



REQUEST FOR PROPOSAL

Mini Pumper
Addendum #1

Prepared by:
The Corporation of the Township of Ryerson
28 Midlothian Road, RR1
Burks Falls, ON P0A 1C0

1. Purpose of Request for Proposal

The Township of Ryerson is inviting proposals to supply one (1) Mini-Pumper 4x4 Crew Cab Fire Apparatus. The proposals are to be based on the specifications contained in this document.

2. Information and Instructions

2.1 Background Information

The Township of Ryerson is a single-tier municipality located in the District of Parry Sound. It is a small, rural community with a population of 648 as per the 2016 Census. The Township is located approximately 35 km north of the Town of Huntsville, west of the Village of Burks Falls and the Township of Armour and east of the Municipality of Magnetawan.

The Township is governed by a Mayor and four Councillors. Residents are provided all standard municipal services, with the exception of water and sewer services. Several of these services, including the Fire Department, Arena, and Landfill are provided through a Shared Services agreement with the Village of Burks Falls and the Township of Armour. As part of that Shared Service Agreement, Ryerson serves as the administering body for the Burk's Falls and District Fire Department.

Additional information on the Township can be found on the municipal website:
www.ryersontownship.ca.

2.2 Submission of Proposals

Proposals shall be submitted in the form and format specified in Section 4 and shall include a completed Form of Proposal attached as Appendix A to this document. A designated signing officer authorized to bind the Respondent to the provisions of their Proposal must sign the Form of Proposal. Any addenda issued by the Township of Ryerson in accordance with Section 2.5 must be acknowledged by the Respondent on the Form of Proposal.

Each Respondent is asked to submit one (1) hard copy of the Proposal. The hard copy of the Proposal must be signed, sealed, and delivered to:

The Township of Ryerson
RR #1, 28 Midlothian Road
Burks Falls, ON P0A 1C0

The front of the sealed envelope must indicate the Respondent's full company name, the name of the lead contact, and be clearly marked 'Request for Proposal- Mini Pumper'.

The hard copy of the Proposal must be received no later than 4:00 PM local time on Thursday January 6, 2022.

It is the responsibility of the Respondent to ensure that the Township receives its Proposal prior to the submission deadline, in accordance with the submission process outlined above. Proposals received after the submission deadline will not be considered and will be returned unopened. Faxed or electronic submissions that are unaccompanied by a hard copy submission will not be accepted as a response to this RFP.

2.3 Lead Contact

The Township of Ryerson has endeavoured to provide complete and correct information necessary for Respondents to properly assess and determine the scope and complexity of work prior to submitting a Proposal.

Respondents are solely responsible for determining if more information is required or if anything contained in this document appears incorrect or incomplete, and for contacting the Lead Contact identified below if they have any questions whatsoever prior to the closing date.

Information obtained from any source other than the Lead Contact is not official and may be inaccurate. The Township will not be responsible for any verbal statement, instruction, or representations.

All inquiries for this RFP must be directed by email to:

Dave McNay
Fire Chief
chiefbfdfd@gmail.com

A Respondent may be disqualified if, during the period between the issuance of this Request for Proposal and the date of notification of the award, they contact any individual who is involved in this RFP process and who is not the Lead Contact. This is to ensure that all Respondents receive the same information and are treated equitably.

2.4 Required Review and Clarification

It is the responsibility of each Respondent to carefully review this RFP. Questions concerning clarification of the contents of this document must be received by the Lead Contact by no later than 4:00 PM local time on Friday December 10, 2021. This is to allow time for the issuance of any necessary addenda.

In submitting a Proposal, the Respondent acknowledges that they have read, completely

understand, and accept the terms and conditions of the RFP in full. The Township of Ryerson is not responsible for any misunderstanding of the RFP.

2.5 Amendments to the RFP

The Township may issue addenda to clarify and/or modify certain aspects of the RFP prior to the submission deadline. Addenda shall be posted by 4:00 PM on Wednesday December 15, 2021 to www.ryersontownship.ca and shall be available in hard copy format at the municipal office.

2.6 Opening of Proposals

There will be no formal opening of proposals. Proposals will be evaluated, and a recommendation brought to Council at the January 18, 2022 regular meeting. Respondents are welcome to attend this meeting at their own cost.

