TOWN OF PORTUGAL COVE - ST. PHILIP'S

Request for Proposal #: PCSP-FD-2026–03

Purchase of one (1) New Pumper/Tanker

Issue Date: April 2nd, 2026
Proposal Submission Date deadline: April 17th, 2026 @ 11:00 am (NST)
Town Hall, 1119 Thorburn Road,
Portugal Cove – St. Philip's, NL
A1M 1T6

Prepared by: Town of Portugal Cove St. Philips
1119 Thorburn Road
Portugal Cove-St. Philips, NL
A1M 1T6
(709) 895-8000 (T)
(709) 895-3780 (F)

NOTE: It is the Proponent's responsibility to check the Town's website for any addendums.

Contents

1. INVITATION

1. Statement of Request for Proposal

The Town of Portugal Cove- St. Philip's (the "Town") is seeking proposals from experienced Fire Fighting vehicle and equipment providers, to supply the Town of Portugal Cove – St. Philips & the Portugal Cove – St. Philips Volunteer Fire Department, with one (1) new pumper/tanker.

2. Terminology

The following terms will apply to this Request for Proposal and to any subsequent Contract. Submission of a proposal in response to this Request for Proposal indicates acceptance of all the following terms:

"***Best Value***" means the value placed upon quality, service, past performance, and price.

"***Contract***" means the written agreement resulting from the Request for Proposal executed by the Town of Portugal Cove- St. Philip's and the Successful Proponent.

"***Town***" means the Town of Portugal Cove- St. Philip's.

"***Town Representative"*** means the Representative or appointee engaged by the Town to supervise the work

"***Must or Shall***", "mandatory" or "required" means a requirement that must be met in order for a PROPOSAL to receive consideration.

"***Premises***" shall mean building(s) or part of a building with its appurtenances. "Proposal" shall mean the proponent's submission in response to this RFP. "Proponent" means a party submitting a proposal to this RFP.

"***RFP***" means- Request for Proposal.

"***Request for RFP***" (RFP) includes the documents listed in the index of the Request for RFP and any modifications thereof or additions thereto incorporated by addenda before the close of RFP's.

"***Should***" or "***desirable***" means a requirement having a significant degree of importance to the objectives of the Request for RFP.

"***Special Conditions***" means the special conditions, which are included in the RFP.

"***Subcontractor***" includes, inter alia, a person, firm or corporation having a contract with the Successful Proponent for the execution of a part or parts or furnishing to the Successful Proponent materials and/or equipment called for in the RFP.

"***Successful Proponent***" means the proponent submitting the most advantageous RFP as determined by the Town.

"***Work***" means any labour, duty, expertise and/or efforts to accomplish the purpose of this project

3. Request for Proposal Documents

Copies of the Request for Proposal may be obtained from the Town of Portugal Cove- St. Philip's:

Town Hall	Procurement Procurement@pcsp.ca 1119 Thorburn Road, NL, A1M 1T6 Telephone: 895-8000
Website	PCSP.ca

4. Town Representative

The Town's Representative will be:

Mr. Fred Hollet, Fire Chief
Town of Portugal Cove-St. Philip's
1119 Thorburn Road, NL, A1M 1T6
Telephone: 895-8000 Ext. 267
Fax: 895-3780
Email: chief@pcsp.ca

All inquiries relating to the RFP shall be directed to the Representative. Closing Date and Time

- RFP Closing Time: 11:00 am. NDT
- RFP Closing Date: April 17, 2026

Proposals received after the Closing Date and Time for receipt of Proposals will be considered as "Late Proposals". Late proposals will not be accepted and will be returned unopened to the sender.

5. Background

The Town of Portugal Cove-St. Philip's is a community of approximately 8500 residents located on the Northeast Avalon bordering the city of St. John's.

The Town has a demographic of varying ages, with two schools (grade range K-4 & 5-9) located within the community; and a new High School under construction; the Town believes there is a need for upgrading and replacing aging fleet vehicles within the Portugal Cove – St. Philips Volunteer Fire Department, with a new pumper/tanker.

2. PURPOSE & SCOPE OF WORK

1. Purpose

This RFP is for complete build and delivery of one (1) new pumper/tanker. Suppliers submitting proposals shall submit with their proposal the following items. Failure to submit shall result in the disqualification of the proposal.

1. A price for completing the build and delivery of one (1) new pumper/tanker, on the included form found in Appendix A. This price shall be inclusive of F.O.B.
2. Certifications showing the supplier:
    - Is certified to the Canadian Welding Bureau (CWB);
    - Has a certified Engineer on staff;
    - Is certified with Canadian Motor Vehicle Safety Standards
3. Specification sheets for cab, chassis and firefighting package components.
    - Including all shop drawings that indicate the overall height, length, and width of the vehicle apparatus with all equipment installed in place.
    - All specifications, or similar, must be provided in English.
4. Where the specifications name a manufacturer or brand, and "equal to or greater than" provision shall apply. The proponent shall submit separate sheet(s) and/or equipment sales literature and engineering data indicating an approved standard of equivalence when quoting other than the specified manufacturer or brand name.
5. All other required items outlined within this RFP.

2. Scope of Deliverables

The supplier shall arrange for a Town representative to inspect the unit at the production plant prior to departure for delivery to Portugal Cove – St. Philip's.

Note: The chief will inspect and test the unit as soon as possible upon delivery to the Town of Portugal Cove – St. Philip's and recommend acceptance or non-acceptance of the unit. If deficiencies are noted the supplier shall make arrangements to correct the deficiencies. If unit is found to be acceptable upon receipt, or once the deficiencies have been satisfactorily corrected The Town will make arrangements with the Supplier for payment of the unit.

The Supplier shall deliver a standard production, new, unused equipment of a modern type, carefully designed to suit the nature of the service which the equipment must perform. All materials, workmanship and finish entering the construction of the equipment shall conform to the specifications, the character of the apparatus and the purpose for which it is intended. Minor details of construction and materials, where not otherwise specified, are left, subject to Special Provisions, to the discretion of the Supplier who shall be solely responsible for the design and construction of all features.

The Supplier shall not deliver the equipment offered until all the components of the equipment contained in the specifications are ready for delivery at the same time to the town.

"**Authority Having Jurisdiction**" regarding testing, approval, and recommendation of acceptance of fire protection equipment shall be the town. The Supplier shall provide the town with a minimum of seven days advance notice of unit arrival. Unit must be washed and cleaned upon delivery to the town.

Upon completion of inspection by the town, if deficiencies are noted they must be corrected by the supplier before the unit is received by the town.

Supplier shall make arrangements with the equipment manufacturer, or a local representative in the consignees' area, for an agreement to perform whatever warranty services as may be required and covered. The name and address of the agency required to perform these services shall be given to the consignee at the time of delivery. In addition, the Supplier shall supply a letter with their proposal specifying their plan for their warranty service for this unit. The letter shall detail who will be performing the warranty service, their location, if they have road and or shop service, whether or not they keep a supply of parts in stock and the number of years in business. The letter will also detail their plan for warranty service for small or large issues if they occur. This letter shall be address to:

Mr. Fred Hollet, Fire Chief
Town of Portugal Cove-St. Philip's
1119 Thorburn Road, NL A1M 1T6
Telephone: (709) 895-8000 Ext. 267
Fax: (709) 895-3780
Email: Chief @pcsp.ca

3. Specifications & Summary of Deliverables

See Appendix B for all required specifications.

It is imperative that the proposed unit complies with the unit dimensions as indicated below in unit minimum requirements. The firehall storage bay for the unit has a maximum length of 34 ft, and the existing overhead door clear available is 10 ft. Due to this, the overall unit height and length shall be as follows.

1. The unit maximum overall height is 116 inches, no exception. Absolutely no component can exceed that overall height.
2. The unit overall maximum length cannot exceed 30 ft. Absolutely no component can exceed that overall length.

The supplier shall deliver with the equipment, the following:

3. All documents as required by Section 3.15 of CAN/ULC SS15-13.
4. An itemized invoice of the equipment showing make, model and serial numbers of all components of the equipment contained within the specifications.
5. Digital pictures shall be emailed to the Fire Chief at Chief@pcsp.ca at various stages of the production process of the unit. The Fire Chief reserves the right to request progress photos at anytime during production.

4. Commencement, Prosecution and Completion of Work

If awarded the Contract, the Proponent shall exhaust all efforts to deliver the completed unit to the town no later than June 20th, 2026. Unless otherwise agreed upon by the Fire Chief.

5. Budget

Adjustments to the scope of work may be completed by the deletion of addition of requirements from the scope or changes to measures implemented. These adjustments shall not nullify the Proponent submitted pricing or any submissions to the RFP. The Town may add or delete any scope of work, to ensure compliance with budget, without need to re-issue to all bidders. This may occur after closing of this RFP, once proposals are evaluated and construction costs realized. If required, any changes to the scope after closing of RFP will be only applied to the successful Proponents proposal and shall not affect the evaluation of all proposals received.

3. FORMAT OF PROPOSALS

To assist in receiving similar and relevant information, and to ensure your Proposal receives fair evaluation, the Town asks that Proponents provide detailed information for the itemized list below and follow the same format and numbering system.

Proponents are asked to provide a reply to each point throughout the RFP and the Proponent must identify any specific provisions with which it is unwilling or unable to comply.

A Proposal response submitted must be in enough detail to allow the Town to determine the Proponent's position from the documents received. Every effort should be made to include complete details of services you or your company would provide.

1. Proposal Overview

The proposal shall include a cover page referencing the RFP title, a table of contents, and a cover letter.

The cover letter:

- Shall be signed by an authorized person to legally bind the Proponent to the statements made in the Response to this RFP;
- Provides a summary of the services to be provided;
- Provides a general overview of the company, its structure, size and capability to perform the work required;
- Includes the name, telephone, fax and email address of the contact person for the Proposal, the contact person should have the authority to answer questions regarding the Proposal; and
- Includes the name and phone number of a contact person to be notified regarding contractual issues.

2. Proponent Experience

This section must specifically highlight recent and relevant project experience that demonstrates the company's suitability to undertake the scope of work. This section should be no more than two (2) pages in length. A minimum of three references relating to relevant deliveries of similar units, delivered in the last eighteen (18) months, must be provided, including contact names and details for the deliveries.

3. Supplier Team & Experience

To be identified at the start-up meeting; items to be identified at this meeting shall be as follows:

The proposal shall clearly identify the proposed supply and delivery lead/manager and team members to perform the work and indicate the level of involvement of each team member in the proposed work. This section should address team structure, organization, and availability, and also demonstrate how the team members identified have the requisite experience to perform the work.

Project management practices shall be in accordance with well-established practice and standards, accepted and recognized by project management associations and the industry.

4. Warranties and Guarantees

The Proponent warrants and guarantees that the Work is free from all defects arising from faulty design or application in any part of the Work that has been provided by the Proponent. All other pertinent warranty information included within the specifications found in Appendix B, shall be included and transferred to the Town.

The proponent will ensure that all warranties received from product manufacturer are transferred to the Town.

5. Work Schedule

Proponent to provide a timeframe for completion of the complete supply and delivery identified as number of weeks to completion. This information is to be shown on the pricing form. The number of weeks, from date of RFP closure to preferred supply and delivery date is approximately 9 weeks.

6. Progress of the Work

The Proponent shall use sufficient labour, equipment, and materials to properly perform the Work in accordance with the contract by the completion dates specified and, on request, shall provide details about the plans and method of performing the Work. If the Consultant considers the rate of progress of the Work to be insufficient to complete the Work by the completion dates, the Proponent shall expedite the progress of the Work.

4. REQUEST FOR PROPOSAL PROCESS

1. Review and Interpretation of Proposals

Each Proponent will be solely responsible for examining all the RFP documents, including any Addenda and issues during the RFP period and for independently informing itself with respect to all information contained therein, and all conditions that may in any way affect the Proposal, before the Proposal is submitted.

Each Proponent will review all RFP documents and will promptly report and request clarification of any discrepancy, deficiency, ambiguity, error, inconsistency, or omission contained therein. Any such request must be submitted to the Town's Representative in writing, electronically or otherwise, no later

than 2:00 PM, five (5) days before the closing date.

Where such requests result in a change or a clarification to the requirements of the RFP, the Town will prepare and issue an Addendum to this RFP.

2. Not a Tender Call

This RFP is not a Tender call and the submission of any response to this RFP does not create a tender process. This RFP is not an invitation for an offer to contract, and it is not an offer to contract made by the Town.

3. Addenda

The Town reserves the right to modify the terms of the RFP at any time at its sole discretion. Written addenda issued by the Town will be the only means of varying, clarifying or otherwise changing any of the information contained in this RFP. The Town reserves the right to issue Addenda up to the RFP Closing Date and Time. The date set for submitting Proposals may be changed if, in the Town's opinion, more time is necessary to enable Proponents to revise their Proposals. Addenda will state any changes to the RFP Closing Date and Time. It is the Proponent's responsibility to ensure that they have all modifications. Proposals must acknowledge receipt of all addenda.

4. Preparation of Proposals

All proponents shall be solely liable for all costs incurred in the preparation of proposals in response to this RFP. This Request for Proposals does not commit the Town to award a contract, to pay any costs incurred in the preparation of a proposal or to contract for the goods and/or services offered.

The Proposal submitted by each Proponent will be signed by an Authorized Representative of the Proponent. If the Proponent is a corporation, in addition to signature, affix corporate seal (if available). If a natural person makes the proposal, the Proponent must sign it with their name typed or clearly printed below the signature. If the Proponent is carrying on business under a firm name and NOT incorporated, the members of the firm must sign below the firm name and their names must be typed or clearly printed below the signature.

5. Proposal Submissions

The Proposal must be labelled with the Proponent's name and RFP title, and it must include a cover letter and Appendix A, Proposal Summary, signed by a person authorized to legally bind the Proponent to the statements made in the Response to this RFP.

The Proponent may submit a Proposal either by email or in a hard copy, as follows:

(a) Email

If the Proponent chooses to submit by email, the Proponent must submit the Proposal electronically in a single PDF file to the Town by email at: procurement@pcsp.ca on or before the Closing Date and Time.

PDF emailed Proposals are preferred, and the Town will confirm receipt of emails. Note that the maximum file size the Town can receive is 10Mb. If sending large email attachments,

Proponents should phone to confirm receipt. A Proponent bears all risk that the Town's equipment functions properly so that the Town receives the Proposal ontime.

(b) Hard Copy

If the Proponent chooses NOT to submit by email, the Proponent shall submit two (2) copies of the proposal which must be delivered to:

Town of Portugal Cove-St. Philip's
Attention: Mr. Fred Hollet, Fire Chief
1119 Thorburn Road, NL
A1M 1T6

On, or before, the Closing Date and Time.

6. Modification of Bids

Modifications to bids already submitted will only be allowed if submitted in writing prior to the Closing Date and Time unless requested by the Town for purposes of clarification.

7. Withdrawal

Proposals may be withdrawn by written notice provided such notice of withdrawal is received prior to the closing date and time.

8. Incomplete Proposals

No proposal shall be altered, amended, or withdrawn after the closing date and time of the RFP. Negligence on the part of the Proponent in preparing the Proposal confers no right for withdrawal of the Proposal after it has been opened.

While the Town has made considerable efforts to ensure an accurate representation of information in each respective RFP, the information contained in the RFP is supplied solely as a guideline for the Proponent and is not necessarily comprehensive or exhaustive. Nothing in a Town RFP is intended to relieve the Proponent from forming their own opinions and conclusions in respect of the matters addressed in the RFP.

The Town expressly reserves the right to reject or accept any Proposal whether or not completed properly and whether or not it contains all required information. Without prejudice to this right, the Town may request clarification where, in the opinion of the Town, the Proponent's intent is unclear.

