNDERCOATING 		
3.25	Certification/Compliance		
	<ul style="list-style-type: none"> U.S. FMVSS CERTIFICATION, EXCEPT SALES CABS AND GLIDER KITS 		
		YES	NO
4	ELECTRICAL EQUIPMENT		
	4.1 A voltage monitor should be built into the electrical system. It activates a warning when the alternator output voltage falls below any desired voltage (usually 11.5 volts).		

	YES	NO
5. TRUCK LIGHTING DETAILS		
5.1 A total of nine (9) Truck-Lite Model 33 Series or equivalent LED clearance lights and seven (7) red LED lights should be installed at the rear. Two (2) amber LED lights should be installed on the front street and curb sides. Reflectors are installed per DOT specifications. A red warning light visible to the driver in the chassis cab that illuminates when a compartment door is ajar/open. An illuminated license plate bracket installed at rear.		
5.2 Two (2) Truck-Lite Model 40 or equivalent Grommet-mounted super LED 4" light with turn signal and reverse lights.		
5.3 LED side-mounted DOT approved side turn signal repeaters, should be mounted in the rear wheel area on the body to provide visible lateral turn warning.		
5.4 A 12V Battery Power, 4 position overload/short protected terminal strip connected to chassis battery and should be installed.		
5.5 One (1) ROSCO STSK7465 or equivalent rear view camera system shall be installed. Camera system should include a wide-angle rear mounted camera and large monitor. Rear view camera set to automatically activate when apparatus is in reverse. Display shall be mounted on the overhead console, above the sun visor.		
6 EMERGENCY LIGHTING	YES	NO
6.1 All emergency lighting, options, and accessories shall be controlled at a master control center in the cab. The apparatus control center shall have: Controls all warning lights and scene lights Includes an "Open Door" and other optional indicator lights Controls other optional functions if equipped. (I.E. Electric Dump Valves, Pump Shift) Mounted Electronics, Sirens, and Radios. Features lighted identification plates on a non-glare panel face that clearly identify each switch and its function. Removable lid on console for maintenance and adding additional items. Control Centers will require that there is no seat in between the driver and passenger seats. All warning packages are fully NFPA compliant and certified by the lighting component manufacturer to meet all requirements.		
6.2 The light bar is mounted on the cab roof. A Whelen Ultra Freedom IV Model F4N7Q or equivalent LED that is compliant with NFPA Zone D requirements and should have red lenses.		
6.3 There should be a Whelen 100-watt, six (6) function Class A electronic siren or equivalent, mounted in the chassis cab in a location convenient to the driver. The electronic siren includes full function siren tones, and a hard-wired microphone. The siren control is lighted for easy night operation. Speaker to be mounted in and flush to front bumper.		

		YES	NO
6.4	There should be a Federal Q-Siren (Q2B) installed and mounted on top of the driver's front bumper. The Q2B includes one standard activation switch on the driver's side floor, and a brake switch on the center console.		
6.5	Two (2) Whelen Model M6 Red LED or equivalent lights with red lenses lights mounted to the grill of the chassis, two (2) mounted on the front bumper extension and two (2) mounted on the rear sides of the body in with a chrome trim ring.		
6.6	There should be upper level rear warning/scene combination LED lights with a chrome bezel. Side/Rear, Scene/Flashers, Red, Whelen M9V2R Series or equivalent. Two (2) should be on each side of the tank in the front and rear upper corners, with two (2) on the rear of apparatus in the upper corners. (Six (6) Total)		
6.7	There should be two (2) Whelen L31HF Red Super LED or equivalent rotating lights located on the rear/upper stanchion.		
6.8	Scene Lights shall be controlled from the control center located in the chassis cab and a One Touch switch pack located on the pump panel. Lights will include a chrome bezel. Rear scene lights shall be wired to illuminate when chassis is placed in reverse.		
6.9	There should be four (4) LED ground lights installed to illuminate the area below the apparatus. Two (2) lights should be installed on the driver and passenger side below the pump house step, and two (2) lights should be installed on the driver and passenger side below the rear step area. Grounds lights shall be activated when parking brake is applied.		
7.	BOOSTER TANK	YES	NO
7.1	Shall be a PRO Poly or UPF 2000 gallon tank with a center fill tower. Tank should come with a lifetime warranty. All auxiliary outlets and inlets must meet NFPA 1900 guidelines in effect at the time of manufacture. An internal overflow system is to be inside in the tank and discharge behind the rear wheels. This allows air to enter the tank when dumping water.		
8.	DIRECT TANK FILLS	YES	NO
8.1	There shall be a 2.5" hydrant fill at the rear of the apparatus with an Akron 8000 series ball valve or equivalent, a 30-degree elbow, bleeder valve, cap holder with a tether chain.		
8.2	There shall be a super bright LED display viewable from 180 degrees with a visual indication at multiple accurate levels. Weather resistant connectors to connect to the digital display, the pressure transducer, and the apparatus power. Additional displays are easily integrated and will receive data from the same source as the Master Display; no additional transducers required. Tank level gauge indicates the liquid level on easy to read LED display. Tank Gauges shall be installed: Street side pump panel. Rear street side.		