2.7 Rights of the Township of Ryerson

The Township of Ryerson reserves the right to:

- a) Make public the names of any or all Respondents and their quoted fees
- b) Verify with the Respondent or with a third party any information set out in their Proposal
- c) Disqualify any Respondent whose Proposal contains misrepresentations, any other inaccurate or misleading information, or any qualifications
- d) Disqualify any Respondent who has engaged in conduct prohibited by this RFP
- e) Make changes, including substantial changes, to this RFP provided that those changes are issued by way of addenda in the manner set out in this RFP
- f) Select a Respondent other than the Respondent whose Proposal reflects the lowest cost to the Township
- g) Cancel this RFP process at any stage
- h) Cancel this RFP process at any stage and issue a new RFP for the same or similar deliverables
- i) Accept or reject any or all Proposals in whole or in part
- j) Discuss with any Respondent different or additional terms to those contemplated in this RFP or in any Respondent's Proposal
- k) If a single Proposal is received, reject the Proposal of the sole Respondent and cancel this RFP process or enter into direct negotiations with the sole Respondent
- l) Enter into negotiations with the selected Respondent to obtain cost savings, additional services, or any other matter

These reserved rights are in addition to any other expressed rights or any other rights which may be implied in the circumstances.

2.8 Not Responsible for Costs

The Township shall not pay any costs associated with the preparation, submission, or presentation of the Respondent's Proposal. The Township shall not be liable for any expenses, costs, or losses suffered by the Respondent or any third party resulting from the Township exercising any expressed or implied rights under this RFP.

2.9 Proposal Expiry Date

Respondents hereby acknowledge that their Proposals shall be irrevocable for a period of 90 days after the submission deadline. Extensions to this period may be granted with the mutual agreement of the Township of Ryerson and the successful Respondent and may be initiated by either party.

2.10 Confidentiality and Ownership

Any information provided to the Respondent by the Township before, during, or after the RFP is completed shall be treated as confidential and shall not be used or communicated by the Respondent or any third party in any way unless otherwise identified or permitted by the Township of Ryerson or under Federal/Provincial legislation. Information, reports, documentation, plans, etc. that are produced by the successful Respondent in response to this RFP shall become the exclusive property of the Township of Ryerson. However, intellectual property such as specific tolls, templates, and processes that the Respondent provides as part of the deliverables remains the property of the Respondent if so requested.

2.11 Freedom of Information

Any personal information required in the Proposal is received under the authority of the Township of Ryerson. This information shall be an integral component of the submission. All written Proposals received by the Township become a public record. Once a Proposal is received by the Township and the contract has been awarded, all information contained in the Proposals may be available to the public, including personal information. Questions about the collection of personal information and the Municipal Freedom of Information and Protection of Privacy Act, 1989, R.S.O. 1990, as amended may be directed to the Lead Contact.

2.12 Invoicing

The Bidder shall provide a single invoice for payment in full to the Township of Ryerson upon delivery of the selected unit. Invoices shall clearly state what has been supplied with a description of the unit. It should be noted that the Township of Ryerson's standard terms of payment are net 30 calendar days from the date of invoice.

2.13 Inspection Period

Upon delivery of the unit to the Township of Ryerson, the Township of Ryerson shall have five (5) days to inspect and test the unit to ensure that it meets the specifications as listed in this RFP. If the unit does not meet the required specifications, the Respondent shall enter into a Penalty Period on the 31st day following the delivery date and shall meet the requirements of Section 2.14. The Township of Ryerson shall not be responsible for any costs associated with a unit that does not meet the specifications as outlined in the Respondent's Proposal.

2.14 Penalty Period

If the Delivery Date passes and the unit that fully meets the specifications of this RFP has not been delivered to the Township of Ryerson, the successful Respondent shall have thirty (30) days to provide the unit. On the 31st day following the delivery date, the successful Respondent shall enter a Penalty Period. A penalty of \$250.00 per day shall be charged to the successful Respondent, to be taken off the unit purchase price, for each day after the Delivery Date until a unit that is fully compliant with the specifications contained herein has been delivered. The Township of Ryerson shall not be responsible for any charges related to the transportation of the unit or a replacement unit to or from the Township yard.

2.15 Delivery Date

Time shall be material and of the essence of the contract. Respondents are required to specify a Delivery Date in their proposals. Failure to meet the specified Delivery Date will result in the Penalty Clause being exercised as per Section 2.14.