9. Opening of Proposals

Proposals may be opened by the Town at any time after the submission deadline. Anyone is welcome to join the Zoom opening by using this link https://us02web.zoom.us/j/7098958000 with Meeting ID: 7098958000. All proposals satisfying the requirements of this Request for Proposals will be evaluated to establish which of the offers best fulfills the needs of the Town and this assignment.

In the event that only one proposal is received, the Town reserves the right to return the proposal unopened.

10. Acceptance of Proposals & Contract

Each Proposal will be valid and irrevocable for a period of sixty (60) days from the Closing Date and Time for receipt of Proposals.

By submission of a proposal, the proponent agrees that should its proposal be successful the proponent will enter into a Contract with the Town of Portugal Cove-St. Philip's. The RFP, accepted submission, and Town contract documents represent the entire Agreement between the Town and the Successful Proponent and supersede all prior negotiations, representations, or agreements either written or oral. The Contract documents may be amended only by written instrument agreed and executed by the Successful Proponent and the Town.

The acceptance of the proposal by the Town shall be made only by notice in writing to the Successful Proponent. Such acceptance shall bind the Successful Proponent to execute in a manner satisfactory to the Town.

The Town shall not be obligated in any manner to any Proponent whatsoever until a written agreement has been duly executed relating to an approved Proposal.

11. Rejection of Proposals

The Town reserves the right to accept or reject, at the Town's sole discretion, any or all proposals received as a result of this request. The Town also has the right to negotiate with all qualified officers or to cancel this Request for Proposal or accept the proposal that is deemed most advantageous to the Town if it is in the best interests of the Town to do so. The Town reserves the right to award this Proposal in whole or part and retains sole discretion not to award at all. The decision of the Town shall be final.

5. PROPOSAL EVALUATION AND SELECTION CRITERIA

The following criteria, but not restricted thereto, will be used to evaluate responses. Evaluation of Proposals will be by an Evaluation Committee formed by the Town.

CATEGORY	DETAILS	(A) Score		Total Score
Production Capabilities & Qualifications	Delivery Time	10		
	Reference Deliveries	10		
Compliance & Specifications	Cab & Chassis	25		
	Fire Protection Package	25		
	Warranty & Support	5		
	Local Service Arrangements	5		
Costs	Price Package	20		

Cost : $Points\ Awarded = \frac{Lowest\ Proposal\ Cost}{Proposal\ Cost\ Being\ Evaluated} \times Total\ Points\ Available\ for\ Cost$

NOTE: A score of ZERO (0) on ANY of the Rated Criteria items MAY result in disqualification of a Submission. The highest scoring or any submission will not necessarily be accepted.

If all delivery timelines exceed the Towns preferred delivery date, as set forth in this RFP, the proposal with the earliest delivery time shall be awarded full points, with proportional points being awarded to subsequent proposals.

Preference will be given to local proposals of acceptable, equivalent quality and readily available services in the event of a tie.

6. GENERAL INSTRUCTIONS

1. Instructions to Proponents

The following terms will apply to this RFP and to any subsequent Contract. Submission of a proposal in response to this RFP indicates acceptance of all the following terms:

a. The law applicable to this RFP shall be the law in effect in the Province of Newfoundland and Labrador. Except for an appeal from a Newfoundland and Labrador Court to the Supreme Court of Canada, no action in respect to this RFP shall be brought or maintained in any court other than in a court of the appropriate jurisdiction of the Province of Newfoundland and Labrador.

b. In carrying out its obligations hereunder, the Proponent shall familiarize itself and comply with all applicable laws, bylaws, regulations, ordinances, codes, specifications, and requirements of all regulatory authorities, and shall obtain all necessary licenses, permits and registrations as may be required by law. Where there are two or more laws, ordinances, rules, regulations, or codes applicable to the Services, the more restrictive shall apply.

c. Applicability of law: All references in the RFP to statutes and regulations thereto and Town bylaws shall be deemed to be the most recent amendments thereto or Replacements thereof.

d. Copyright: All designs, drawings, concept drawings, specifications, digital, hard copies, web pages, internet pages, maps and plans commissioned by the Town of Portugal Cove-St. Philip's, shall remain the property of the Town of Portugal Cove- St. Philip's.

e. In the case of any inconsistency or conflict between the provisions of the RFP, the provisions of such documents and addenda thereto will take precedence in governing in the following order: (1) Addenda; (2) RFP; (3) Special Conditions; (4) Drawings; (5) all other documents.

f. Headings are for convenience only: Headings and titles in the RFP are for convenience only and are not explanatory of the clauses with which they appear.

g. Town policy as well as applicable Federal and Provincial laws govern methods of payment.

h. The RFP, accepted submission, and Town contract documents represent the entire Agreement between the Town and the Successful Proponent and supersede all prior negotiations, representations, or agreements either written or oral. The contract documents may be amended only by written instrument agreed and executed by the Successful Proponent and the Town.

2. Proponent's Responsibility

It is the responsibility of the Proponent to ensure that the terms of reference contained herein are fully understood and to obtain any further information required for this proposal call at their own initiative. The Town reserves the Right to share, with all Proponents, all questions and answers related to this proposal call.

3. No Obligation to Proceed

Though the Town fully intends at this time to proceed through the RFP, in order to select the services, the Town is under no obligation to proceed to the Contract, or any other stage. The receipt by the Town of any information (including submissions, ideas, plans, drawings, models, or other materials communicated or exhibited by any intended Proponent, or on its behalf) shall not impose any obligations on the Town. There is no guarantee by the Town, its officers, employers, or Managers, that the process initiated by the issuance of this RFP will continue, or that this RFP process or any RFP process will result in a contract with the Town for the purchase of goods or services.

4. No Collusion

Except as otherwise specified or as arising by reason of the provision of the Contract Documents, no person whether natural, or body corporate, other than the Proponent has or will have any interest or share in this proposal or in the proposed contract which may be completed in respect thereof. There is no collusion or arrangement between the Proponent and any other actual or prospective Proponents in connection with proposals submitted for this Request for Proposal and the Proponent has no knowledge of the contents of other proposals and has made no comparison of figures or agreement or arrangement, express or implied, with any other party in connection with the making of the proposal.

5. Town Responsibility

The Town will provide the Successful Proponent with Town documents such as existing bylaws or plans that may be required to complete the scope of work and achieve the goals and objectives laid out herein.

6. Conflict of Interest

At no time during the Proposal stage, evaluation stage, after award, or during the preparation of the Scope of Work shall a Town employee or Council Member or appointed Authority, Committees or Commissions be in any way connected with the Proponent. Proponents are to include, with their initial Proposal, and at any subsequent time where requested to do so by the Town, full details of any employee, person, firm or corporation that could be considered at conflict with the Town.

7. Confidentiality

The Town will endeavor to keep all proposals confidential. The material contained in the Successful Proposal will be incorporated in a contract and information which is considered sensitive and/or proprietary shall be identified as such by the Proponent. Technical or commercial information included in the Town contract shall not be released if the Town deems such releases inappropriate, subject to the Access to Information and Protection of Privacy Act.

8. Limitation of Damages

The Proponent, by submitting a Proposal agrees that it will not claim damages, for whatever reason, relating to the RFP, by reason of submitting a Proposal, in respect of the competitive process, or in respect of any breach of any implied duty of fairness, including but not limited to any costs incurred by the Proponent in preparing its Proposal. The Proponent, by submitting a Proposal, waives any and all such claims.

9. Ownership of Documents

All documents and materials submitted in response to this RFP shall become the property of the Town.

10. Gifts and Donations

Proponents will not offer entertainment, gifts, gratuities, discounts, or special services, regardless of value, to any employee of the Town. The Successful Proponent shall report to the Chief Administrative Officer any attempt by Town employees to obtain such favours.

11. Insurance & WCB

The Successful Proponent must indemnify the Town and their employees, officers, directors and agents (each an "Indemnified Person") against all claims, actions, proceedings, damages, losses, costs, expenses and liabilities of any kind incurred that an Indemnified Person may sustain, incur, suffer or be put to, either before or after this Contract ends, which are based upon, arise out of or occur, directly or indirectly, by reason of, any act or omission by you or by any of your agents, employees, officers, directors, or Successful Proponents in providing the Services, except liability arising out of any independent negligent act by the Town.

The Successful Proponent accepts responsibility for the acts and omissions of all Subcontractors it may engage in rendering the Service on the Project.

The Proponent shall obtain and continuously hold for the term of the Contract, insurance coverage with the Town listed as "Additional Named Insured" the minimum limits of not less than those stated below:

- Commercial General Liability – not less than $2,000,000 per occurrence
- Vehicle Third Party Liability – not less than $2,000,000 per occurrence
- Error & Omissions Insurance – not less than $500,000 per occurrence

The Proponent must comply with all applicable laws and bylaws within the jurisdiction of the work.

12. Negotiation Delay

If a written Contract cannot be negotiated within thirty (30) days of notification of the Successful Proponent, the Town may, at its sole discretion at any time thereafter, terminate negotiations with that proponent and either negotiate a Contract with the next qualified proponent or choose to terminate the RFP process and not enter into a Contract with any of the Proponents.

13. Execution of Contract

If the offer contained in this proposal is accepted, upon being advised that the Contract Documents are available, the Proponent will obtain the Contract Documents and Drawings, if any, and will execute and identify the documents and drawings in a form and manner acceptable to the Town, and will deliver the same within Thirty (30) days from the time when the same are available, delivered or mailed to the Proponent.

14. Failure or Default of Proponent

If the Proponent for any reason whatsoever fails or defaults in respect of any matter or thing which is an obligation of the Proponent under the terms of this proposal, the Town at its option may consider the Proponent has abandoned the offer made or the contract if the offer has been accepted, whereupon the acceptance, if any, of the Town shall be null and void and the Town shall be free to select an alternate solution of its choosing.

If the Proponent is a corporation, in addition to signature, affix corporate seal (if available). If a natural person makes the proposal, the Proponent must sign it with his/her name typed or clearly printed below the signature. If the Proponent is carrying on business under a firm name and NOT incorporated, the members of the firm must sign below the firm name and their names must be typed or clearly printed below the signature.

7. ADDITIONAL TERMS

1. Sub-Contracting

Using a Subcontractor (who must be clearly identified in the proposal) is acceptable. This includes a joint submission by two Proponents having no formal corporate links. However, in this case, one of these proponents must be prepared to take overall responsibility for successful interconnection of the two product or service lines and this must be defined in the proposal.

Subcontracting to any firm or individual, whose current or past corporate or other interests may, in the Town's opinion, give rise to a conflict of interest in connection with this project will not be permitted. This includes, but is not limited to, any firm or individual involved in the preparation of this proposal.

2. Liability for Errors

While the Town has used considerable efforts to ensure an accurate representation of information in this RFP, the information contained in this RFP is supplied solely as a guideline for Proponents. The information is not guaranteed or warranted to be accurate by the Town, nor is it necessarily comprehensive or exhaustive. Nothing in this RFP is intended to relieve Proponents from forming their own opinions and conclusions with respect to the matters addressed in this RFP.

3. Agreement with Terms

By submitting a proposal, the Proponent agrees to all the terms and conditions of this RFP. Proponents who have obtained the RFP electronically must not alter any portion of the document, with the exception of adding the information requested. To do otherwise will invalidate the proposal.

4. Use of Request for Proposal

This document or any portion thereof, may not be used for any purpose other than the submission of proposals.

8. SPECIAL CONDITIONS

a. A qualified proposal is one which meets the needs and specifications of the Town, the terms and conditions contained in the RFP. The preferred proposal is a qualified proposal offering the best value, as determined by the Town.

b. The Town will decide whether a proposal is qualified by evaluating all of the proposals based on the needs of the Town, specifications, terms and conditions and price. The Town will examine all proposals and recommend which proposal is in the Town's best interest.

c. A proposal which is unqualified is one that exceeds the cost expectations of the Town and/or does not meet the terms and conditions contained in the RFP and/or do not meet the needs and specifications of the Town. The Town reserves the right to reject any or all unqualified proposals.

d. The Town reserves the right to cancel this RFP at any time.

e. The Successful Proponent, herein named the Consultant, shall guarantee that his proposal will meet the needs of the Town and that any or all item(s) supplied and/or service(s) rendered shall be correct. If the item(s) supplied by the Consultant and/or the service(s) rendered by it are in any way incorrect or unsuitable, all correction costs shall be borne solely by the Consultant.

f. Cancellation Clause - The Town reserves the right to cancel the Contract Agreement for goods and/or services as outlined in this RFP, at any time, by providing 30 days' written notice to the Vendor.

g. Protection of Town Against Patent Claim - The Successful Proponent shall hold and save the Town, its officers, agents, servants, and employees, harmless from liability of any nature or kind, including costs and expenses for or on account of any copyrighted or un-copyrighted composition, secret or other process, patented or unpatented invention, articles or appliance manufactured or used in the performance of this contract, and/or used or to be used by the Town before or after completion of the work unless otherwise stipulated in this contract, and if the Successful Proponent shall fail to save harmless the Town, its officers, agents, servants, or employees in manner aforesaid, any money collected from the Town, its officers, agents, servants, or employees by reason of such failure shall be charged to the Successful Proponent.

9. ADDITIONAL NOTES

1. COVID – 19

The Town has changed some of the operating practices to ensure safety of staff and public. During this time electronic submissions will be accepted for this process, as well as a digital opening. Upon awarding of the contract, the proponent will have to ensure that the public health guidelines on COVID-19 are meet for work completion.

We know this is a challenging time and we thank you for your co-operation and understanding.

2. PROVINCIAL SUPPLIER ALLOWANCE

In the evaluation of submissions, the Town must apply a ten per cent (10%) reduction to the bid price of a provincial supplier prior to the evaluation based on the thresholds for the Canadian Free Trade Agreement (CFTA). The 10% reduction only needs to be applied when the evaluation includes suppliers that are not provincial suppliers.

The submission with the lowest price, following the application of the provincial supplier reduction allowance if required, and that meets all the requirements will ultimately be determined to be the preferred supplier and be awarded a contract if an award is made.

3. ATIPPA

The financial value of a contract resulting from this procurement process will be publicly released as part of the award notification process. This procurement process is subject to the Access to Information and Protection of Privacy Act, 2015. The proponent agrees that any specific information in its submission that may qualify for an exemption from disclosure under subsection 39(1) of the Access to Information and Protection of Privacy Act, 2015 has been identified. If no specific information has been identified it is assumed that, in the opinion of the proponent, there is no specific information that qualifies for an exemption under subsection 39(1) of the Access to Information and Protection of Privacy Act, 2015.

By submitting a Proposal, the Proponent represents and warrants to the Owner that the Proponent has complied with applicable Laws, including by obtaining from each person any required consents and authorizations to the collection of information relating to such individual and to the submission of such information to the Owner, and the use, distribution and disclosure of such information as part of the Proposal for the purposes of, or in connection with, this RFP and the Competitive Selection Process.

For further clarification on Access to Information and Protection of Privacy disclosure requirements for Public Procurement, see the guidance document from the Office of the Information and Privacy Commissioner at the following link:
http://www.oipc.nl.ca/pdfs/PublicProcurementActAndATIPPA2015.pdf

APPENDIX "A"

Town of Portugal Cove St. Philips

INDIVIDUAL OFFICIAL OFFER FORM
An submission price shall be submitted on this **Individual Official Submission Form.** The form must be completed in its entirety.

SUPPLIER _____

Mailing Address _____
_____

Telephone Number (Area Code) _____ Fax Number (Area Code) _____

BIDDING ON

Municipality _____
Equipment _____
Specification (proposal) Number_____

PROPOSAL SUBMISSION

Supplier's Bid $_____
Harmonized Sales Tax (H.S.T.) Sub-Total _____
Total Bid _____

All above Taxes are applicable to all Fire Protection Equipment.