	YES	NO
9. DUMP VAVLES AND CHUTES		
9.1 A Newton 10" square stainless-steel Kwick-Dump Gate style (full flow) dump valves or equivalent with stainless-steel flip chutes and telescopic chutes. For improved water flow, the dump valve is attached directly to the tank.		
9.2 A Swivel Dump shall be installed on the rear. The swivel dump shall dump water from the street side or curb side or any point in between which meets NFPA requirements for water delivery on three sides of the vehicle. It shall have a telescoping extension, retractable for storage. A 36" manual telescoping chute with manual dump valve shall be installed.		
10. PORTABLE TANK CARRIER	YES	NO
10.1 Mounting as per the manufacture's recommendation that is the easiest for personnel to deploy and store.		
10.2 <i>Applies only to manufactures that will mount the portable tank to the side of the apparatus</i> , A one tip-down portable tank carrier for loading/unloading of a folding water tank located above the catwalk and on the passenger side should be designed to fold down over the body side should be installed. When in the up position the tank, carrier will be secured with heavy duty locking DeStaco latches or equivalent. The tank carrier should be constructed of stainless-steel square tubing.		
A red "Carrier down" flashing LED warning light visible to the driver shall be installed when the portable tank carrier is not in the stowed position. Carrier should hold up to a 2200 gallon collapsible frame drop tank.		
10.3 <i>Applies only to manufactures that will mount the portable tank to the side of the apparatus</i> , the portable tank carrier enclosure should be enclosed on four sides and should be equipped with at least two grab rails. The portable tank carrier enclosed on four (4) sides should be painted smooth aluminum.		
10.4 A Fol-Da-Tank® portable tank with frame capable of holding 2200 gallons or equivalent shall be installed. The tank liner should constructed of nylon -coated material, 23 oz. side walls and a 30 oz. floor with handles installed in the floor for ease of folding. All portable tanks should have two outlets.		
11. BODY AND COMPONENTS	YES	NO
11.1 The sub-frame should integral to the tank cradle and constructed using extruded thick aluminum or steel tubing and be designed to support the body structure and to provide maximum support for the weight of the body and all stored equipment.		
11.2 The body should be attached to the sub-frame using rigid fasteners isolated by fitted rubber bushings. The mounting system should provide secure attachment of the body to the sub-frame while allowing enough range of movement between the two assemblies. The body shall be enclosed on all sides and should incorporate closed wheel wells and finished storage compartments. Stainless-steel corner guards or equivalent should be installed to protect from damage on road and fire scene. The front lower vertical surface of body should be protected with aluminum Tread-brite or equivalent.		

	YES	NO
11.3 The tank shall be held front and rear as well as side-to-side by additional cradle structures to prevent the tank from shifting during vehicle operation. The tank should be affixed to the cradle utilizing hat channel mounting brackets constructed of thick stainless-steel. The channels should be mounted beneath the center of the tank before and after the cross members of the cradle. The channel should be surrounding these members and is bolted directly to the bottom of the tank thereby securing the tank to the cradle. This mounting system should provide a free-floating connection of the tank to the cradle which allows the chassis frame's normal movement and twist to introduce no stress upon the tank or body.		
11.4 Fenders should be integral with the side of the body. Fender wells should be constructed for ease of cleaning and maintenance.		
11.5 The entire body should be fabricated 3/16 th aluminum or 12 gauge stainless steel or polymer. All welds shall conform to DVS and AWS standards.		
11.6 Manufacturer shall state the body warranty.		
11.7 Black rubber fenderettes should be installed on the wheel wells to prevent splash and enhance appearance. The fenderettes should extend approximately 1" beyond the body side and designed to be easily replaced. All fasteners should not be exposed to the exterior of the fenderettes or body.		
11.8 The bottom edge of the entire apparatus should have an aluminum rub-rail installed including the pump house, and rear step. The rub-rail should be easily replaceable and should be made from solid extruded aluminum and should feature a reflective stripe at the rail center.		
11.9 The rear tow eyes should have a thru hole, made from thick steel, powder-coated black, and bolted directly to the end of frame rails.		
11.10 An all-aluminum or steel cradle should be engineered and constructed to connect the chassis frame with the copolymer tank and body. The cradle should be constructed using extruded aluminum tubing and extruded aluminum flats. Cradle cross members should be spaced to restrict unsupported portions of the tank between cross members. There should be cushioned rubber extrusions placed over all tank support areas to isolate the tank from the aluminum cradle.		
12 COMPARTMENTS	YES	NO
12.1 There should be 2 on each side of the body (for a total of 4). <ul style="list-style-type: none"> • Location front and behind the rear axle • ROM Roll-up doors with aluminum finish • Tall bottom rail to allow gloved hand access between lift bar and rub rail • Lighting shall be LED for the compartments 		
13. RUNNING BOARDS, CATWALKS AND REAR STEP	YES	NO
13.1 Should be at least a 12" wide running board should be located at the base of the pump house and should be made from extruded aluminum deck plate.		
13.2 Catwalks should be located above the driver and passenger side compartments, and should be made of polished 3.16th aluminum Tread-Brite and bent at a 30-degree angle to provide a drip rail.		