2.16 Additional Requirements

- a) The use of qualified sub-contractors by the Respondent to perform specific duties while under contract is permitted only if the Respondent declares such use in the Proposal or if the successful Respondent receives written approval from the Township.
- b) The successful Respondent shall ensure that all services and products provided in respect to this proposal are done so in accordance with and under the authorization of all applicable authorities, municipal, provincial, and/or federal legislation, including but not limited to WSIB and all applicable responsibilities under the Occupational Health and Safety Act.

2.17 Proposed Timeline

The timeline set out below is the Township's best estimate of the schedule that will be followed. It is intended to be for guidance purposes only.

RFP Issue Date	October 26, 2021
Deadline for submission of questions (see Section 2.4)	December 10, 2021, 4:00 p.m.
Deadline for addenda to be posted on the Township website (see Section 2.5)	December 15, 2021, 4:00 p.m.
Submission Deadline	January 6, 2022, 4:00 p.m.
Recommendation taken to Council	January 18, 2022
Notification of Award	Within ten (10) calendar days following Council decision

3. Specifications and Requirements

The Township of Ryerson is looking to purchase one (1) Mini-Pumper 4x4 Crew Cab Fire Apparatus. Vehicle must be new, unused, free of defects or deficiencies in design, materials or workmanship; conforming to manufacturer’s specifications. The vehicle must be properly pre-delivery serviced to ensure that the vehicle is ready for use with particular attention to lubes, fluids, filters, belts, all fasteners, lighting, electrical components, sensors and adjustable items. Dealer is responsible for hookup and testing of units prior to putting into service.

A detailed list of specifications has been included as Schedule B. Respondents are asked to complete this Schedule, noting whether or not their proposed model conforms to the specifications contained therein, and list alternate specifications where deviations occur. Note that, as this is an RFP, the Township will consider alternatives put forth by a Respondent; the purpose of the schedules is to simplify the process of comparing various models being proposed.

4. Submission Requirements

Respondents are asked to submit a proposal which contains all of the information detailed below.

4.1 Format

For the Township of Ryerson to evaluate proposals fairly and consistently, Respondents should follow the format set out herein and provide all of the information as requested. Failure to provide all required information as detailed in this RFP may result in the Respondent being disqualified or scoring poorly in the evaluation. Respondents are encouraged to provide any additional information not specifically outlined in this RFP that they believe would be of value in evaluating their Proposal.

4.2 Specification Sheets and Warranty

Only ONE (1) specification sheet shall be submitted by the Respondent. The completed specification sheet must be legible and shall not be restricted by any attached sheets or documents of any kind unless requested in this RFP.

A “YES” answer indicates 100% compliance with the entire statement. The Respondent’s bid may meet or exceed stated specifications unless otherwise quantified.

If the question is “YES” or “NO” and requires specification, circle the corresponding answer and enter the specification beside the answer (e.g., when answering with a wheeled excavator machine weight of 16 tonne, circle “YES” and enter “16 tonne” beside the word “YES”.)

If the question is a simple yes or no, circle the corresponding answer only (e.g., when answering DEF question, circle “YES” if the quoted machine requires DEF and circle “NO” if it does not.)

If a question is answered “NO”, please still list the specification where required. A “NO” answer may cause the proposal to be scored lower in the evaluation process.

A question may be answered with N/A if the specification does not apply to the proposed unit.

4.3 Company Background and References

The Respondent shall provide a description of their Company, including but not limited to the company name, contact person(s), contact title, company address, phone number, email address, and a brief description of the number of years in business and the services provided.

The Respondent shall provide references for at least two (2) municipalities to which they have provided similar units in the past five (5) years. Respondents must provide manufacturer literature.

The Respondent shall provide a description of the nearest fixed support location(s), including but not limited to the distance(s) to the Township of Ryerson shop, a description of mobile support available and the associated rates shall be provided, including mileage.

4.4 Costs and Fees

Respondents are required to state their total tender price on the Schedule A- Form of Proposal.

Respondents are also asked to separately quote an extended warranty, if available, and provide details on both the regular warranty included in the Tender Price and any

extended warranty option in their Proposal. The Township will, in its sole discretion, elect whether or not to purchase the extended warranty as a component of this RFP.

5. Evaluation Criteria

As part of the evaluation process, the Township may contact one or more Respondents to clarify or obtain more information about their Proposal or substantiate any details contained therein. Discussions will only be held with Respondents who have submitted a Proposal deemed reasonably acceptable for award.

The Township of Ryerson may make their award(s) on the basis of the Proposals, without seeking additional information and/or clarification. Therefore, each initial Proposal should reflect the best efforts of the Respondent and include all required documentation as set out in the RFP.