PAYMENT-TERMS AND CONDITIONS - FULL PAYMENT ON DELIVERY
This is to certify that the fire protection equipment supplied under this RFP shall be in accordance with that specified in the Specification.

_____
*SIGNATURE

Dated at _____

Province of _____

This _____ day of _____20___ _____
Type/Print Name and Title

Number of weeks to delivery:____

*To be signed by person authorized to sign offers on behalf of the Supplier.

APPENDIX "B"

SPECIFICATIONS

	SPECIFICATIONS	YES	NO	DETAILS
1.1	**UNIT MINIMUM REQUIREMENTS**			
1.1.1	Unit shall be listed and labelled in accordance with CAN/ULC S515 - 13; Section 9, Mobile Water Supply firefighting apparatus. Minor equipment as indicated in Section 9 shall be provided except for the following: hose, nozzles, ladders, SCBA and SCBA cylinders. These items shall be provided and installed by the fire department upon receipt of unit and prior to placement in service.			
1.1.2	Unit MUST be manufactured in Canada, by a Canadian fire apparatus manufacturer.			
1.2	**FIRE APARATUS BODY**			
1.2.1	Unit may be dry side or wet side configuration.			
1.2.2	Right side of unit shall have a ZICO, electric swing down porta-tank storage.			
1.3	**SERVICE REQUIREMENTS**			
1.3.1	The bidder shall provide a "24 Hour", "7-Day Per Week" emergency parts and service toll free telephone number. This phone number must be listed on a separate statement included in the bid package, along with the contact's name, business name, address, and phone number of the local service agency, which will service the vehicle after being placed into service. (Mandatory Requirement)			
1.3.2	The service agency shall be capable to perform all required service work and shall also have at their disposal the ability to have any required subcontracting work, such as engine, transmission, etc. work performed on behalf of the apparatus manufacturer.			
1.4	**ENGINEERING DRAWINGS**			
1.4.1	Engineering drawings shall be submitted to the purchaser with the submission to the town.			

	SPECIFICATIONS	YES	NO	DETAILS
1.4.2	This drawing shall show at a minimum the front, left, right and rear views of the vehicle, as it will look at the time of completion.			
1.4.3	A copy of this drawing shall be signed and returned to the apparatus manufacturer and become part of the vehicle contract.			
1.5	**BODY MANUAL - ELECTRONIC**			
1.5.1	Two (2) digitized manual(s) shall be provided on operation of the complete apparatus. The manual(s) shall include a troubleshooting guide complete with recommended daily, weekly, and annual maintenance procedures.			
1.6	**WEIGHT AND BALANCE CALCULATION**			
1.6.1	The apparatus, prior to acceptance will be required to meet the vehicle stability of the applicable NFPA or ULC automotive fire apparatus standard.			
1.6.2	A calculated center of gravity calculation shall be provided as part of the line drawing supplied with the quote request to ensure the apparatus meets these requirements. The calculated center of gravity shall be no higher than 80 percent of the rear track axle width.			
1.7	**TESTING AND CERTIFICATION**			
1.7.1	The completed vehicle shall be tested and labeled to CAN/ULC-S515-13 by an independent third-party certification organization.			
1.7.2	The third-party organization shall be accredited for testing systems on fire apparatus in accordance with ISO/IEC 17020 or ISO/IEC Guide 65.			
1.7.3	The certification organization shall not be owned or controlled by manufacturers or vendors of the apparatus being tested.			
1.7.4	The certification organization shall be primarily engaged in certification work and shall not have a monetary interest in the product’s ultimate profitability.			

1.7.5	The certification organization shall witness all test and shall refuse to certify any test result for a system if the components do not pass the testing required by this system.			
1.7.6	There shall be no conditional, temporary, or partial certification of test results.			
1.7.7	Appropriate forms of data sheets shall be provided and used during testing.			
1.7.8	Manufacturer's certification **is not** acceptable. **(Mandatory Requirement)**			
1.7.9	The manufacturer shall be certified to ISO 9001			
1.7.10	The completed vehicle shall undergo, prior to delivery, a two (2) hour road test with all applicable emergency equipment activated. A certification shall be provided to the purchaser outlining the results of this road test.			
1.8	**CARRYING CAPACITY PLATE**			
1.8.1	A warning label shall be provided in the cab within sight of the driver stating the seating capacity of the cab/crew cab.			
1.8.2	Another warning label shall be provided in the cab within sight of the driver that the occupants must be seated and belted.			
1.9	**VEHICLE DIMENSION PLATE**			
1.9.1	A warning label shall be provided in the cab within sight of the driver stating the following apparatus dimensions:			
1.9.2	Height and length in standard and metric measurements			
1.9.3	Gross vehicle weight rating in pounds and kilograms			
1.10	**DIELECTRIC VOLTAGE TESTING**			
1.10.1	The wiring and permanently connected devices and equipment shall be subject to a dielectric voltage withstand test of 900 volts for one minute. The testing shall be performed after all body work has been completed. The electric polarity of all permanently wired equipment, cord reels, and receptacles shall be tested to verify that wiring connections have been properly made.			

1.11	**FLUID CAPACITY AND TYPE LABEL**			
1.11.1	A permanent label shall be provided and shall state the type and quantity of the following fluids used in the vehicle:			
1.11.2	Engine Oil			
1.11.3	Engine Coolant			
1.11.4	Chassis Transmission Fluid			
1.11.5	Drive Axle Fluid			
1.11.6	Pump Gear Case			
1.11.7	Primer Lubricant (If Applicable)			
2.1	**CHASSIS SPECIFICATIONS**			
2.1.1	A two door chassis shall be supplied as per the attached specifications			
2.1.2	Model year 2026 or 2027			
2.1.3	Axle Configuration 4X2			
2.1.4	Application: Tank (Emergency)			
2.1.5	MISSION**:** Requested GVWR minimum: 44500. Calc. GVWR: 44500. Calc. GCWR: 80000 Calc. Start / Grade Ability: 27.46% / 3.36% @ 55 MPH Calc. Geared Speed: 71.3 MPH			
2.1.6	DIMENSION: Wheelbase: 205.00, CA: 137.90, Axle to Frame: 43.00 approximately			
2.1.7	ENGINE, DIESEL: {Cummins L9 360} EPA 2024, 360HP @ 2200 RPM, 1150 lb-ft Torque @ 1200 RPM, 2200 RPM, minimum Governed Speed, 359 Peak HP (Max)			
2.1.8	TRANSMISSION, AUTOMATIC: {Allison 3000 EVS} 6th Generation Controls, Close Ratio, 6-Speed with Double Overdrive, with PTO Provision, Less Retarder, Includes Oil Level Sensor			
2.1.9	CLUTCH: Omit Item (Clutch & Control)			
2.1.10	AXLE, FRONT NON-DRIVING: {Meritor MFS-16-143A} Wide Track, I-Beam Type, 14,500-lb Capacity, minimum			
2.1.11	CAB: Conventional, Day Cab			
2.1.12	TIRE, FRONT: (2) 385/65R22.5 Load Range J XZY-3 (MICHELIN), 491 rev/mile, 65 MPH, All-Position			
2.1.13	TIRE, REAR: (4) 315/80R22.5 Load Range L XDN2 (MICHELIN), 486 rev/mile, 75 MPH, Drive			

2.1.14	SUSPENSION, REAR, SINGLE: 30,000-lb Capacity, Vari-Rate Springs, with 4500-lb Capacity Auxiliary Rubber Springs, minimum			
2.1.15	PAINT: Cab schematic 100WL, or equal Location 1: 2303, Red (Std) Chassis schematic N/A			
2.1.16	Axle Configuration 1ANA AXLE CONFIGURATION 4x2			
3.1	**ENGINE**			
3.1.1	12EYZ ENGINE, DIESEL {Cummins L9 360} EPA 2024, 360HP @ 2200 RPM, 1150 lb-ft Torque @ 1200 RPM, 2200, or equal			
3.1.2	RPM Governed Speed, 359 Peak HP (Max), minimum			
3.1.3	12VHR EMISSION, CALENDAR YEAR {Cummins L9} EPA, OBD and GHG Certified for Calendar Year 2021			
3.1.4	12XCS CARB EMISSION WARR COMPLIANCE Does Not Comply with CARB Emission Warranty			
3.1.5	12WZE CARB IDLE COMPLIANCE Does Not Comply with California Clean Air Idle Regulations			
3.1.6	12WVH EPA IDLE COMPLIANCE Low NOx Idle Engine, Complies with EPA Clean Air Regulations; Includes "Certified Clean Idle" Decal on Door			
3.1.7	10UAV VEHICLE REGISTRATION IDENTITY ID for Non-CARB Omnibus and/or Non-ACT Adopting State or Exempt Vehicle. Not for use on vehicles registering in CA/MA /OR/NJ/NY/WA. Contains non-mitigated legacy engine & cannot be registered in CA unless exempt. You may be held liable under state law for failure to properly register vehicle.			
3.1.8	12UWZ RADIATOR Aluminum, Cross Flow, Front to Back System, 1228 SqIn, with 1167 SqIn Charge Air Cooler			
3.1.9	Includes In-Tank Oil Cooler Includes: DEAERATION SYSTEM with Surge Tank HOSE CLAMPS, RADIATOR HOSES Gates Shrink Band Type; Thermoplastic Coolant Hose Clamps RADIATOR HOSES Premium, Rubber			
3.1.10	12THT FAN DRIVE {Horton Drivemaster} Two-Speed Type, Direct Drive, with Residual Torque Device for Disengaged Fan Speed Includes: FAN Nylon 12VBC AIR CLEANER Single Element 12703 ANTI-FREEZE Red, Extended Life Coolant; To -40 Degrees F/ -40 Degrees C, Freeze Protection			

3.1.11	12849 BLOCK HEATER, ENGINE 120V/1000W, for Cummins ISB/B6.7/ISL/L9 Engines Includes: BLOCK HEATER SOCKET Receptacle Type; Mounted below Drivers Door 12XBM ENGINE CONTROL, REMOTE MOUNTED Provision for; Includes Wiring for Body Builder Installation of PTO Controls and Starter Lockout, with Ignition Switch Control, for Cummins B6.7 and L9 Engines 12VXT THROTTLE, HAND CONTROL Engine Speed Control; Electronic, Stationary, Variable Speed; Mounted on Steering Wheel			
3.2	**TRANSMISSION**			
3.2.1	13BCU TRANSMISSION, AUTOMATIC {Allison 3000 EVS} 6th Generation Controls, Close Ratio, 6-Speed with Double Overdrive, with PTO Provision, Less Retarder, Includes Oil Level Sensor			
3.2.2	13WUE ALLISON SPARE INPUT/OUTPUT for Emergency Vehicle Series (EVS), Fire/Pumper, Tank, Aerial/Ladder, Package Number 198			
3.2.3	13XAL PTO LOCATION Customer Intends to Install PTO at Left Side of Transmission			
3.2.4	13WYU SHIFT CONTROL PARAMETERS {Allison} 3000 or 4000 Series Transmissions, Performance Programming			
3.2.5	13WLP TRANSMISSION OIL Synthetic; 29 thru 42 Pints			
3.2.6	13WET TRANSMISSION SHIFT CONTROL Column Mounted Stalk Shifter, Not for Use with Allison 1000 & 2000 Series Transmission			
3.3	**CLUTCH**			
3.3.1	11001 CLUTCH Omit Item (Clutch & Control)			
3.4	**REAR AXLES, SUSPENSIONS**			
3.4.1	14ASD AXLE, REAR, SINGLE {Meritor RS-30-185} Single Reduction, 30,000-lb Capacity, Driver Controlled Locking			
3.4.2	Differential, T Wheel Ends. Gear Ratio: 5.86			
3.4.3	14VAJ SUSPENSION, REAR, SINGLE 30,000-lb Capacity, Vari-Rate Springs, with 4500-lb Capacity Auxiliary Rubber Springs			
3.5	**FRONT AXLES**			
3.5.1	2ARU AXLE, FRONT NON-DRIVING {Meritor MFS-16-143A} Wide Track, I-Beam Type, 14,500-lb Capacity			
3.6	**FRONT SUSPENSIONS**			

3.6.1	3ADE SUSPENSION, FRONT, SPRING Parabolic Taper Leaf, Shackle Type, 14,500-lb Capacity, with Shock Absorbers			
3.7	**CABS, COWLS, BODIES**			
3.7.1	16030 CAB Conventional, Day Cab			
3.7.2	16XTK ACCESS, CAB Bright Aluminum, Driver & Passenger Sides, Two Steps per Door, for use with Day Cab or Extended Cab			
3.7.3	16BAM AIR CONDITIONER with Integral Heater and Defroster			
3.7.4	16VKB CAB INTERIOR TRIM Classic, for Day Cab Includes: CONSOLE, OVERHEAD Molded Plastic with Dual Storage Pockets, Retainer Nets and CB Radio Pocket; Located Above Driver and Passenger DOME LIGHT, CAB Door Activated and Push On-Off at Light Lens, Timed Theater Dimming, Integral to Overhead Console, Center Mounted SUN VISOR (2) Padded Vinyl; 2 Moveable (Front-to-Side) Primary Visors, Driver Side with Toll Ticket strap.			
3.7.5	16XCW CAB, INTERIOR TRIM, CLOSEOUT Under IP, Driver Side			
3.7.6	16WSK CAB REAR SUSPENSION Air Bag Type			
3.7.7	16WEE CAB SOUND INSULATION Includes Dash Insulator and Engine Cover Insulator			
3.7.8	16GDD GAUGE CLUSTER Base Level; English with Metric Speedometer and Tachometer, for Air Brake Chassis, Includes Engine Coolant Temperature, Primary and Secondary Air Pressure, Fuel and DEF Gauges, Oil Pressure Gauge, Includes 3 Inch Monochromatic Text Display			
3.7.9	16HHE GAUGE, AIR CLEANER RESTRICTION {Filter-Minder} Mounted in Instrument Panel			
3.7.10	16HGH GAUGE, OIL TEMP, AUTO TRANS for Allison Transmission			
3.7.11	16SDC GRAB HANDLE, EXTERIOR (2) Chrome, Towel Bar Type, with Anti-Slip Rubber Inserts, for Cab Entry Mounted Left and Right Side at B-Pillar			
3.7.12	16GHU GRAB HANDLE, CAB INTERIOR (2) Safety Yellow			
3.7.13	16XJP INSTRUMENT PANEL Wing Panel			
3..14	16HKT IP CLUSTER DISPLAY On Board Diagnostics Display of Fault Codes in Gauge Cluster			
3.7.15	16SNV MIRRORS (2) Aero Pedestal, Power Adjust, Heated, Turn Signals, Bright Heads, Black Arms, 6.5" x 14" Flat Glass, Includes 6.5" x 6" Convex Mirrors, for 102" Load Width			
3.7.16	16VLV MONITOR, TIRE PRESSURE Omit			