	YES	NO
13.3 The 12" deep rear step shall be NFPA compliant and should be made of extruded aluminum deck plate with a tall kick plate. Rounded polished aluminum castings should be installed on the corners of the step.		
14. GRAB RAILS AND FOOTSTEPS 14.1 The grab rails should be made of extruded aluminum tubing with knurled finish and chrome plated stanchion brackets. Locations of grab rails should be: Vertical grab rail(s) provided at the rear- (2) two with (1) one on each side. Two (2) horizontal grab rails provided, one on each side, above the pump control panels. One (1) grab rail located on driver's side of tank in the upper front corner for ease of loading and unloading hose cross lays. One (1) grab rail located on passenger side of tank in the upper front corner of tank for ease of loading and unloading hose cross lays. One (1) horizontal grab rail located below the hose bed at the rear of the truck.		
14.2 As per NFPA 1901 standards, all steps shall be a minimum of 35" square. There should two (2) sets of large chrome plated steps with polished kick-plates provided at the rear of tank for access to the hose bed area. There should be a large chrome plated illuminated folding steps are provided at the front on the driver's side, for access to the catwalk area. The steps shall be a minimum of 35" square. There should be a large chrome plated illuminated folding steps provided at the front on the passenger side, for access to the catwalk area. The steps shall be a minimum of 35" square. There should be a large chrome-plated illuminated set of folding steps provided at the rear for access to the catwalk area on both the driver and passenger's side. The steps are a minimum of 35" square with polished kick-plates.		
15. PAINTING, LETTERING AND SIGNS 15.1 The entire tank, body, and components shall be washed, sanded, prepped for primer, cleaned, and primed with PPG urethane primer filler or equivalent. The body will be hand sanded and color match painted using a PPG Deltron base coat/clear coat paint or Sikkens. After paint is applied and properly cured the apparatus should be color sanded and buffed to a high gloss. 15.2 10-year warranty should be on painted body parts.		
15.3 There should be a permanent plate located in the chassis cab with the following information: Quantity and type of fluids used in the vehicle. This plate includes: Engine oil, quantity. Engine coolant, quantity. Chassis transmission fluid, quantity. Pump transmission fluid, quantity. Drive axle lubrication fluid, quantity. Air conditioning refrigerant, quantity. Air conditioning lubrication oil, quantity. Power steering fluid, quantity. Front and rear cold tire pressure Number of personnel the vehicle is designed to carry located in an area visible to the driver. Height and length of the vehicle in feet and inches Gross vehicle weight rating (GVWR) in pounds		