The evaluation committee will make a recommendation to Council on the basis of the criteria identified below.

- a) Specification sheets and warranty
- b) Company background and references
- c) Costs and fees

Schedule A: Form of Proposal

The Township of Ryerson is inviting proposals for one (1) Mini-Pumper 4x4 Crew Cab Fire Apparatus.

I/We, the Undersigned, having examined this Request for Proposal, do hereby offer to enter into an agreement with the Township of Ryerson to provide a Mini-Pumper 4x4 Crew Cab.

Total Price (before HST) _____

HST _____

Total Tender Price _____

Delivery Date _____

Extended Warranty (provide information separately) _____

I, We _____
(Name-Print) (Position)

of _____
(Company Name)

Dated at _____ this _____ day of _____, 2021.

AUTHORIZED SIGNATURE(s)

STREET ADDRESS

CITY PROVINCE POSTAL CODE

TELEPHONE NO. FACSIMILE NO. E-MAIL ADDRESS

Receipt of any issued addenda shall be acknowledged by initialing in the space provided below.

Addendum No. 1 _____ Addendum No. 2 _____ Addendum No. 3 _____

Signature in the designated space, by an authorized officer of the Bidder's company affirms acceptance of the Request for Proposal requirements set forth in this document, the associated costs attributed to the business arrangement between the Bidder and the Township of Ryerson, and hereby certifies that the information supplied in this proposal to be true and complete in all respects.

Company Seal

Schedule B: Truck Specifications

MAKE AND MODEL

Make: _____

Model: _____

Year: _____

Weight (tonne): _____

SERVICING INFORMATION

Nearest Service Facility: _____

Distance (km): _____

Servicing Fee (/hr): _____

Mileage: _____

Other Information (turnaround times, description of service, call process, etc.)

ITEMS	DESCRIPTIONS	CONFORMITY		SPECIFICATIONS
		YES	NO	
	<p>Chassis, Crew Cab 4x4, 4 door Crew Cab The chassis shall be put into service and operate in the country of Canada (CAN) and shall meet the regulatory requirements of the same. The entire chassis specifications shall be provided with bid.</p>			
	<p>Warranty Basic36 month/36,000 miles Powertrain60 month/60,000 miles Corrosion Perforation... 60 month/unlimited mileage Roadside Assistance 36 month/36,000 miles Diesel Engine..... 60 month/100,000 miles Front GAWR: 7,000 lbs. Rear GAWR: 13,500 lbs. GVWR: 19,500 lbs.</p>			
	<p>Powertrain Turbo diesel engine * 250-amp dual alternator * 730-amp battery with run down protection * Engine oil cooler, transmission oil cooler. Automatic transmission with overdrive, lock-up, driver selection * Part-time four-wheel drive with electric shift-on-the-fly transfer case, auto locking hubs * Limited slip differential, ABS & driveline traction control, power take-off provision * 4.88 axle ratio * Stainless steel exhaust</p>			
	<p>Steering and Suspension Hydraulic power-assist re-circulating ball steering * 4-wheel disc brakes with front and rear vented discs * HD ride suspension, with electronic stability * Non-independent front suspension * Front leading link suspension * Front anti-roll bar* HD front shocks * Rigid rear axle * Rear leaf suspension * HD rear anti-roll bar * HD rear leaf springs * HD rear shocks * Front and rear 19.5" x 6.00" polished forged aluminum wheels with chrome hub covers * 225/70R19.5 BSW AS front tires * AT rear tires</p>			