3.7.17	16VBZ SEAT BELT All Red; 1 to 3			
3.7.18	16JJE SEAT, DRIVER {National 2000} NFPA Compliant, Air Suspension, High Back with Integral Headrest, Vinyl, Isolator, 1 Chamber Lumbar, 2 Position Front Cushion Adjust, -3 to +14 Degree Back Angle Adjust			
3.7.19	16PPG SEAT, PASSENGER {National 2000} NFPA Compliant, Air Suspension, High Back with Integral Headrest, Vinyl, Isolator, 1 Chamber Lumbar, 2 Position Front Cushion Adjustment, -3 to +14 Degree Back Angle Adjust			
3.7.20	16HCK SEATBELT WARNING PREWIRE Includes Seat Belt Switches and Seat Sensors for all Belted Positions in the Cab and a Harness Routed to the Center of the Dash for the Aftermarket Installation of the Data Recorder and Seatbelt Indicator Systems, for 1 to 3 Seat Belts			
3.7.21	16WJU WINDOW, POWER (2) and Power Door Locks, Left and Right Doors, Includes Express Down Feature			
3.8	**FRAMES**			
3.8.1	1CAG FRAME RAILS Heat Treated Alloy Steel (120,000 PSI Yield); 10.250" x 3.610" x 0.375" (260.4mm x 91.7mm x 9.5mm); 456.0" (11582mm) Maximum OAL			
3.8.2	1MDS BUMPER, FRONT Contoured, Stainless Steel, Polished, Includes Mounting Holes for 1 CPI Bumper Mounted Siren			
3.8.3	1MEJ FRAME DIMPLE Dimple on Left and Right Top Flange of Frame Rail to Reference Rear Axle Centerline			
3.8.4	1570 TOW HOOK, FRONT (2) Frame Mounted			
3.8.5	1LEH LICENSE PLATE HOLDER Single Plate, Swing Type, Mounted Below Front Bumper			
3.8.6	1WGS WHEELBASE RANGE 189" (480cm) Through and Including 256" (650cm)			
3.9	**BRAKES**			
3.9.1	4091 BRAKE SYSTEM, AIR Dual System for Straight Truck Applications Includes: BRAKE LINES Color and Size Coded Nylon DRAIN VALVE Twist-Type GAUGE, AIR PRESSURE (2) Air 1 and Air 2 Gauges; Located in Instrument Cluster PARKING BRAKE CONTROL Yellow Knob, Located on Instrument Panel PARKING BRAKE VALVE For Truck QUICK RELEASE VALVE On Rear Axle for Spring Brake Release: 1 for 4x2, 2 for 6x4 SPRING BRAKE MODULATOR VALVE R-7 for 4x2, SR-7 with relay valve for 6x4/8x6			
3.9.2	4AZS AIR BRAKE ABS {Bendix AntiLock Brake System} 4-Channel (4 Sensor/4 Modulator) Electronic Stability Program, with Automatic Traction Control			

3.9.3	4GBM BRAKE, PARKING Manual Push-Pull Pneumatic Parking Brake			
3.9.4	4XDT BRAKES, FRONT {Meritor 16.5X6 Q-PLUS CAST} Air S-Cam Type, Cast Spider, Fabricated Shoe, Double			
3.9.5	Anchor Pin, Size 16.5" X 6", 23,000-lb Capacity			
3.9.6	4EXV BRAKE CHAMBERS, FRONT AXLE {Bendix} 24 SqIn			
3.9.7	4LAA SLACK ADJUSTERS, FRONT {Haldex} Automatic			
3.9.8	4WBX DUST SHIELDS, FRONT BRAKE for Air Cam Brakes			
3.9.9	4XCZ BRAKES, REAR {Meritor 16.5X7 P} Air S-Cam Type, Cast Spider, Cast Shoe, Double Anchor Pin, Includes Greaseable and Zinc Coated Anchor Pins, Size 16.5" X 7", 38,000-lb Capacity per Axle			
3.9.10	4EXT BRAKE CHAMBERS, REAR AXLE {Bendix EverSure} 36/36 SqIn Spring Brake			
3.9.11	4LGA SLACK ADJUSTERS, REAR {Haldex} Automatic			
3.9.12	4WDM DUST SHIELDS, REAR BRAKE for Air Cam Brakes			
3.9.13	4ERC BRAKE CHAMBERS, POSITION Relocated To Rear Of Rear Axle For Maximum Ground Clearance			
3.9.14	4SPA AIR COMPRESSOR {Cummins} 18.7 CFM			
3.9.15	4EBS AIR DRYER {Bendix AD-9} with Heater			
3.9.16	4VKC AIR DRYER LOCATION Mounted Inside Left Rail, Back of Cab			
3.9.17	4VKH AIR TANK LOCATION (2) Mounted Under Battery Box, Outside Right Rail, Under Cab			
3.9.18	4722 DRAIN VALVE {Bendix DV-2} Automatic, with Heater, for Air Tank			
3.10	**STEERING**			
3.10.1	5PTB STEERING GEAR (2) {Sheppard M100/M80} Dual Power			
3.10.2	5710 STEERING COLUMN Tilting and Telescoping			
3.10.3	5CAW STEERING WHEEL 4-Spoke; 18" Dia., Black			
3.11	**DRIVELINES**			
3.11.1	6DGC DRIVELINE SYSTEM {Dana Spicer} SPL170, for 4x2/6x2			
3.12	**EXHAUST SYSTEMS**			
3.12.1	7BMM EXHAUST SYSTEM Horizontal Aftertreatment System, Frame Mounted Under Right Rail Back of Cab, for Single Long Horizontal Tail Pipe			
3.12.2	7SCP ENGINE EXHAUST BRAKE for Cummins ISB/B6.7/ISL/L9 Engine with Variable Vane Turbo Charger			

3.12.3	7WZY SWITCH, FOR EXHAUST 2 Position, Lighted & Latching, On/Off Type, Mounted in IP, Inhibits Diesel Particulate Filter Regeneration as Long as Switch is in On Position			
3.12.4	7WBZ TAIL PIPE (1) Horizontal, Long, Exits Right Side Outside of Body at Rear Wheels			
3.13	**ELECTRICAL SYSTEMS**			
3.13.1	8000 ELECTRICAL SYSTEM 12-Volt, Standard Equipment Includes: DATA LINK CONNECTOR For Vehicle Programming and Diagnostics In Cab HAZARD SWITCH Push On/Push Off, Located on Instrument Panel to Right of Steering Wheel HEADLIGHT DIMMER SWITCH Integral with Turn Signal Lever PARKING LIGHT Integral with Front Turn Signal and Rear Tail Light STARTER SWITCH Electric, Key Operated STOP, TURN, TAIL & B/U LIGHTS Dual, Rear, Combination with Reflector TURN SIGNAL SWITCH Self-Cancelling for Trucks, Manual Cancelling for Tractors, with Lane Change Feature WINDSHIELD WIPER SWITCH 2-Speed with Wash and Intermittent Feature (5 Pre-Set Delays), Integral with			
3.13.2	Turn Signal Lever WINDSHIELD WIPERS Single Motor, Electric, Cowl Mounted WIRING, CHASSIS Color Coded and Continuously Numbered			
3.13.3	8GXK ALTERNATOR {Leece-Neville BLP4006HN} Brushless, 12 Volt, 325 Amp Capacity, Pad Mount, with Remote Sense			
3.13.4	8RPR ANTENNA for Increased Roof Clearance Applications			
3.13.5	8THB BACK-UP ALARM Electric, 102 dBA			
3.13.6	8TTR BATTERY BOX Steel, with Plastic Cover, 30" Wide, 2-4 Battery Capacity, Mounted Right Side Under Cab			
3.13.7	8XHV BATTERY DISCONNECT SWITCH for Cab Power Disconnect Switch, Disconnects Power to Power Distribution Center (PDC) and Body Builder Through Solenoid, Does Not Disconnect Charging Circuits, Locks with Padlock, Cab Mounted			
3.13.8	8MSH BATTERY SYSTEM {Fleetrite} Maintenance-Free, (4) 12-Volt 2640CCA Total, Top Threaded Stud			

3.13.9	8HAB BODY BUILDER WIRING Back of Day Cab at Left Frame or Under Sleeper, Extended or Crew Cab at Left Frame; Includes Sealed Connectors for Tail/Amber Turn/Marker/ Backup/Accessory Power/Ground and Sealed Connector for Stop/Turn			
3.13.10	8XAH CIRCUIT BREAKERS Manual-Reset (Main Panel) SAE Type III with Trip Indicators, Replaces All Fuses			
3.13.11	8WPH CLEARANCE/MARKER LIGHTS (5) {Truck Lite} Amber LED Lights, Flush Mounted on Cab or Sunshade			
3.13.12	8WTP COURTESY LIGHT (2) Mounted In Front Map Pocket Left and Right Side			
3.13.13	8TPA DATA RECORDER Includes Display Mounted in Overhead Console			
3.13.14	8XKG DOME LIGHT, CAB with Red Reading Lights			
3.13.15	8XKC HEADLIGHTS Halogen, with Daytime Running Lights, Automatic Twilight Controlled			
3.13.16	8XHN HORN, AIR Single Trumpet, Black, with Lanyard Pull Cord			
3.13.17	8VAY HORN, ELECTRIC Disc Style			
3.13.18	8WZP INDICATOR, BATTERY WARNING Green BATTERY ON Indicator, Mounted on Left Side of Instrument Panel, To be Used with Factory Installed or Customer Mounted Battery Disconnect Switch			
3.13.19	8WWJ INDICATOR, LOW COOLANT LEVEL with Audible Alarm			
3.13.20	8WBW JUMP START STUD 12V, Remote Mounted			
3.13.21	8RPS RADIO AM/FM/WB/Clock/Bluetooth/USB Input/Auxiliary Input			
3.13.22	8RMZ SPEAKERS (2) 6.5" Dual Cone Mounted in Both Doors, (2) 5.25" Dual Cone Mounted in Both B-Pillars			
3.13.23	8WTK STARTING MOTOR {Delco Remy 38MT Type 300} 12 Volt, Less Thermal Over-Crank Protection			
3.13.24	8XKM SWITCH, AIR HORN, PASSENGER Fire Truck Application; Momentary Switch Located in Instrument Panel Close to Passenger, Driver Also To Activate Switch with Lanyard			
3.13.25	8WPZ TEST EXTERIOR LIGHTS Pre-Trip Inspection will Cycle all Exterior Lamps Except Back-up Lights			
3.13.26	8XGT TURN SIGNALS, FRONT Includes LED Side Turn Lights Mounted on Fender			
3.13.27	8XPN USB PORT One USB-A Port and One USB-C Port, Located in Instrument Panel			
3.14	**FRONT END**			
3.14.1	9WBC FRONT END Tilting, Fiberglass, with Three Piece Construction, for WorkStar/HV			
3.14.2	9585 FENDER EXTENSIONS Rubber			

3.14.3	9HBM GRILLE Stationary, Chrome			
3.14.4	9WBT GRILLE EMBER SCREEN Mounted to Grille and Cowl Tray to Keep Hot Embers out of Engine and HVAC Air Intake System			
3.14.5	9HBN INSULATION, SPLASH PANELS for Sound Abatement			
3.14.6	9HAN INSULATION, UNDER HOOD for Sound Abatement			
3.14.7	9AAB LOGOS EXTERIOR Model Badges			
3.14.8	9AAE LOGOS EXTERIOR, ENGINE Badges			
3.15	**SPEEDOMETER, TOOLS, MISC**			
3.15.1	10AGB COMMUNICATIONS MODULE Telematics Device with Over the Air Programming; Includes Five Year Data Plan and International 360			
3.15.2	10XAN FIRE EXTINGUISHER 5 lb Class A B C			
3.15.3	10XAP FIRE EXTINGUISHER BRACKET Mounted Left Side Driver Seat			
3.15.4	10060 PAINT SCHEMATIC, PT-1 Single Color, Design 100 Includes: PAINT SCHEMATIC ID LETTERS "WL"			
3.15.5	10761 PAINT TYPE Base Coat/Clear Coat, 1-2 Tone			
3.13.6	10WCY SAFETY TRIANGLES			
3.16	**FUEL TANKS**			
3.16.1	15SWE FUEL TANK Top Draw, Non-Polished Aluminum, 26" Dia, 70 US Gal (265L), Mounted Left Side, Under Cab			
3.16.2	15DYP DEF TANK 9.5 US Gal (36L) Capacity, Frame Mounted Outside Left Rail, Under Cab			
3.16.3	15WCS FUEL COOLER Less Thermostat; Mounted in Front of Cooling Module			
3.16.4	15LNS FUEL/WATER SEPARATOR {Racor 400 Series} 12 VDC Electric Heater, Includes Pre-Heater, with Primer Pump, Includes Water-in-Fuel Sensor, Mounted on Engine			
3.17	**WHEELS, TIRES - FRONT**			
3.17.1	27DBA WHEELS, FRONT {Accuride 29374} DISC; 22.5x12.25 Rims, Extra Polish Aluminum, 10-Stud, 285.75mm BC, Hub-Piloted, Flanged Nut, with Steel Hubs			
3.17.2	7602653208 (2) TIRE, FRONT 385/65R22.5 Load Range J XZY-3 (MICHELIN), 491 rev/mile, 65 MPH, All-Position			
3.18	**WHEELS, TIRES - REAR**			

3.18.1	28DUS WHEELS, REAR {Accuride 41730} DUAL DISC; 22.5x9.00 Rims, Extra Polish Aluminum, 10-Stud, 285.75mm BC, Hub-Piloted, Flanged Nut, with Steel Hubs			
3.18.2	7652543264 (4) TIRE, REAR 315/80R22.5 Load Range L XDN2 (MICHELIN), 486 rev/mile, 75 MPH, Drive			
4.1	**BODY INTEGRATION**			
4.1.1	60AAP BDY INTG, REMOTE POWER MODULE (3) Mounted Inside Cab Behind Driver Seat, Up to 6 Outputs & 6 Inputs Each, Max 20 amp per Channel, Max 80-amp Total; Includes 2 Modules with Switch Packs Containing 6 Latched Switches, 1 Module with Hardware Only OBD001 MISCELLANEOUS COMPLETE SPEC FOR ENGINEERING			
4.2	**WARRANTY**			
4.2.1	40128 WARRANTY Standard for HV507/HV509, HV50B, HV607/HV609 Models, Effective with Vehicles Built July 1, 2017 or Later, CTS-2025A			
4.2.2	Round Air Horns Mounted on Hood			
4.3	**CONSOLE - PAINTED**			
4.3.1	There shall be a console installed in the chassis cab with an angled design making it easier to access vital emergency controls. The top of the console shall be easily removable for maintenance and service. The console shall have a storage bin.			
4.3.2	One (1) dividers shall be installed in the console bin.			
4.4	**CHASSIS WHEELS**			
4.4.1	The chassis wheels shall be an aluminum polished finish from the chassis supplier.			
4.5	**CHROME HUB AND LUG NUT COVERS**			
4.5.1	The front wheels shall be fitted with chrome baby moon type hub covers.			
4.5.2	The rear wheels shall be fitted with chromed "Top Hat" type hub covers.			
4.5.3	All front and rear wheel lug nuts shall have chrome lug nut covers installed.			
4.6	**CHASSIS SUPPLIED ANTI ROLL SYSTEM CALIBRATION**			
4.6.1	The chassis supplied Anti Roll system shall be calibrated after the apparatus body has been installed on the chassis.			
4.7	**CHASSIS PREPARATION**			
4.7.1	The chassis shall be carefully inspected for compliance to the required specifications and to assure that it is ready for apparatus construction.			
4.7.2	Any components that require relocation or modification shall be done at this time.			