	YES	NO
15.5 The apparatus body and chassis shall have a reflective stripe on each side and the front bumper per NFPA 1901 standards. Apply 10" reflective stripe and door decals will be supplied by Roanoke County Fire and Rescue.		
15.6 Per NFPA 1901 standards, 100 percent of the rear shall include red and fluorescent yellow diamond grade chevron retro-reflective striping installed, with each stripe a minimum of 6" wide.		
	YES	NO
16. CORROSION PROTECTION		
16.1 The body should have several features which prevent corrosion. All fasteners should stainless-steel where applicable All contacts of dissimilar metals should be insulated with 3M products to prevent galvanic corrosion. Rub rails should Type II bright dip anodized. Tow rings should powder coated steel. The pump house frame should be made from Stainless-steel which resists corrosion better than aluminum.		
16.2 There shall be two mud flaps installed behind the rear wheels. The mud flaps are thick black rubber.		
	YES	NO
17. PUMP AND PLUMBING		
17.1 Side Control Pump House The pump compartment features should include: The superstructure frame should be made from .125" wall X 2.00" square type 304 brushed 4B finish stainless-steel tubing or equivalent. Pump to be fitted with Akron 8000 Drop Center series valves. The front and a portion of the rear of the pump compartment should be made from type 304 brushed 4B finish stainless-steel sheets or equivalent to enclose the perimeter of the water pump. The street and curb sides of the pump compartment are equipped with side running boards. The running boards extend along the width of the pump compartment from the rear of the chassis cab to the forward end of the body module. Pump side panels should be covered with black protective material and should be fully hinged on both sides for easy access. Running boards should include extruded aluminum rub rail extending the length of the running boards. The step surfaces comply with applicable sections of NFPA 1901 requirements.		

	YES	NO
<p>17.2 PTO Pumps should have the following standard features:</p> <ul style="list-style-type: none"> All PTO driven pumps should have its pump-and-roll capability disabled. Helical design and precision-cut gears to reduce noise and minimize wear Double seal ring design solid bronze impeller Stainless-steel pump shaft Maintenance free mechanical seal The driver and passenger side pump panels and access doors should be constructed of aluminum and be covered with black protective material. The pump compartment should have full width vertically hinged access doors. The pump operator panels should be completely "bolted" or hinged in place for ease of removal. A full panel width LED light hood should be provided to illuminate the street and curb side pump panels. The operator's panel should include the following gauges: 2 1/2" 400# liquid filled stainless-steel individual discharge pressure gauges and control handles. One (1) 3 1/2" Master Discharge Gauge and one (1) 3 1/2" Master Pump intake gauge. Color-coded pump panel identification labels are provided for all gauges, controls, connections, switches, inlets, and outlets. The intakes should have a removable strainer provided and chrome plated caps. Pump shift is electric operated and incorporates standard automotive shifting mechanism for ease of maintenance. The pump shift switch is mounted in the cab and identified as "Pump Engagement". The pump shift assembly includes an indicating light to show when the pump has been engaged. A master manifold type drain valve should be provided with all pump drains connected to it and operate from the pump operators panel, so the entire pump system may be drained by a single control. Per NFPA 1901 standards there shall be pump system test ports mounted on the pump panel. All discharges and pre-connects with an 1 1/2" or larger valve, per NFPA 1901 standards, shall have drains or bleeder valves, having a minimum 3/4" pipe thread connection, for bleeding off pressure from the hose connection to the outlet. Per NFPA 1901 standards there shall be a suction relief valve installed on the intake sides of the pump, terminated with a NST male threads. 		
<p>17.3 Waterous CX Series 1000 PTO Pump, Side Control and 36" Pumphose shall be installed.</p> <p>All the plumbing and/or piping in the pump compartment shall be constructed of stainless-steel or flexible piping for long life. All NPT pipe thread connections larger than 3/4" connections are avoided in the construction of the plumbing system. The following valves shall have groove connection: rear discharge, tank fill, all 2" and 2-1/2" pre-connect valves.</p> <p>Pump Ratings: 1000 GPM @ 150 PSI; 700 GPM @ 200 PSI; 500 GPM @ 250 PSI</p>		

	YES	NO
17.4 A PTO Fire Research "In-control 400 Series Auto Governor" or equivalent with features should be installed: <ul style="list-style-type: none"> • Discharge pressure in PSI. • Pump adjustment back idle. • Engine monitoring of oil pressure, water temperature, battery voltage, and engine RPM. • Preset function for instant and reliable operation. • Overheat pump protection system. 		
17.5 A 12 volt rotary gear, oil-less primer should be installed and be NFPA Compliant.		
17.6 On all pumps, an intake suction relief shall be provided per NFPA 1901 standards. It shall be terminated with a 2 ½" NST male adapter. Each intake consists of a Akron gated ball valve 2 ½ " NST female chrome plated swivel intake located on both the driver and passenger side pump panel. The intakes has a 2 ½ " valve, swivel adapter with screen, chrome plated plug and chain. 6" non-gated Master intakes shall be plumbed out both sides of the pump house and capped with a chrome long handled cap.		
17.7 2.5" Discharges should include: <ul style="list-style-type: none"> • Tee Handle Control • 2 ½" 400 PSI Liquid Filled Stainless Pressure Gauge • 30 Degree Elbow, cap and chain Discharges shall be located on the side control pump panel discharges with: Two (2) 2.5" Discharge, Street Side One (1) 2.5" Discharge, Curb Side One (1) 2.5" side control pump, front discharge located on the passenger side of the front bumper.		
17.8 A 2" tank fill/pump re-circulating line should be provided from the pump to the water tank, with a 2" valve and a 2" high-pressure flexible hose. A 3" tank to pump line should be provided from the water tank to the pump, with a 3" valve and tee handle controls, and 4" plumbing with flexible connection.		
17.9 The pump test shall be witnessed and certified third party by Underwriters Laboratory.		
	YES	NO
18. HOSE TRAY AND PRE-CONNECTS		
18.1 Hose Cross Lay <ul style="list-style-type: none"> • The hose cross lay should provide an area for pre-connected hose cross lays and/or hose storage. • The cross lay should be constructed of a thick polypropylene/polyethylene or aluminum floor designed to provide drainage and ventilation to the cross lay area. • Front and rear should be constructed of aluminum. • Hose cross lay shall be located above the side control pump. 		
18.2 Cross lay shall be pre-connected via NST swivel male gated with a ball valve. Pre-connect should have a 2.5" 400psi liquid filled stainless-steel individual pressure gauge and control handle. Two (2) 2.5 " NST male pre-connects each with a 2.5" valve.		