ITEMS	DESCRIPTIONS	CONFORMITY		SPECIFICATIONS
		YES	NO	
Safety	4-wheel anti-lock braking system * Dual airbags, seat mounted driver and passenger side-impact airbags, airbag occupancy sensor * Front height adjustable seatbelts with front pre-tensioners			
Comfort and Convenience	Air conditioning, four (4)12V DC power outlets in cab, two (2) front and two (2) rear, four (4) USB outlets two (2) front and (2) rear * Analog instrumentation display includes tachometer, oil pressure gauge, engine temperature gauge, voltmeter gauge, oil temperature gauge, transmission fluid temp gauge, engine hour meter, systems monitor, redundant digital speedometer, trip computer, trip odometer. Voice activated GPS. * Warning indicators include oil pressure, engine temperature, battery, low oil level, low coolant, lights on, key, low fuel, low washer fluid, lighting malfunction, door ajar, service interval, brake fluid, turn signal on, transmission fluid temp * Steering wheel with tilt adjustment Variable intermittent front windshield wipers * Interior lights include dome light glove box			
Seating and Interior	Seating capacity of 4 * two (2) bucket front seats with adjustable head restraints (passenger seat with mounted SCBA bracket), * 4-way adjustable driver seat * 4-way adjustable passenger seat * two (2) rear bucket seats with SCBA brackets and center storage consul * Vinyl faced front seats with vinyl back material * Vinyl faced rear seats with carpet back material * Full cloth headliner, full vinyl/rubber floor covering, deluxe sound insulation, urethane gear shift knob			
Exterior Features	1 skid plate, side impact beams, front license plate bracket, fully stainless steel body material * Black fender flares * Black side window moldings, black front windshield molding * Black door handles * Chrome grille * 4 doors * Driver and passenger power remote black heated convex spotter folding manual extendable trailer outside mirrors with turn signal indicators * Front chrome bumper with front tow hooks * halogen fully automatic headlamps with multiple headlamps, delay-off feature * Additional exterior lights include cab clearance lights, remote activated perimeter/approach lights *flat running board* Clear coat monotone paint.			

ITEMS	DESCRIPTIONS	CONFORMITY		SPECIFICATIONS
		YES	NO	
Cab Paint	The cab on the vehicle shall be painted red by the factory.			
Back-Up Camera	The chassis shall be supplied with a rear back-up camera system. The camera shall be mounted immediately below the hose bed.			
Cab Console	<p>A heavy-duty angled console shall be installed in the cab between the driver and officer seats. The console shall be finished in black powder coat for durability and low reflection. The console shall be designed with a versatile mounting rail system that accommodates commercially available panels for installation of items such as radio equipment. The design shall allow for a total of sixteen (16) inches of mounting space.</p> <p>The console shall contain the following items as standard:</p> <ul style="list-style-type: none"> • Siren control head in a 3" Equipment Mounting Plate • Pump Shift in a 4" custom laminate panel. • Three (3) Blank 3" Filler Plates <p>The following items shall be installed on the console:</p> <ul style="list-style-type: none"> • Two (2) microphone clips 			
Drivelines	Universal joints and driveshaft's shall be modified for mid ship pump installation. The driveshaft slip joints shall be coated to reduce sliding friction and thrust under high torque loads. Shafts shall be balanced to prevent vibration.			
Front & Rear Bumper / Winch Receiver	The front and rear bumper will have 2" receiver for portable winch or towing capability.			
Electronic Siren	A electronic siren control, with siren tones including Radio Rebroadcast, Public Address, Manual, Wail, Yelp, Air Horn, Electronic Mechanical Siren tones and Piercer tones and hard-wired microphone, shall be provided.			
Siren Speaker	Behind the grille there shall be a 100-watt siren speaker.			

ITEMS	DESCRIPTIONS	CONFORMITY		SPECIFICATIONS
		YES	NO	
	<p>Battery Charger / power Inverter</p> <p>Vehicle must have a load minder and a trickle charger with auto eject.</p> <p>A minimum 3000-watt 12 DC volt to 110 AC volt inverter with an outlet in L3 and R3</p>			
	<p>Pump Frame and Pump Piping</p> <p>The pump cage framework assemblies that are to be precision manufactured from strong corrosion free heavy wall stainless steel tubing. The framework is to mount to the truck frame through a mounting design complimented with iso-mount elastomer cushions. The result shall be a mounting system that allows for the twisting movement of the truck frame without undue stress loading of the pump module.</p> <p>Side panels are to be stainless steel. Brushed, mirror polished, or powder coated are acceptable for the side panels</p>			
	<p>Pump Compartment</p> <p>For durability, the pump compartment shall be constructed entirely of corrosion resistant material.</p>			
	<p>Running Boards</p> <p>The running board step surface shall be non-slip meeting the current revision of NFPA 1901 for step requirements. Bolt on running boards and support structure shall be provided to provide field service of the running board without major repairs to the pump compartment in the event of an accident.</p>			
	<p>Pump Service Access</p> <p>The intake panels on the sides of the pump module shall be fastened with quick release latches to provide access to the pump at the intake piping area.</p> <p>The floor of the cross lays shall be removable for access to the top of the pump module.</p>			
	<p>Pump Control Panel</p> <p>All pump controls and gauges shall be located at the left (street) side of the apparatus and properly identified. The layout of the pump control panel (34") shall be ergonomically efficient and systematically organized.</p> <p>All push-pull valve controls shall have quarter turn locking control rods with chrome plated zinc tee handles. Guides for the push-pull control rods shall be chrome plated zinc castings securely mounted to the pump panel. Push-pull valve controls shall be capable of locking in any position. The control rods shall pull straight out of the panel and shall be equipped with universal joints to eliminate binding.</p>			