4.8	**CHASSIS EXHAUST MODIFICATIONS**			
4.8.1	To maintain chassis engine performance, the chassis exhaust shall be modified minimally after any exhaust treatment devices and shall meet the chassis supplier's recommendations. The exhaust shall exit at the curbside of the apparatus before the rear axles and shall be a straight exhaust pipe design.			
4.9	**EXHAUST MITIGATION DEVICE**			
4.9.1	The chassis supplier shall supply an Exhaust Mitigation Device to be mounted by the OEM body builder after completion of the apparatus. The mitigation device shall be designed to reduce the exhaust temperature to meet the requirements of NFPA 1900 latest edition.			
4.10	**FRONT AND REAR MUD FLAPS**			
4.10.1	Four (4) heavy duty rubber rear mud flaps shall be provided and installed on the apparatus. The mud flaps shall be installed behind the front and rear wheels.			
4.11	**IGNITION TYPE**			
4.11.1	The ignition shall be keyless type and not be required to have the key chained to the chassis to meet NFPA and ULC requirements.			
4.12	**40 AMP - BATTERY CHARGER / CHASSIS AIR BRAKE PROTECTION PACKAGE**			
4.12.1	The following components shall be installed: **BATTERY CHARGER SYSTEM TESTING** The low voltage battery charger shall be tested as per the requirements of NFPA to determine that the conditioner shall maintain an output of at least 12.54 V and shall maintain at least 80 percent of the rated output current for the duration of the test.			
4.13	**Battery Charger - Kussmaul - Smart Charger 40 Amp**			
4.13.1	A Kussmaul Chief Series Smart Charger Model #091-266-12-40, 40-amp high output battery charger shall be installed.			
4.14	**Air Compressor - 12V - 100 PSI**			

4.14.1	The compressor shall be a Kussmaul P/N 091-9-12V 12-volt compressor. The Auto Pump 12-volt driven air compressor shall ensure that the air brake system is properly pressurized for immediate response of the unit. A pressure switch shall regulate operation and shall automatically sense low air pressure in the brake system and restore the proper pressure. The unit shall have no interference with the vehicle mounted air compressor. The compact compressor shall have sealed bearings and a 15-amp circuit breaker installed in pressure switch assembly. The air compressor shall have the following ratings: 1) 100 PSI maximum rating 2) Pre-set at 75 PSI "ON" and 95 PSI "OFF" 3) Adjustable differential range of 20 PSI to 100 PSI 4) Output: 0.30 SCFM @ 80 PSI 0.35 SCFM @ 60 PSI 5) Rating: 12 volts at 11 amps			
4.15	**Shoreline Inlet - Kussmaul Super Auto Eject - 20 Amp**			
4.15.1	A Kussmaul Super Auto Eject Model #091-55-20-120, 20-amp 120-volt shore power assembly, cover, solenoid input wire, power cord, and plug shall be installed. The 12-volt solenoid shall eject the shore power cord away from vehicle path upon sensing engine start; after ejection, the weatherproof cover snaps into position over inlet. The unit shall sequence energizing of an Auto Eject, eliminating terminal arching when connecting and disconnecting power cord. The unit shall have a waterproof back enclosure with watertight cable fittings, which protect mechanism from road contamination. A pre-wired 3-foot AC electrical cord and starting sense wire (side wired) shall be installed. The assembly shall have the following dimensions: 6.17" high x 4.08" wide x 2.8" deep with 4 lb. weight. Cover color to be yellow. Other colors available, please specify if otherwise: red, blue, white, gray, black.			
4.16	**Battery Charger Remote Digital Display**			
4.16.1	The charger shall include a Model #091-266-RCP remote digital display.			
4.17	**CAB STEP LIGHTING**			
4.17.1	The cab step lighting shall be chassis supplied and as per the chassis specifications			

4.18	**TRANSPORTATION ROAD SAFETY KIT**			
4.18.1	The following Transportation Road Safety Kit shall be supplied. One (1) standard First Aid Kit shall be provided. There shall be a four-inch-wide reflective stripe applied to the front of the apparatus. The reflective stripe shall be a 3M Scotchlite product. There shall be reflective striping applied to the interior chassis cab doors of the apparatus. The reflective stripe shall be a 3M Scotchlite product.			
4.19	**HELMET HOLDERS**			
4.19.1	The helmet holders shall be Ziamatic Universal Helmet Holders, model UHH-1.			
5.1	**PUMP MODULE – HALE SIDEKICK**			
5.1.1	The pump module shall be a Hale Sidekick Module, or equal. The pump module shall be mounted to the chassis frame rails. The pump module panels shall be 14 gauge brushed stainless steel. The panels shall be an integral part of the module.			
5.2	**PUMP – HALE MBP PTO – 750 U.S. GPM (625 Imp. Gal) minimum**			

5.2.1	The pump shall be of a size and design to mount on the chassis rails of commercial and custom truck chassis and have the capacity of 750 gallons per minute (U.S. GPM) (625 Imp. GPM), NFPA-1901 rated performance. The entire pump shall be assembled and tested at the pump manufacturer's factory. The pump shall be driven by the truck transmission mounted PTO. The engine shall provide sufficient horsepower and RPM to enable pump to meet and exceed its rated performance within the torque rating of the PTO, truck transmission and drive line components. The entire pump shall be hydrostatically tested to a pressure of 600 PSI. The pump shall be fully tested at the pump manufacturer's factory to the performance spots as outlined by the latest NFPA Pamphlet No. 1901. Pump shall be free from objectionable pulsation and vibration. The pump body and related parts shall be of fine grain alloy cast iron, with a minimum tensile strength of 30,000 PSI (2069 bar). All metal moving parts in contact with water shall be of high-quality bronze or stainless steel. Pump utilizing castings made of lower tensile strength cast iron not acceptable. Pump body shall be vertically split on a single plane for easy removal of entire impeller assembly including clearance rings. Pump shaft to be rigidly supported by two bearings for minimum deflection. The bearings shall be heavy-duty, deep groove ball bearings in the gearbox and they shall be splash lubricated. The pump impeller shall be hard, fine grain bronze of the mixed flow design; accurately machines, hand-ground and individually balanced. The vanes of the impeller intake eye shall be hand ground and polished to a sharp edge and be of sufficient size and design to provide ample reserve capacity utilizing minimum horsepower. Impeller clearance rings shall be bronze, easily renewable without replacing impeller or pump volute body. The pump shaft shall be heat-treated, electric furnace, corrosion resistant stainless steel. Pump shaft must be sealed with double-lip oil seal to keep road dirt and water out of gearbox.			
5.3	**Gearbox**			

5.3.1	The gearbox shall be manufactured and tested at the pump manufacturer's factory. Pump gearbox shall be of sufficient size to withstand the torque of the engine in pump operating conditions. The drive unit shall be designed of ample capacity for lubrication reserve and to maintain the proper operating temperature. The gearbox drive shafts shall be of heat-treated chrome nickel steel shall withstand the full torque of the engine and pump operating conditions. All gears, both drive and pump, shall be of highest quality electric furnace chrome nickel steel. Bores shall be ground to size and teeth integrated and hardened, to give an extremely accurate gear for long life, smooth, quiet running, and higher load carrying capability. An accurately cut helical design shall be provided. (Mandatory Requirement.) The pump ratio shall be selected by the apparatus manufacturer to give maximum performance with the engine and transmission selected.			
5.4	**PTO PUMP ACTUATION – PUMP AND ROLL**			
5.4.1	The PTO pump engagement operations shall be controlled and monitored by a solid-state controller. The electronic controller shall have the ability to communicate with the chassis J1939 communication port in order to meet the requirements of NFPA 1901 for pump shift interlock and operation of the pump. The electronic control module shall have 16 built in diagnostic LED lights to allow for efficient maintenance. Pump shift actuation shall be completed through a cab mounted control panel. The control panel shall be back lit illuminated and come with a locking switch that indicates either "ROAD" or "PUMP" mode. The control panel shall have three green indicator lights, one showing when the pump has been engaged and shall be labelled "PUMP ENGAGED". Second for when pump is safe for stationary pumping and shall be labelled "OK TO PUMP" remote operator throttle will be operational at this time. Third for when pump is safe for pump and roll operation and shall be labelled "OK TO PUMP AND ROLL" remote throttle will be disable in this condition.			
5.4.2	PUMP ENGAGED light will flash if PTO engagement switch is in PUMP position and required PTO conditions are not met for engagement			
5.4.3	All wiring shall be GXL grade wire, with wire function labelled every 6 inches onto wire. All connections shall have IP67 rated dust and waterproof protection.			
5.5	**PIPING AND MANIFOLDS**			

5.5.1	All the plumbing and/or piping in the pump module shall be of 304 stainless steel or flexible piping for long life. All stainless-steel castings shall be a minimum of schedule 40. All NPT pipe thread connections larger than ¾" connections shall be avoided in the construction of the plumbing system. The following valves shall have groove connection: rear discharge, tank fill, all 2" and 2-½" (5.08 and 6.35cm) pre-connect valves.			
5.5.2	The flexible piping shall be black SBR synthetic rubber hose with 300 working pounds, and 1200 pounds burst pressure for sizes 1.5 through 4". Sizes ¾", 1" and 5" are rated at 250 pound working and 1000-pound burst pressure. All sizes are rated at 30 HG vacuum. Reinforcement consists of two plies of high tensile strength tire cord for all sizes sand helix wire installed in sizes 1 through 5" for maximum performance in tight bend applications. The material has a temperature rating of –40 degrees F to 210 degrees F. Full flow couplings are precision machined from high tensile strength stainless steel. All female couplings are brass. ¾" and 1" male and Victaulic couplings are brass.			
5.6	**PRIMING PUMP - ENVIRONMENTALLY SAFE**			
5.6.1	The priming pump shall be a positive displacement, oil-less rotary vane electric motor driven pump conforming to the requirements of NFPA 1901. The pump body shall be manufactured of heat-treated anodized aluminum for wear and corrosion resistance.			
5.6.2	The pump shall be capable of producing a minimum 24 Hg vacuum at 2000 feet above sea level.			
5.6.3	The electric motor shall be a 12 VDC totally enclosed unit.			
5.6.4	The priming pump shall not require lubrication.			
5.6.5	The priming pump shall be operated by a single push-pull control valve mounted on the pump operator panel. The control valve shall be of all bronze construction.			
5.7	**STANDARD WARRANTY – HALE PUMPS**			
5.7.1	The pump shall carry the Hale Pump warranty that states that the pump shall be free of defects in material and workmanship for a period of five (5) years from the date the product is placed into service. Within this warranty period Hale will cover parts and labor for the first two (2) years and parts only for the remaining (3) years.			
5.8	**RELIEF VALVE**			
5.8.1	There shall be one (1) suction side stainless steel relief pump valve provided on the pump system.			
5.9	**BALL VALVES**			

5.9.1	The valve shall be Akron Brass Style Swing-Out™ Valves. The valve shall have an all brass body with flow optimizing stainless steel ball and dual polymer seats. The valve shall be capable of dual directional flow while incorporating a self-locking ball feature using an automatic friction lock design and specially designed flow optimizing stainless steel ball. All stainless-steel parts must be 316 grade for increased resistance to corrosion. The valve shall not require lubrication of seats or any other internal waterway parts and must be capable of swinging out of the waterway for maintenance by the removal of six bolts. Product must carry a 10-year manufacturer's warranty.			
5.10	**LEFT SIDE FRONT DISCHARGE**			
5.10.1	One (1) 2-½" (6.35cm) discharge shall be located on the left side panel. The valve shall be a quarter turn ball type and fixed pivot design to allow easy operation at all pump pressures. The 2-½" (6.35cm) outlet shall be equipped with an integral, stainless steel, 30-degree elbow terminating with 2-½" (6.35cm) MNST threads. A chrome vented cap and chain shall also be supplied. The valve shall be controlled at the side panel with a push pull control. There shall be a Class 1 2 ½" pressure gauge mounted on the panel near the control to indicate pressure. The discharge shall also come equipped with a quarter-turn ¾" drain valve.			
5.11	**LEFT SIDE REAR DISCHARGE**			
5.11.1	One (1) 2-½" (6.35cm) discharge shall be located on the left side panel. The valve shall be a quarter turn ball type and fixed pivot design to allow easy operation at all pump pressures. The 2-½" (6.35cm) outlet shall be equipped with an integral, stainless steel, 30-degree elbow terminating with 2-½" (6.35cm) MNST threads. A chrome vented cap and chain shall also be supplied. The valve shall be controlled at the side panel with a push pull control. There shall be a Class 1 2 ½" pressure gauge mounted on the panel near the control to indicate pressure. The discharge shall also come equipped with a quarter-turn ¾" drain valve. The discharge must be capable of flowing 700 GPM or greater.			
5.12	**ADDITIONAL SIDE DISCHARGE**			

5.12.1	One (1) 2-½" (6.35cm) discharge shall be located on the upper mid side panel. The valve shall be a quarter turn ball type and fixed pivot design to allow easy operation at all pump pressures. The 2-½" (6.35cm) outlet shall be equipped with an integral, stainless steel, 30-degree elbow terminating with 2-½" (6.35cm) MNST threads. A chrome vented cap and chain shall also be supplied. The valve shall be controlled at the side panel with a push pull control. There shall be a Class 1 2 ½" pressure gauge mounted on the panel near the control to indicate pressure. The discharge shall also come equipped with a quarter-turn ¾" drain valve. The discharge must be capable of flowing 700 GPM or greater.			
5.13	**LEFT SIDE AUXILLARY SUCTION**			
5.13.1	One (1) 2-½" (6.35cm) intake shall be located on the left side panel. The valve shall be a quarter turn ball type and fixed pivot design to allow easy operation at all pump pressures. The valve shall be controlled at the side pump panel with a swing handle. The valve shall come equipped with a chrome plug, chain, inlet strainer, 2-½ (6.35 cm) chrome inlet swivel and ¾" drain valve.			
5.14	**5" STEAMER INLET**			
5.14.1	One (1) 5" (15.24cm) steamer inlets will be provided on the pump panel. The inlet shall have long handle chrome vented caps and a screen.			
5.15	**MAIN SUCTION INLET CHROME CAPS**			
5.15.1	Each inlet shall come with a chrome plated long handled cap.			
5.16	**TANK TO PUMP - AIR**			
5.16.1	One (1) 3" (7.62cm) stainless steel valve shall be installed between the water tank and the pump. The valve shall be a quarter turn ball type. The valve shall be actuated with an air cylinder. The valve shall be controlled with a switch at the pump panel.			
5.17	**TANK FILL**			
5.17.1	One (1) 2"(5.08cm) discharge with a stainless steel valve shall be plumbed to the tank. The valve shall be a quarter turn ball type and fixed pivot design to allow easy operation at all pump pressures. The 2"(5.08cm) valve outlet terminates with 2"(5.08cm) grooved connection. Valve shall be controlled at the side panel with a chrome-plated push/pull locking "T" handle mounted on the pump panel.			
5.18	**1½" DISCHARGES – HOSEBED SPEED LAY**			

5.18.1	There shall be two (2) 1.5” discharges plumbed to the front hose bed divider wall as speed lay discharges. A 1-1/2" chrome threaded hose connector shall be used in each discharge. Each discharge shall have one (1) 2” (5.08cm) valve. The valve shall be a quarter turn ball type and fixed pivot design to allow easy operation at all pump pressures. The discharge shall be plumbed using 2” (5.08cm) plumbing which shall be either high pressure rubber hose or rigid stainless steel. Each valve shall be controlled with a chrome-plated One (1) 2-½" (6.35cm) discharge shall be located on the upper mid side panel. The valve shall be a quarter turn ball type and fixed pivot design to allow easy operation at all pump pressures. The 2-½" (6.35cm) outlet shall be equipped with an integral, stainless steel, 30-degree elbow terminating with 2-½" (6.35cm) MNST threads. A chrome vented cap and chain shall also be supplied. The valve shall be controlled at the side panel with a push pull control. There shall be a Class 1 2 ½” pressure gauge mounted on the panel near the control to indicate pressure. The discharge shall also come equipped with a quarter-turn ¾" drain valve. The discharge must be capable of flowing 700 GPM or greater.			
5.19	**LEFT SIDE AUXILLARY SUCTION**			
5.19.1	One (1) 2-½" (6.35cm) intake shall be located on the left side panel. The valve shall be a quarter turn ball type and fixed pivot design to allow easy operation at all pump pressures. The valve shall be controlled at the side pump panel with a swing handle. The valve shall come equipped with a chrome plug, chain, inlet strainer, 2-½ (6.35 cm) chrome inlet swivel and ¾” drain valve.			
5.20	**5” STEAMER INLET**			
5.20.1	One (1) 5" (15.24cm) steamer inlets will be provided on the pump panel. The inlet shall have long handle chrome vented caps and a screen.			
5.21	**MAIN SUCTION INLET CHROME CAPS**			
5.21.1	Each inlet shall come with a chrome plated long handled cap.			
5.22	**TANK TO PUMP - AIR**			