		YES	NO
18.3	Hose cross lay is equipped should be installed with two (2) adjustable divider constructed of aluminum. A heavy-duty black webbing mesh cross lay cover should be supplied and custom fitted to the apparatus cross lay. The cover is attached with shock cord to retain the cover during travel as required by NFPA.		
18.4	A Hose bed shall run the full length and width of the tank and should be approximately 10" tall. The floor of the hose bed should be grooved to allow the loaded hose to drain and provide ventilation. The floor should be fabricated from UV stable white polypropylene with inverted T slot and should be machine into the floor at three points to accommodate adjustable hose dividers.		
18.5	The hose bed should have two (2) adjustable dividers. The rear of the divider should have a slot cut in that can be used for a hand grip.		
18.6	A heavy-duty hose bed cover made of black webbing mesh should be attached across the front of the hose bed with a rail and bead system to prevent wind from getting under the cover, and a flap to cover the back of the hose bed that has a quick release elastic rope to retain the hose in the bed during travel as required by NFPA.		
		YES	NO
19	EQUIPMENT STORAGE AND MOUNTING Mounting of two (2) 6" suction hose to the truck that is easily deployed by personnel.		
		YES	NO
20.1	CHASSIS ACCESSORIES A shoreline connection, 115 volt Kussmaul 1000 Series air and battery conditioner system or equivalent shall be installed. The shoreline electrical auto eject plug-in should be beneath the driver's side chassis door.		
20.2	Two (2) Stutter Tone air horns mounted through the front bumper. Steering wheel horn switch will control the air horns as well as a foot switch located on the passenger's side floor.		
20.3	There shall be an extended Front Bumper with Hose Well added. The Chassis front bumper should be extended at least 24" with a hose well for approximately 150' of 1 3/4" hose. The extension should have an aluminum Tread-Brite overlay. The hose well is open to the top, should be made of aluminum include floor drains, and have rubber floor tiles. A heavy-duty black webbing mesh hose well cover should be supplied and custom fitted to the apparatus hose well.		
20.4	Front tow eyes should be installed to each end of the front frame rail extensions.		
20.5	A chassis OEM installed heat exchanger should be installed that permits the use of water from the pump to cool the engine. Cooling is done without mixing the engine antifreeze and the pump water.		
20.6	Chassis exhaust shall be modified to exit passenger side ahead of the rear wheels and vent outwards from the edge of the body. A heat shield shall be fabricated from aluminum and installed between the body and the exhaust pipe. OEM supplied exhaust tip will be used when applicable.		

		YES	NO
21 LOOSE EQUIPMENT			
21.1 Two (2) Wheel Chocks, with holders, shall be mounted on the driver's side, before the rear wheel.			
21.2 Two (2) 6" x 10' PVC flexible hard suction hoses shall be supplied.			
		YES	NO
22 PLEASE PRICE THESE OPTIONS INDIVIDUALLY			
22.1 One (1) 12V LED telescoping light with individual switches on the light head will be mounted on each side of the front corner of the pump house.			
22.2 Mounting a 24 foot long extension and 14 foot roof ladder to the truck that is easily deployed by personnel.			
22.3 <i>Applies only to manufactures that will mount the portable tank to the side of the apparatus</i> , mounting a hydraulic type assist/lift for raising and lowering of the drop tank.			
22.4 LED Headlights or equivalent.			