ITEMS	DESCRIPTIONS	CONFORMITY		SPECIFICATIONS
		YES	NO	
	<p>Pump Panel Identification Tags</p> <p>The identification tag for each valve shall be recessed in the face of the control handle. All discharges shall have color-coded metal identification tags, with each discharge having its own unique color scheme. Color-coding shall include the labeling of the outlet and the drain for each corresponding discharge.</p>			
	<p>Pump Panel Finish</p> <p>All stainless panels used in the construction of the pump house shall have a brushed finish.</p>			
	<p>Controls and Gauges</p> <p>The following shall be provided on the pump and gauge panels in a neat and orderly fashion.</p>			
	<p>Electronic Pressure Governor</p> <p>Hale Captain Pressure Governor preferred</p>			
	<p>Foam System</p> <p>Foam Pro 2000 Series</p>			
	<p>Pressure Gauges</p> <p>Each line pressure gauge shall be mounted immediately above the control for the corresponding valve. The individual line pressure gauges for the discharges shall be 2-1/2" in diameter with white dial face gauges with black lettering and markings. The gauges shall be a compound style gauge with a vacuum/pressure range of 0 - 400 psig. The gauges shall be fluid filled with pulse and vibration dampening Interlube to lubricate the internal mechanisms to prevent lens condensation and to ensure proper operation to -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. The gauge accuracy for the gauge shall be plus or minus 2% mid-scale, plus or minus 3% balance, per ANSI B40.1, Grade 1A.</p> <p>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. A bright metal bezel shall be supplied for resistance to corrosion and to protect the lens and case from damage.</p> <p>All line pressure gauges shall be mounted adjacent to the corresponding discharge control tee handles.</p> <p>All gauges must display both PSIG and KPA</p>			

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		YES	NO	
	<p>Led Gauge Lighting</p> <p>The 2-1/2" pressure gauges shall be equipped with LED back lighting.</p>			
	<p>Pump Panel Lighting</p> <p>The pump operator's panel shall be supplied with a LED light system. LED strip lights with a stainless-steel hood shall be mounted across the top of the pump panel gauges and controls.</p> <p>LED strip lights with a stainless-steel hood shall be provided on each side of the pump module above the side panels.</p> <p>All pump module lighting shall illuminate when the parking brake is engaged.</p>			
	<p>Water/Foam Tank Indicator</p> <p>Fire Research Tank Vision tank indicator kit shall be installed for both the foam and water tanks.</p> <p>The program features shall be accessed from the front of the indicator module. The program shall support self- diagnostics capabilities, self- calibration, and a data link to connect remote indicators. Low water warnings shall include flashing LEDs at 1/4 tank, down chasing LEDs when the tank is almost empty, and an output for an audio alarm.</p> <p>The indicator shall receive an input signal from an electronic pressure sensor. The sensor shall be mounted from the outside of the water tank near the bottom. No probe shall place on the interior of the tank. Wiring shall be weather resistant and have automotive type plug-in connectors.</p>			
	<p>Pump Compartment Heater, Switch on Pumphouse</p> <p>805-1663 Faucher 36, 600btu or equivalent</p>			
	<p>Aluminum Plate Heat Pan Under Pumphouse</p> <p>Includes frame and removable panel, including extra drain holes</p>			
	<p>Pump Manufacturer and Model</p> <p>The pump shall be a Hale 1050 DSD model midship pump.</p>			
	<p>Altitude Requirements</p> <p>The apparatus shall be designed to meet the specified rating at 0 to 2000' altitude.</p>			
	<p>Priming Pump</p> <p>The priming pump shall be a positive displacement vane type, oil-less, electrically driven, and conform to standards outlined in NFPA 1901. One priming control shall both start the priming motor and open the priming valve.</p>			