5.22.1	One (1) 3" (7.62cm) stainless steel valve shall be installed between the water tank and the pump. The valve shall be a quarter turn ball type. The valve shall be actuated with an air cylinder. The valve shall be controlled with a switch at the pump panel.			
5.23	**TANK FILL**			
5.23.1	One (1) 2"(5.08cm) discharge with a stainless steel valve shall be plumbed to the tank. The valve shall be a quarter turn ball type and fixed pivot design to allow easy operation at all pump pressures. The 2"(5.08cm) valve outlet terminates with 2"(5.08cm) grooved connection. Valve shall be controlled at the side panel with a chrome-plated push/pull locking "T" handle mounted on the pump panel.			
5.24	**1½" DISCHARGES – HOSEBED SPEED LAY**			
5.24.1	There shall be two (2) 1.5” discharges plumbed to the front hose bed divider wall as speed lay discharges. A 1-1/2" chrome threaded hose connector shall be used in each discharge. Each discharge shall have one (1) 2” (5.08cm) valve. The valve shall be a quarter turn ball type and fixed pivot design to allow easy operation at all pump pressures. The discharge shall be plumbed using 2” (5.08cm) plumbing which shall be either high pressure rubber hose or rigid stainless steel. Each valve shall be controlled with a chrome-plated push/pull locking "T" handle mounted on the pump panel. There shall be a Class 1 2 ½” pressure gauge mounted on the panel near each control to indicate pressure. Each discharge shall also come equipped with a quarter-turn ¾" drain valve.			
5.25	**MASTER PUMP DRAIN**			
5.25.1	The pump shall be equipped with a Master Pump 12 port Drain to allow draining of the lower pump cavities, volute and selected water carrying lines and accessories. The drain shall have an all brass body with a stainless steel return spring. The master drain shall be mounted in the pump drain panel.			
5.26	**BLEEDERS**			
5.26.1	The module shall be equipped with ball drain valves designed to allow draining for the pump and all water carrying lines and accessories. All 2” or larger discharge outlets shall be equipped with a ¾” ball valve drain valve or larger			
5.27	**DISCHARGE GAUGES - KPA & PSI**			

5.27.1	Individual 2½" line gauges for each 1½" or larger discharges shall be supplied and mounted adjacent to the discharge valve control handle. The gauges shall be in KPA and PSI scale.			
5.28	**MASTER GAUGES - KPA & PSI**			
5.28.1	All gauges shall be fully filled with pulse and vibration dampening Interlube to lubricate the internal mechanisms to prevent lens condensation and to ensure proper operation to minus 40 degrees F. The cases shall be temperature compensated with an internal breathing diaphragm to permit fully filled cases and to allow a rigid lens with a distortion free viewing area. To prevent internal freezing and to keep contaminants from entering the gauge, the stem and Bourdon tube shall be filled with low temperature oil and be sealed from the water system using an isolating diaphragm located in the stem (no exceptions). A bright metal bezel shall be supplied for resistance to corrosion and to protect the lens and case from damage.			
5.28.2	Two 4.5” master pump gauges shall be supplied and mounted next to each other adjacent to the governor, primer, and engine instrumentation. The intake gauge shall be to the left of the discharge gauge.			
5.29	**TOTAL PRESSURE GOVERNOR (TPG)**			
5.29.1	Apparatus shall be equipped with a Class 1 “Total Pressure Governor” (TPG) that is connected to the Electronic Control Module (ECM) mounted on the engine. The “TPG” will operate as a pressure sensor (regulating) governor (PSG) utilizing the engine’s J1939 data link for optimal resolution and response provided that J1939 is supported by the engine manufacturer. If J-1939 engine control is not supported, then analog remote throttle control shall be provided by the TPG, subject to J1939 RPM data availability. The TPG shall utilize control algorithms that minimize pressure spikes during low or erratic water supply situations and display operational status messages to the operator under certain circumstances. The TPG shall be backwards compatible to any engine that supplies J1939 RPM, Temperature and Oil Pressure information providing the ability to maintain consistent fleet fire-fighting capability.			

5.29.2	TPG shall incorporate the ability to use either a 300 PSI or a 600 PSI transducer for best operation. PSG system diagnostics shall be built in and accessible by service technicians. Programmable pre-sets for RPM and Pressure settings shall be easily configurable. The TPG shall incorporate configurable parameters in the menu structure accessed through a diagnostic password.			
5.29.3	The “TPG” shall also include indication of engine RPM, system voltage, engine oil pressure and engine temperature with audible alarm output for all. The “TPG” uses the J1939 data bus for engine information, requiring no additional sensors to be installed. The TPG shall use J1939 broadcast warnings for the alarm points as a standard.			
5.30	**ITL-4 LIGHT TANK LEVEL GAUGE - RED**			
5.30.1	The apparatus shall be equipped with a Class1 “Intelli-Tank” Tank Level Gauge for indicating water level. The Tank Level Gauge shall indicate the liquid level on an easy to read LED display and show increments of 1/8 of a tank. Each tank level gauge system shall include: 1) A pressure transducer that is mounted on the outside of the tank in an easily accessible area. Sealed foam tanks will require zero pressure vacuum vents. 2) A super bright LED 4-light display with a visual indication at nine accurate levels. 3) A set of weather resistant connectors to connect to the digital display, to the pressure transducer and to the apparatus power.			
5.31	**PUMP COOLER VALVE**			
5.31.1	A pump cooler valve shall be installed in the instrument panel. The valve will allow tank water to recirculate thru the pump to cool it using a 3/8” water line			
5.32	**ENGINE COOLER VALVE**			
5.32.1	An engine cooler valve shall be installed in the instrument panel. There shall be a ¼ turn ¼” valve with 3/8” tube connections installed thru the instrument panel and labeled appropriately. A heat exchanger shall be installed on the chassis and will allow tank water to cool the chassis engine			
5.33	**PUMP HOUSE HEATERS**			

5.33.1	One (1) 16,000 BTU forced air heater shall be installed at the front lower section of the pump house directly in front of all the drain valves and auxiliary suction valves. **(Mandatory Requirement)**			
5.34	**HEAT PANS**			
5.34.1	The bottom of the pump house shall be fitted with a removable heat pan. The heat pan shall be enclosed all sides, front, and rear bottom of the pump module. **(Mandatory Requirement)**			
5.34.2	The heat pan shall be constructed from sheet aluminum and shall be installed to the underside of the pump house in a sliding tray.			
5.35	**CLASS A FOAM SYSTEM**			
5.35.1	Unit shall have a Class A foam system installed. Foam capability shall be provided for two (2)) handlines, and if possible one (1) 2.5-inch discharge line.			
5.36	**THREAD TYPE - DISCHARGE 2.5"**			
5.36.1	The threads that shall be provided for the 2.5" Discharges and 2.5" Suction Inlets shall be NL Standard, 5VTPI, ODM 3.25". Manufacturer shall re-verify the 2.5" threads prior to final installation.			
6.1	**BOOSTER TANK**			
6.1.1	The booster tank shall have the following capacities: **2000 Imperial gallons (9090 Litres) minimum**			
6.1.2	The transverse and longitudinal swash partitions shall be manufactured of Polypropylene Copolymer material. All partitions shall be equipped with vent and air holes to permit movement of air and water between compartments. The partitions shall be designed to provide maximum water flow and meet NFPA rules. All swash partitions interlock with one another and are welded to each other as well as to the walls and floor of the tank.			

6.1.3	The tank shall have a combination vent and fill tower. The fill tower shall be constructed of .5” thick Polypropylene Copolymer and shall be a minimum dimension of 8”x 8” outer perimeter. The tower shall be located in the left front corner of the tank unless otherwise specified by the purchaser. The tower shall have a .25” thick removable Polypropylene Copolymer screen and a Polypropylene Copolymer hinged-type cover. Inside the fill tower, there shall be a combination vent overflow pipe. The vent overflow shall be a minimum of schedule 40 pipe with a minimum I.D. of 4”, unless a dump chute is included in the design in which case the I.D. shall be 6”. Both shall be of a design to run through the tank. The tank overflow shall be piped behind the rear wheels.			
6.1.4	The tank cover shall be constructed of recessed .5” thick Polypropylene Copolymer, stress relieved, U.V. stabilized material. A minimum of two lifting dowels shall be drilled and tapped .5” x 2” to accommodate the lifting eyes.			
6.1.5	There shall be one (1) sump standard per tank. The sump shall be constructed of .5” Polypropylene Copolymer and be located in the left front corner of the tank and shall meet the requirements of NFPA.			
6.1.6	There will be two (2) standard tank outlets: one for tank to sump suction line and one for a tank fill line. All tank fill couplings shall be backed with flow deflectors to break up the stream of water entering the tank, and be capable of withstanding sustained fill rates of up to 1,000 G.P.M. The tank shall rest on the body cross members in conjunction with such additional cross members, spaced at a distance that would not allow for more than 530 square inches of unsupported area under the tank floor. In cases where overall height of the tank exceeds 40 inches, cross member spacing must be decreased to allow for not more than 400 square inches of unsupported area.			

6.1.7	The tank must be isolated from the cross members through the use of hard rubber strips with a minimum thickness and width dimension of .25” x 2” and a minimum Rockwell hardness of 60 durometers. Additionally, the tank must be supported around the entire bottom outside perimeter and capture both front and rear as well as side to side to prevent tank from shifting during vehicle operation.			

6.1.8	The tank shall be mounted in the apparatus body in a manner that the total outside bottom perimeter of the tank shall be supported. The bottom of the tank shall be completely isolated from the frame by heavy-duty .25" thick rubber strips. There shall be a picture frame type cradle mount system utilized for the purpose of capturing the tank. There shall be a support system across the top of the tank to prevent excessive bouncing when the tank is empty.			
6.1.9	Although the tank is designed as a free-floating suspension unit, it is required that the tank has adequate hold down restraints to minimize movement during vehicle operation. If proper retention has not been incorporated into the apparatus hose floor structure, an optional mounting restraint system shall be located on the top of the tank, halfway between the front and rear on each side of the tank.			
6.1.10	The tank shall be completely removable without disturbing or dismantling the apparatus structure.			
6.2	**LIMITED LIFETIME POLY TANK WARRANTY**			
6.2.1	The water tank shall carry a tank manufacturer lifetime warranty against defects and workmanship. The apparatus manufacturer must be authorized for installation and alterations on poly tanks to not void any written warranties. **(Mandatory Requirement)**			
6.3	**BOOSTER TANK – PAINTED**			
6.3.1	The booster tank shall be painted with the PPG paint process for a Polypropylene plastic surface.			
6.3.2	The paint process shall include having the entire surface cleaned with warm soapy water followed by a rinse with clean water. The tank shall be allowed to dry overnight maintaining a 65-degree Fahrenheit temperature.			
6.3.3	The surface shall be cleaned using DX 103 Multi prep followed by DX394 water base wax and grease remover. The surface shall then be final sanded with 280 Grit paper and cleaned again using DX 103 Multi prep.			
6.3.4	A medium wet coat of DPX 801 universal plastics primer shall be applied. F3975 surface primer shall be applied after a 30 minute dry time at 70 degree Fahrenheit and the surface shall be re sanded, washed and reprimed with DPX 801.			

6.3.5	The surface shall receive up to 3 coats of base coat until hiding has been achieved. The base coat shall consist of 3 parts color to 1 part hardener to 1 part solvent.			
6.3.6	The surface then shall receive 3 coats of clear coating.			
6.3.7	The manufacturer shall be audited by the paint manufacturer yearly for compliance to the application and adherence to the paint application process. This audit shall be available for the customer's inspection if requested. **There shall be no exception to this requirement.**			
6.4	**FIREMAN'S FRIEND - 4" EXTERNAL TANK FILL - REAR RIGHT**			
6.4.1	There shall be a 4" external tank fill with a Storz fitting provided at the rear right of the apparatus body.			
6.4.2	The internally mounted check-type fill valve shall be capable of flowing at a rate in excess of 1,000 gallons per minute. The internal valve shall be self deflecting, requiring no additional diffusion device. The check valve shall be stainless steel and a spring actuated piston-type sealing mechanism to minimize seal wear and provide positive sealing of valve after shutting off at feed source. Valve seal designed to be self-cleaning, utilizing EPDM rubber.			
6.4.3	The valve body shall have a mounting plate and the TTMA 6-bolt attachment pattern (2 1/2" to 3" valve body) positioned on outside of and attached directly to tank wall. All valve components constructed of highly corrosive resistant stainless steel. External attachment fitting corrosion resistant aluminum. Available with connections from 2 1/2" to 5" fittings.			
6.5	**10" NEWTON DUMP VALVE – STAINLESS STEEL - 180º DEGREE SWIVEL**			
6.5.1	One (1) stainless steel 10" Newton "Quick - Dump" with manual valve shall be provided at the rear of the apparatus. This valve shall extend out the center of the rear body with the control lever offset to the left side of the dump valve. The telescopic dump chute shall have a dimension of 8"H x 12.5"W to allow for a maximum dump rate and extend up to 36". The chute shall have the capability of swinging 180º so it can be used on the left, rear and right side of the truck.			
6.6	**TANK DRAIN**			

6.6.1	The tank shall have a 1.5" tank drain installed in the bottom of the tank and accessible from the ground.			
6.7	**HOSE BED**			
6.7.1	The main hose bed shall be located above the booster tank.			
6.7.2	The hose bed shall be an integral part of the poly water tank.			
6.7.3	There shall be a partition at the front portion of the water tank that separates the hose storage area with the front storage area. This divided shall be manufactured from Aluminum.			
6.7.4	The rear track shall have a snap cover to prevent the hose couplings from catching the track.			
6.7.5	Tank Supplier - Hose Bed - 2000 IG			
6.8	**HOSE BED DIVIDER - ADJUSTABLE**			
6.8.1	There shall be Two (2) adjustable hose bed divider(s) provided.			
6.8.2	The divider(s) shall be easily adjustable in the hose bed slide tracks.			
6.8.3	Each divider shall be constructed from 3/16" 5052-H32 aluminum which shall be welded into a custom aluminum extrusion base frame.			
6.8.4	Each hose bed divider shall have an oval handhold provided at the rear portion of the divider.			
6.8.5	<<< Hose Bed Divider - 18" or Less In Height >>>			
6.9	**HOSE BED MATTING**			
6.9.1	The hose bed flooring shall be fitted with vinyl type matting to allow for air movement under the hose.			
6.10	**HOSE BED TARP**			

6.10.1	One (1) vinyl hose bed tarp shall be provided with shock cord fasteners, or depending on hose bed obstructions, a combination of shock cord fasteners and nickel plated quarter turn fasteners for the main hose bed. The hose bed tarp shall have an end flap with Velcro fasteners provided to cover the rear of the hose bed. The tarp shall be red in color.			
6.11	**APPARATUS BODY**			
6.11.1	The body shall be fabricated with the highest quality components available, and acceptable to the fire service industry. Only new components shall be in the manufacturing process.			
6.11.2	The body shall be engineered and designed to provide a low center of gravity and carry a correct load distribution.			
6.11.3	The entire body sub frame shall be constructed of heavy-duty tubular aluminum and channels to provide a rigid body design.			
6.11.4	The use of tubular aluminum and channels shall provide for extreme strength, maximum durability, and maximum resistance to buckling and failure. All compartments shall be fabricated with 3/16" aluminum panels, grade 5052. The 3/16 panels will provide reinforcement to the compartment, for installation of heavy equipment. The 3/16" aluminum panels, grade 5052 panels shall provide extreme strength, rust corrosion resistance, and maximum durability.			
6.11.5	Skilled craftsmen shall perform all welding operations on the body. All welding shall be electronically with the highest quality components.			
6.11.6	Certified welders shall perform all welding. Proof of welder certification shall be provided with the completed vehicle.			
7.1	**BODY SUBFRAME**			
7.1.1	The body framework shall be assembled on a jig and shall be clamped together and squared. The framework shall be electronically welded with digital pulse welders forming the integral superstructure.			