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		YES	NO	
	<p>Pump Construction and Assembly</p> <p>The entire pump, both suction and discharge passages, 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 specs as outlined by the latest NFPA Pamphlet No. 1901. Pump shall be free from objectionable pulsation and vibration.</p> <p>The pump body and related parts shall be of fine grain alloy cast iron, with a minimum tensile strength of 30,000 PSI. All moving metal parts in contact with water shall be of high-quality bronze or stainless steel. Pump body shall be vertically split on a single plane for easy removal of entire impeller assembly including wear rings and bearings without disturbing piping or the mounting of the pump in chassis. Pump shaft to be rigidly supported by three bearings for minimum deflection. The bearings shall be heavy-duty, deep groove ball bearings in the gearbox, and they shall be splash lubricated.</p> <p>Pump impeller shall be hard, fine grain bronze of the mixed flow design; accurately machined, hand ground, and individually balanced. The vanes of the impeller intake eyes shall be of sufficient size and design to provide ample reserve capacity utilizing minimum horsepower.</p> <p>Removable, non-corrosive material clearance rings shall be provided.</p> <p>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.</p>			
	<p>Pump Rating and Test Requirements</p> <p>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 1500 gallons per minute (U.S. GPM), NFPA 1901 rated performance. The pump shall deliver the percentage of rated discharge at pressures indicated below:</p> <ul style="list-style-type: none"> • 100 percent of rated capacity at 150 pounds net pressure • 70 percent of rated capacity at 200 pounds net pressure • 50 percent of rated capacity at 250 pounds net pressure • 100 percent of rated capacity at 165 pounds net pressure <p>The entire pump shall be assembled and tested at the pump manufacturer's factory. The pump shall be driven by a driveline from the truck transmission. The engine shall provide sufficient horsepower and RPM to enable pump to meet and exceed its rated performance.</p>			

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	<p>Pump Transmission</p> <p>The pump transmission shall be assembled and tested at the pump manufacturer's factory. Pump transmission shall be of sufficient size to withstand up to 16,000 lbs. ft. of torque in road operating conditions. The pump transmission shall be designed with ample capacity for lubrication reserve and to maintain the proper operating temperature.</p> <p>The transmission drive shafts shall be of heat-treated chrome nickel steel and at least 2-3/4 inches in diameter on both the input and output drive shafts. They shall withstand the full torque of the engine. All gears drive and pump, shall be of highest quality electric furnace chrome nickel steel. Bores shall be ground to size and teeth integrated, shaved, hardened and ground to give an extremely accurate gear for long life, smooth quiet running, and higher load carrying capability. An accurately cut spur design shall be provided to eliminate all possible end thrust.</p> <p>The pump ratio shall be selected by the apparatus manufacturer to give maximum performance with the engine and transmission selected. If gearbox is equipped with a power shift, the shifting mechanism shall be a heat- treated, hard- anodized aluminum power cylinder, with stainless steel shaft. An in-cab control for rapid shift shall be provided that locks in road or pump.</p> <p>Three green warning lights shall be provided to indicate to the operator when the pump has completed the shift from Road to Pump position. Two green lights to be located in the truck driving compartment and one green light on pump operator's panel adjacent to the throttle control. All lights to have appropriate identification/instruction plates.</p>			
	<p>Pump Shift</p> <p>The pump shift switch shall be mounted in the cab and identified as "PUMP SHIFT" and include instructions permanently inscribed on the pump shift switch plate. The in-cab operating valve uses a spring-loaded locking collar to prevent it from accidentally being moved.</p> <p>The pump shift control assembly shall incorporate an indicating light system, which will notify the operator when the shift has been completed to PUMP and when the chassis transmission is in correct pumping gear.</p> <p>The switch that activates the lights must be mounted on the pump transmission and positioned so that the pump shift arm activates the switch only when the shift arm has completed its full travel into PUMP position. An additional indicator light shall be provided adjacent to the throttle control at the pump operator's panel to indicate a completion of the pump shift.</p>			