7.1.2	The body frame rails shall be constructed of 6061T6/6063-T6, 3" x 3" aluminum extrusions, with a wall thickness of 1/4".			
7.1.3	The front cross member shall be a heavy duty 3" x 2" x 1/4" aluminum extrusions providing maximum strength and durability.			
7.1.4	The two middle cross members shall be heavy duty 3" x 3" x 1/4" aluminum extrusions providing maximum strength and durability at the main section of the body.			
7.1.5	The rear cross members shall be heavy duty 3" x 2" x 1/4" aluminum extrusions providing maximum strength and durability at the rear section of the body.			
7.1.6	The two middle cross members shall extend the full width of the body. The cross members shall provide support for the body side compartments section.			
7.1.7	The body sub frame and the chassis frame shall be insulated and separated by a rubberized belt.			
7.1.8	There shall be rear drop sub frame bolted to chassis frame made from formed heavy steel rails			
7.1.9	The body shall be mounted to the chassis frame rails with steel flex mounts at the front, two steel channels in the middle, and steel mounts at the rear. All mounts shall be attached to the chassis rails 5/8" Grade 8 bolts. All steel mounts shall have an anti rust heavy duty coating.			
7.2	**CORROSION PROTECTION**			
7.2.1	All body components or attachments made from dissimilar metals shall be fastened to the body utilizing an UHMW/Polyethylene material to prevent metal-to-metal contact preventing dielectric corrosion.			
7.2.2	All fasteners used in attaching or fastening of aluminum panels shall be installed with stainless steel hardware. Rivets shall not be acceptable. (**Mandatory Requirement)**			

7.2.3	All fasteners shall be installed in a manner, which shall involve drilling, tapping, and application of non-corrosive grease before the stainless steel bolts are installed. Self-tapping screws or screws without threads shall not be acceptable. (**Mandatory Requirement)**			
7.3	**BODY COMPARTMENTS**			
7.3.1	The body compartments shall be fabricated with 3/16" 5052 marine grade aluminum panels. These panels shall be non-corrosive, durable, and add strength and integrity to the body construction.			
7.3.2	The interior compartment seams shall be sealed and caulked with a permanent, pliable automotive type sealer.			
7.3.3	All compartments shall have a 1" drop on the lower edge of the door opening to accommodate the door seal, and to stop moisture from entering the compartment. (**Mandatory Requirement)**			
7.3.4	All compartments shall have sweep out floors.			
7.3.5	All compartments shall be weatherproof.			
7.4	**REAR FENDERS**			
7.4.1	The rear fender outer skin shall be fabricated from 3/16" 5052 aluminum and have a painted finish. The rear fender skin shall be permanently attached to the body.			
7.5	**REAR FENDER EXTENSIONS**			
7.5.1	Each rear fender shall come with stainless steel fender extensions. For corrosion resistance, an EPDM molding shall be utilized to seal the fender extension and isolate it from the apparatus body. The fender extensions and EPDM molding shall be secured using stainless steel fasteners.			
7.6	**LEFT SIDE BODY COMPARTMENTS - LOW**			
7.6.1	The following compartments shall be provided on the driver's side of the apparatus body.			

7.6.2	Two (2) compartments forward of the rear wheels measuring 48.25"W x 40"H x 13.5 / 26"D frame opening.			
7.6.3	The forward compartment shall house the pump module			
7.7	**PUMP MODULE TRIM**			
7.7.1	The open portion above the pump module will come with a removable 3003 – H14 checker plate trim for access to the back of the panel. The trim will be fastened with stainless steel screws that have been pre tapped. Self tapping screws are not acceptable.			
7.8	**AMDOR ROLL UP DOORS**			
7.8.1	The doors shall be Amdor Roll-Up type doors to include double wall aluminum box section slats with integral hinge joint and recessed slat seal, reusable end shoes with snap-in securement, double wall aluminum reinforced bottom rail with either Stainless Steel Lift Bar door latching system, aluminum track with side frame, sill plate, and top gutter with non-marring top seal, side seals, bottom seal, with all wear component material to be Type 6 Nylon.			
7.8.2	The slats shall have a true box section with a flat interior surface to prevent equipment hang-up. The slats shall have a face depth of 1.0 inches and a wall thickness of 0.045 inches. Each slat incorporates a recessed slat seal to weatherproof the compartment and reduce rattle between slats.			
7.8.3	For every inch of height an integral continuous hinge joint spans the width of the door to provide superior strength.			
7.8.4	The door glides on non-interlocked end shoes. Each end shoe is independent and positively secured by an exclusive snap-in device. Door slats can be easily removed and replaced when required.			
7.8.5	The Stainless Steel Lift Bar system shall be provided to keep the door securely closed. This system complements the superior strength of the bottom rail with bottom seal and integral reinforcing flange.			
7.8.6	Wear components are constructed of Type 6 Nylon to provide maximum strength and durability. Type 6 Nylon is a naturally lubricating material, which provides exceptional temperature characteristics.			

7.8.7	Each door is equipped with slat, top, bottom and side seals to keep moisture and dirt on the outside. The non-marring top seal provides a seal without marking the door surface.			
7.8.8	The compartment door at the L1 location shall be Amdor roll up style.			
7.8.9	The compartment door at the L2 location shall be Amdor roll up style.			
7.9	**COMPARTMENT LIGHTS - LED**			
7.9.1	All roadside body compartments shall have LED lights activated by a switch. The LED compartment lights shall be flush mount and provide a consistent 120 degree wide beam pattern. There shall be a minimum of two strip lights installed in each compartment.			
7.10	**RIGHT SIDE BODY COMPARTMENTS - LOW**			
7.10.1	The following compartments shall be provided on the curb side of the apparatus body.			
7.10.2	Two (2) compartments forward of the rear wheel measuring 48"W x 40"H x 13.5 / 26"D frame opening.			
7.11	**AMDOR ROLL UP DOORS**			
7.11.1	The doors shall be Amdor Roll-Up type doors to include double wall aluminum box section slats with integral hinge joint and recessed slat seal, reusable end shoes with snap-in securement, double wall aluminum reinforced bottom rail with either Stainless Steel Lift Bar door latching system, aluminum track with side frame, sill plate, and top gutter with non-marring top seal, side seals, bottom seal, with all wear component material to be Type 6 Nylon.			
7.11.2	The slats shall have a true box section with a flat interior surface to prevent equipment hang-up. The slats shall have a face depth of 1.0 inches and a wall thickness of 0.045 inches. Each slat incorporates a recessed slat seal to weatherproof the compartment and reduce rattle between slats.			
7.11.3	For every inch of height an integral continuous hinge joint spans the width of the door to provide superior strength.			

7.11.4	The door glides on non-interlocked end shoes. Each end shoe is independent and positively secured by an exclusive snap-in device. Door slats can be easily removed and replaced when required.			
7.11.5	The Stainless Steel Lift Bar system shall be provided to keep the door securely closed. This system complements the superior strength of the bottom rail with bottom seal and integral reinforcing flange.			
7.11.6	Wear components are constructed of Type 6 Nylon to provide maximum strength and durability. Type 6 Nylon is a naturally lubricating material, which provides exceptional temperature characteristics.			
7.11.7	Each door is equipped with slat, top, bottom and side seals to keep moisture and dirt on the outside. The non-marring top seal provides a seal without marking the door surface.			
7.11.8	The compartment door at the R1 location shall be Amdor roll up style.			
7.11.9	The compartment door at the R2 location shall be Amdor roll up style			
7.12	**COMPARTMENT LIGHTS - LED**			
7.12.1	All curbside body compartments shall have LED lights activated by a switch. The LED compartment lights shall be flush mount and provide a consistent 120 degree wide beam pattern. There shall be a minimum of two strip lights installed in each compartment			
7.13	**NO TAILLIGHT WIRING COVER PLATE**			
7.13.1	The wiring for the rear taillights shall be openly accessible from the rear roadside and curbside body compartments.			
7.14	**RUB RAILS - APPARATUS BODY**			
7.14.1	Three inch "C" channel aluminum rub rails shall be bolted into place with nylon spacers on the lower framework below the apparatus body compartments. The rub rail will extend to the outside edges of the apparatus body for protection of the body from impact damage.			
7.15	**REAR TOW EYES - PAINTED**			

7.15.1	Two (2) heavy duty steel painted tow eyes shall be bolted directly to the rear frame rails.			
7.15.2	The tow eyes shall be easily accessible from the rear of the apparatus body.			
7.16	**HOSE BED ACCESS LADDER - STAINLESS STEEL - REAR**			
7.16.1	There shall be a 12" wide folding ladder on the roadside rear of the apparatus for access to the main hose bed. The ladder shall be manufactured from 11 Gauge 304 - 2B stainless steel. Each rung of the ladder shall be 9 1/2" wide and shall be manufactured as an integral component of the side rails for maximum strength and rigidity. Each rung shall have a slip resistant dimpled surface. **(Mandatory Requirement)**			
7.16.2	The ladder shall come with two (2) gas struts to assist in unfolding the ladder or for folding the ladder for storage while not in use.			
7.16.3	The hose bed access ladder shall have a weight rating of 500 lbs.			
7.16.4	Two (2) 30" 1 1/4" diameter aluminum knurled handrails shall be vertically attached on each side of the hose bed access ladder.			
7.16.5	A single minimum 12" handrail shall be supplied as an additional hand hold.			
7.17	**HOSE BED ACCESS LADDER STEP LIGHT**			
7.17.1	The hose bed access ladder steps area shall be illuminated by one (1) Whelen PEL2C LED light.			
7.18	**TAIL BOARD**			
7.18.1	A heavy-duty 16" deep tail board shall be provided.			
7.18.2	The tail board shall be covered with slip resistant 3/16" embossed checker plate. The aluminum checker plate shall be bolted to the tail board sub frame with non-corrosive stainless steel bolts. The bolt on aluminum tread plate shall allow for easy removal for service.			
7.18.3	The forward section of the tail board shall be gapped to allow washing without dirt being trapped and for the drainage of accumulated water.			

7.19	**BODY HANDRAILS**			
7.19.1	The following handrails shall be installed on the apparatus body.			
7.19.2	One (1) 48" mounted vertically on the curbside rear.			
7.19.3	One (1) 42" mounted horizontally on the upper rear, below the hose bed area.			
7.19.4	The body handrail shall be 1 1/4" in diameter and shall be knurled aluminum for maximum grip and safety.			
7.19.5	The handrail shall be installed and supported with chrome plated polished cast brackets.			
7.19.6	The handrail brackets shall be provided with an isolation gasket and held in place with stainless steel screws.			
7.20	**FOLDING STEPS - CURBSIDE REAR**			
7.20.1	One (1) folding aluminum steps shall be installed on the curbside rear of the apparatus.			
7.20.2	The steps shall be mounted to a 3/8" plate with stainless steel screws. The plate shall be permanently welded to the apparatus body frame.			
7.21	**PULL OUT STEP**			
7.21.1	One (1) Zico P/N PS-8-5 pull-out step(s) shall be provided and installed at the rear body.			
7.22	**STEP LIGHTS - LED**			
7.22.1	All steps on the body shall have adequate light, per the requirements of NFPA and ULC, for illumination. The lights shall be Tecniq EON-Linear White 2.9"W lights for folding and cast step lighting or shall be already supplied with the manufacturer supplied steps.			
7.23	**LICENSE PLATE ILLUMINATION**			
7.23.1	A LED light shall illuminate the rear license plate mount. The light shall come with a chrome bezel.			
7.24	**CHEVRON STRIPPING**			

7.24.1	There shall be 6" chevron stripping decals applied to the rear face of the apparatus. The chevron decals shall be made of high visibility Reflexite™ material that is red / yellow in color and shaped to form an "A" style pattern. A minimum of 50% of the rear body shall be covered with Chevron.			
7.25	**BODY SCENE LIGHTING - LEFT**			
7.25.1	One (1) Whelen model M9LZC surface mount light(s) shall be installed on the left side of the body. The lights shall come with a chrome plated plastic bezel. There light shall have 9860 Lumens.			
7.25.2	The light shall have a manufacturer Lifetime warranty.			
7.26	**BODY SCENE LIGHTING - RIGHT**			
7.26.1	One (1) Whelen model M9LZC surface mount light(s) shall be installed on the curbside of the body. The lights shall come with a chrome plated plastic bezel. There light shall have 9860 Lumens.			
7.26.2	The light shall have a manufacturer Lifetime warranty.			
7.27	**BODY SCENE LIGHTING - RIGHT**			
7.27.1	One (1) Whelen model M9LZC surface mount light(s) shall be installed on the curbside of the body. The lights shall come with a chrome plated plastic bezel. There light shall have 9860 Lumens.			
7.27.2	The light shall have a manufacturer Lifetime warranty.			
7.27.3	The light shall have a manufacturer Lifetime warranty.			
7.27.4	Two (2) Whelen model M9LZC surface mount light(s) shall be installed on the rear of the body. The lights shall come with a chrome plated plastic bezel. There light shall have 9860 Lumens. The light shall have a manufacturer Lifetime warranty.			
7.27.5	The rear scene light(s) shall be activated when the chassis transmission is place into reverse.			
8.1	**ELECTRICAL SYSTEM – MULTIPLEXED**			

8.1.1	The manufacturer shall design the wiring system for the apparatus in accordance with the SAE, Society of Automobile Engineers.			
8.1.2	The manufacturer shall determine the circuit loads and design the system to accommodate these loads with appropriate circuit routings and relays.			
8.1.3	All wiring harnesses shall be properly secured and routed. All passages required for routing shall be grommeted and sealed as required.			
8.1.4	All wiring shall be easily accessible for servicing.			
8.1.5	All wiring shall be SAE J1128 and SAE J1292 GXL type wire, as per fire industry standards.			
8.1.6	All exposed wiring shall be crimped, and heat shrunk for added protection.			
8.1.7	The wiring harnesses shall be pre-engineered for correct circuit loading and shall be custom made. The harnesses shall be function, number, and color coded and shall be fitted inside automotive high temperature loom. All connections to the main panel box must be made with waterproof automotive style guided pin locking connectors.			
8.1.8	An enclosed main electrical distribution panel that provides protection against dirt, dust, oil, and water shall be installed in the upper section of the pump house.			
8.1.9	All electrical connections to the panel shall be made through positive locking environmentally sealed connectors. The panel features a solid-state power distribution board(s) with visual diagnostics.			
8.1.10	All circuits are protected by automatic resetting circuit breakers. All breakers shall be properly sized to the circuit load and are direct plug-in sockets.			
8.1.11	All wiring shall have a strain pull test on wiring connections of 40 pounds			
8.2	**BATTERY MASTER SWITCH**			

8.2.1	The battery master switch shall be supplied by the chassis manufacturer.			
8.3	**ZONE A UPPER EMERGENCY LIGHTING**			
8.3.1	The zone A upper emergency lighting zone shall have the following: A Whelen Justice 56" light bar **(Model: JE2NFPA)** warning system shall be furnished and mounted to the chassis using a Whelen Stainless steel mount. The mount shall allow for adjustment of the lightbar angle.			
8.3.2	The light bar shall have a manufacturer 5-year warranty.			
8.4	**ZONE A LOWER EMERGENCY LIGHTING**			
8.4.1	The zone A lower emergency lighting zone shall have the following lights and shall be mounted to the chassis grill:			
8.4.2	Two (2) Whelen M6 Series Model # M6R warning lights.			
8.4.3	These lights shall have a Red Lens, Red LED's and come with a chrome bezel.			
8.4.4	The light shall have a manufacturer Lifetime warranty			
8.5	**ZONE B UPPER EMERGENCY LIGHTING**			
8.5.1	The zone B upper emergency lighting zone shall have the following: No emergency lights in this zone			
8.6	**ZONE B LOWER EMERGENCY LIGHTING**			
8.6.1	The zone B lower emergency lighting zone shall have the following: Two (2) Whelen M6 Series Model # M6R warning lights. These lights shall have a red lens, red LED's and come with a chrome bezel. The light shall have a manufacturer Lifetime warranty.			
8.7	**ZONE C UPPER EMERGENCY LIGHTING**			

8.7.1	The zone C upper emergency lighting zone shall have the following: No emergency lights in this zone			
8.7	**ZONE C LOWER EMERGENCY LIGHTING**			
8.7.1	The zone C lower emergency lighting zone shall have the following: Two (2) Whelen M6 Series Model # M6R warning lights.			
8.7.2	These lights shall have a red lens, red LED's and come with a chrome bezel.			
8.7.3	The light shall have a manufacturer Lifetime warranty.			
8.8	**ZONE D UPPER EMERGENCY LIGHTING**			
8.8.1	The zone D upper emergency lighting zone shall have the following: No emergency lights in this zone			
8.9	**ZONE D LOWER ZONE**			
8.9.1	The zone D lower emergency lighting zone shall have the following: Two (2) Whelen M6 Series Model # M6R warning lights.			
8.9.2	These lights shall have a Red Lens, Red LED's and come with a chrome bezel			
8.9.3	The light shall have a manufacturer Lifetime warranty.			
8.10	**REAR WARNING LIGHTS - LED – UPPER**			
8.10.1	Two (2) Whelen, model L31HRFN LED red beacons lights shall be provided and mounted for upper Zone C lighting, one (1) each side, and controlled by a switch located in the cab.			
8.10.2	The lights shall have a Lifetime manufacturer warranty.			
8.11	**HEADLIGHT WIG WAG FLASHER**			
8.11.1	The chassis high beam headlights shall be equipped with an alternating flashing, wig wag headlight system. An electronic flasher shall be used to control the lights. A control switch panel shall activate the flashing system.			

8.12	**ELECTRONIC SIREN**			
8.12.1	A Whelen Siren Amplifier model # 295SLSA1 shall be provided. The siren amplifier shall incorporate a 12V/200W siren installed on an aluminum alloy chassis covered by a black polycarbonate powder coated housing for maximum protection. The 295SLSA1 shall have the ability for either 100- or 200-watt output. The front overlay shall be made of velvet Lexan™ with a matte finish. The lettering and artwork on the overlay shall be illuminated with adjustable backlighting of soft LED non-glaring green. The operating controls will consist of a power switch, manual button, PA volume switch, horn button, and rotary switch. The 295SLSA1 PC board shall have input polarity protection, output short circuit protection. The siren amplifier shall include a 20A/32V fuse. The solid-state siren speaker amplifier shall be vibration resistant. The microphone shall be hardwired to the 295SLSA1.			
8.12.2	The 295SLSA1 shall have 21 Scan-Lock™ siren tones with two manual functions for additional siren tones. The siren amplifier shall have the ability to customize the placement of each siren tone with the rotary switch. The siren amplifier shall have a “Siren in Use” icon driver and adjustable preset repeat radio volume. The 295SLSA1 shall have a “Park Kill” feature that disables the siren when the vehicle is in park. The PTT (push to talk) switch on the microphone shall override all siren functions. The 295SLSA1 shall have a combination On/Off and horn ring transfer switch with Bi-polarity horn/ring activation control. The 295SLSA1 shall have SI Test® capability to perform a complete diagnostic silent test of amplifier and speaker(s). The siren amplifier shall have a quick disconnect plug. The 295SLSA1 shall have the ability to activate siren tones with “Aux Enable” input either with a slide switch, power controls, or relay-to-ground connector. The 295SLSA1 shall meet Class A requirement for SAE, AMECA, KKK1822, and California Title XII. The sire amplifier shall have an adjustable bail bracket with installation hardware. The 295SLSA1 is covered by a two-year factory warranty.			
8.13	**ELECTRONIC SIREN SPEAKER**			
8.13.1	There shall be a Whelen model # SA315P, 123db / 100 watt electronic siren speaker provided at the front bumper and connected into the electronic siren.			
8.13.2	The speaker shall have a manufacturer 2 Year warranty.			
8.14	**SPEAKER COVER – BUMPER MOUNT**			

8.14.1	The chassis bumper shall come with a cut out for mounting the siren speaker behind. The cut out shall come with a stainless steel cover that is slotted to allow sound to pass thru.			
8.14.2	The bumper shall be chromed after the cut out has been made (**Mandatory Requirement)**			
8.15	**TAILLIGHTS - LED**			
8.15.1	There shall be a set of LED taillights installed the rear face of the apparatus body. These lights shall include brake, turn and clear back up lights installed in chrome trim bezels.			
8.16	**HANDHELD CAB SPOTLIGHT - LED**			
8.16.1	One (1) Sho-Me P/N 06.0600 CLP, handheld LED spotlight shall be provided and mounted on the right side in the cab and wired into the 12- volt electrical system.			
8.16.2	The light shall be secured in the chassis cab with a stainless steel NFPA compliant hook.			
8.17	**HOSE BED FLOOD LIGHT(S) - LED**			
8.17.1	There shall be two (2) DTI model DTI-LED-010WX6 12V light(s) provided for hose bed and area lighting. The LED lighting shall be rated for 2700 lumens. The mounting base shall be a stainless steel mount that swivels vertically and horizontally. The lights shall be controlled from the cab and shall come with a shut off switch at the light head.			
8.18	**GROUND LIGHTS - LED**			
8.18.1	There shall be six (6) LumaBar H2O 12” LED ground lights with outward facing angle brackets installed underneath the apparatus. The ground lights shall be activated by a switch installed in the chassis cab. Ground lights that are directly underneath a door opening will turn on automatically when the door is opened.			
8.19	**ENGINE COMPARTMENT LIGHT - LED**			
8.19.1	One (1) Tecniq EON P/N E03-W000-1 LED light(s) shall be installed in the engine compartment. The light shall come with a Tecniq stainless steel light bezel. A mercury switch shall activate the light when the hood is opened.			

8.20	**DOOR AJAR SYSTEM**			
8.20.1	A chassis supplied red flashing warning light for the door ajar system shall be provided in the cab. This light shall be activated when a compartment door on the apparatus body is open.			
8.20.2	A magnetic sensor shall be installed in all compartments with a roll up door.			
8.20.3	A On / Off depression style switch shall be supplied in all compartments with a pan door.			
8.21	**CLEARANCE AND MARKER LIGHTS - LED**			
8.21.1	All clearance / marker lights, reflectors shall comply with department of transport motor vehicle safety standards. The clearance / marker lights shall be LED (light emitting diode) type.			
8.22	**TWO WAY RADIO POWER SUPPLY**			
8.22.1	There shall be one (1) dedicated 12V power supply line(s) coiled underneath the chassis dash for the future install of each customer supplied two way radio.			
8.23	**ANTENNA MOUNT(S)**			
8.23.1	One (1) mount(s) for future antenna installation shall be installed on the chassis cab roof. The antenna leads shall be wired to the chassis cab dash area for future installation of a radio.			
9.1	**SUB STRUCTURE WARRANTY - 5 YEAR**			
9.1.1	The substructure shall be warranted for a period of five (5) years on the apparatus sub structure for corrosion perforation.			
9.2	**BODY WARRANTY - 10 YEAR**			
9.2.1	The apparatus body warranty shall cover the entire body against manufacturer defects for a period of ten (10) years on aluminum formed bodies.			
9.3	**PAINT WARRANTY**			
9.3.1	The paint shall be warranted by PPG for a period of five (5) years and shall be ***non prorated***. **(Mandatory Requirement)**			

9.3.2	Items covered in the warranty shall include all body interior and exterior surfaces and painted pump houses and shall cover the following: Peeling or delaminating of the topcoat and other layers of paint. Cracking or checking due to failure of the product. Excessive loss of gloss caused by cracking, checking, or hazing.			
9.4	**TANK PAINT WARRANTY**			
9.4.1	The paint shall be warranted by PPG for a period of five (5) years and shall be ***non prorated***. **(Mandatory Requirement)**			
9.4.2	Items covered in the warranty shall include: Peeling or delaminating of the topcoat and other layers of paint. Cracking or checking due to failure of the product. Excessive loss of gloss caused by cracking, checking, or hazing.			
9.5	**WHEEL WELL LINER**			
9.5.1	Both wheel wells shall have a liner. For corrosion and weather resistance the liner shall be manufactured from .110 inch thick ultraviolet resistant high density polyethylene. The liner shall be black in color.			
9.6	**PAINT POLISH BODY - A.C.T. STANDARDS #6**			
9.6.1	The paint finish on the body shall meet the ACT test panel #6 level for orange peel visual standard. Test sample swatches shall be made available on request for paint finish comparison. **(Mandatory Requirement)**			
9.7	**BODY UNDERCOATING - CORASHIELD®**			
9.7.1	The whole frame / cross members / wheelwell area / and inner body of the apparatus body shall be thoroughly prepared and sprayed with Corashield® that will help prevent rust and corrosion. A minimum of 8-10 mils of Corashield® shall be sprayed. The bottom, sides and tops of the cross members shall be fully covered.			

9.7.2	The Corashield® is a sprayable latex coating designed for use on aluminum, fiber glass, cold rolled steel, galvanized steel, and most metal primers. Corashield® is formulated to give very good corrosion protection. This medium viscosity, sag resistant coating can be easily sprayed onto exposed underbody areas, and into restricted areas such as tubing and "hidden" areas accessible only with spray wands.			
9.7.3	Corashield® dries quickly at ambient temperatures and will withstand urethane paint bakes after only 30 min drying at room temperature.			
9.7.4	Corashield® provides better protection than any of the competitive products tested without the environmental and safety problems inherent in many of the undercoating available today.			
9.8	**KROWN RUST INHIBITOR**			
9.8.1	There shall be an application of Krown rust inhibitor applied to the chassis and the apparatus body as per the supplier's recommendation for maximum rust protection prior to delivery of the apparatus.			
9.9	**COMPARTMENT FINISH**			
9.9.1	The interior of all compartments of the body shall also be sealed and caulked. A natural finish shall be provided with all compartment interiors.			
10.1	**4" REFLECTIVE BODY PRIMARY STRIPING**			
10.1.1	There shall be a four-inch-wide reflective stripe applied to the left and right sides of the apparatus according to the requirements of NFPA 1901 latest edition. The reflective stripe shall be a 3M Scotchlite product.			
10.1.2	Accent Stripe - 1/4" Black Pin Stripe above and below main reflective			
10.1.3	The accent stripe shall be the same color as the main stripe.			
10.2	**HARD SUCTION HOSE MOUNTING**			
10.2.1	Suction hose storage for two (2) lengths of hard suction hose shall be installed above the body compartments per the fire departments specifications. Suction hoses may be placed above the ladders on the drivers' side, or one mounted on each side of the unit.			

10.2.2	The hose troughs shall be fabricated from polished custom aluminum extrusions. The hose shall be fastened to the tray with heavy duty type Velcro Straps.			
10.3	**PORTABLE TANK CARRYING BRACKETS**			
10.3.1	One (1) hinged aluminum Quic-Lift portable tank rack, 12 volt hydraulically actuated with mechanical locks on the left side of body, above side running board compartments, shall be provided. This rack shall swing down to a level the same as the running board compartments for ease of removing and installing the portable tank.			
10.4	**PORTABLE TANK RACK ENCLOSURE - ALUMINUM CHECKER PLATE**			
10.4.1	There shall be an enclosure installed on the porta tank rack for storage of the porta tank. The enclosure shall be manufactured from aluminum checker plate.			
10.4.2	Tarp - Mesh - Porta Tank			
10.5	**FRAMED PORTABLE TANK**			
10.5.1	One (1) Husky 2080 IG / 2500 USG collapsible portable tank made with 22 oz. EXLON® and a full tubular aluminum frame shall be provided. The liner includes a 10" quick-drain tube which will empty the tank in seconds.			
10.5.2	Open tank dimensions with liner: 12'3" x 12'3" x 29" Closed tank dimensions with liner: 7" x 12'3" x 29" Weight: 135 lbs			
10.6	**LADDER MOUNTING BRACKETS**			
10.6.1	Electrically powered ladder mounting brackets shall be installed on the left side (drivers) of the apparatus, Ladder brackets shall accommodate the mounting and carrying of one (1) 24 ft. extension ladder and one (1) 14 ft. roof ladder. Ladders will be provided and installed by Portugal Cove - St. Philip's. Power brackets shall lower the ladders for easy removal and replacement.			
11.1	**SCENE LIGHTS**			

11.1.1	Two (2) Fire Research Evolution II LED model FCA530-V20 side mount push up telescopic light shall be installed. The light pole shall be anodized aluminum and have a knurled twist lock mechanism to secure the extension pole in position. The extension pole shall rotate 360 degrees. The outer pole shall be a grooved aluminum extrusion and qualify as an NFPA compliant handrail. The pole mounting brackets shall have a 3 1/2" offset. Wiring shall extend from the pole bottom with a 4' retractile cord. The lamp head shall have eight (8) ultra-bright white LEDs. It shall operate at 12/24 volts DC, draw 13/6.5 amps, and generate 20,000 lumens. The lamp head shall direct 50 percent of the light onto the action area while providing 50 percent to illuminate the working area. The lamp head angle of elevation shall be adjustable at a pivot in the mounting arm and the position locked with a round knurled locking knob. The lamp head shall incorporate heat-dissipating fins and be no more than 5 3/16" deep by 3 5/16" high by 11 1/2" wide. The lamp head and mounting arm shall be powder coated white. The floodlight shall be for fire service use. **Location of floodlight shall be: 1 each side front of body.** **GUIDE RAILS FOR TELELIGHTS** Two (2) FRC "No Scratch" guide rails shall be installed in conjunction with the side mount raised telescopic lights. The guide rails shall consist of a guide collar, guide rail assembly and a steady rest bracket to prevent scratching and denting of the apparatus body surfaces. Electrical wiring shall be provided in between each 12V light and the main 12v electrical distribution box to ensure a proper and safe connection. Two (2) on/off switches shall be provided in cab. **HAZARD LIGHT SWITCH** Fire Research Spectra –SW530 option raised pole hazard light switch shall be installed. A magnetic switch shall close when the pole is raised to activate a door ajar light in the chassis cab.			
12.1	**COMPARTMENT SHELVING**			
12.1.1	Each available open compartment shall have installed one adjustable full shelf.			

13.1	**SCBA STORAGE RACK/TRAY**			
13.1.1	One compartment on the passenger side of the vehicle shall have installed a pull-out vertical tray to accommodate the mounting and storage of two MSA Fire HAWK SCBA.			
14.1	**HARD SUCTION HOSES**			
14.1.1	Two 10-foot lengths of hard suction hose for the truck mounted pump shall be provided. Mounting trays for suction hoses shall be provided on the driver's side of the unit. Complete with hose securement clamps or eq			