ITEMS	DESCRIPTIONS	CONFORMITY		SPECIFICATIONS
		YES	NO	
	<p>Mechanical Seal</p> <p>The fire pump shall be provided with a mechanical pump seal. One (1) only required on the suction, inboard, side of the pump. The mechanical seal shall be two inches in diameter and shall be spring loaded, maintenance free and self- adjusting. Mechanical seal construction shall be a carbon sealing ring, stainless steel coil spring, rubber boot, and a tungsten carbide seat with Teflon backup seal.</p>			
	<p>Anode System</p> <p>To reduce the effect of galvanic action the pump shall be equipped with two alloy (2) anodes. One anode is to be installed on the inlet (suction) side of the system and one anode is to be installed on the pressure (outlet) side of the system.</p> <p>The anode brass cap is to be drilled with a 1/8" diameter hole to provide an indicator when the anode alloy element is to be replaced.</p>			
	<p>Thermal Protection</p> <p>The pump shall be equipped with a TRV-L, thermal protection device, which monitors the water temperature of the pump and relieves water when the temperature inside the pump exceeds the preset value of the relief valve (120 degrees F / 49 degrees C).</p> <p>The TRV shall automatically dump a controlled amount of water to the atmosphere when the pump water temperature exceeds the preset value. The valve shall automatically close when the water temperature cools to below the preset value.</p> <p>An aluminum composite panel placard with a visual warning lamp and test button shall be provided on the operator's panel. The warning light shall illuminate when the Thermal Relief Valve is open and discharging water.</p>			
	<p>Suction Pressure Relief Valve</p> <p>A pressure relief valve shall be provided. The valve shall have an easy-to-read adjustment range from 90 to 300 PSI in 90, 125, 150, 200, 250, 300 PSI increments. For corrosion resistance the cast aluminum valve shall be hardcoat anodized with a powder coat interior and exterior finish. The valve shall be configured for either a Waterous or Hale pump.</p> <p>The discharge side of the intake relief valve shall be plumbed to the right side below the running boards, away from but, visible to the pump operator, and shall terminate with an unthreaded pipe.</p> <p>The adjustment control shall be located behind the street side pump panel.</p>			

ITEMS	DESCRIPTIONS	CONFORMITY		SPECIFICATIONS
		YES	NO	
	<p>Master Drain</p> <p>The apparatus shall be equipped with a Class 1 Manual Master Pump Drain for draining of the lower pump cavities, volute and selected water- carrying lines and accessories. The all brass and stainless-steel construction allows for operation up to 600 psi.</p>			
	<p>Third Party Pump Test</p> <p>The pump shall undergo third party pump test with line and/or low voltage requirements of NFPA 1901 prior to delivery of the completed apparatus. The TUV acceptance certificate shall be furnished with the apparatus on delivery.</p>			
	<p>Fire Pump Warranty</p> <p>Standard 5-year warranty (Parts and Labor for the first two years, parts only years 3 - 5) See Hale warranty for full details.</p>			
	<p>Electronic Pump Manuals</p> <p>Two (2) sets of electronic fire pump service and operation manuals shall be provided with the completed apparatus.</p>			
	<p>Left Side Steamer Inlet</p> <p>There shall be one (1) steamer inlet furnished on the left side pump panel. The suction inlet shall have 6" NH thread. The suction inlet shall have a removable strainer provided inside the external inlet.</p> <p>A Valve 6" NH F X 6" NH M with drain and an 4" Storz x 6"NH shall be provided</p>			
	<p>Large Diameter Cap</p> <p>A six (6) inch chrome plated cap with long handles shall be supplied. The cap shall be capable of withstanding 500 PSI and be trimmed with the apparatus manufacturer's logo in the center of the cap.</p>			
	<p>Right Side Steamer Inlet</p> <p>There shall be one (1) steamer inlet furnished on the right-side pump panel. The suction inlet shall have 6" NH thread. The suction inlet shall have a removable strainer provided inside the external inlet.</p>			
	<p>Large Diameter Cap</p> <p>A six (6) inch chrome plated cap with long handles shall be supplied. The cap shall be capable of withstanding 500 PSI and be trimmed with the apparatus manufacturer's logo in the center of the cap.</p>			

ITEMS	DESCRIPTIONS	CONFORMITY		SPECIFICATIONS
		YES	NO	
	<p>Left Side Intake</p> <p>There shall be an intake located on the left (street) side of the pump and shall contain:</p> <p>A 2-1/2" intake shall be provided. The inlet shall have a 2-1/2" quarter- turn swing-out valve. The inlet shall be provided with a 2-1/2" CSA female swivel that extends through the pump panel.</p> <p>The inlet valve shall have a swing type control handle located adjacent to the valve.</p> <p>One (1) 2-1/2" chrome plated rocker lug plug with chain shall be supplied</p>			
	<p>Left Side Discharge #2</p> <p>The second from the forward discharge on the left (street) side of the pump panel shall contain:</p> <p>A 2-1/2" discharge shall be provided. The discharge outlet shall have a 2- 1/2" quarter-turn swing-out valve. The discharge shall be provided with chrome plated 30-degree discharge elbow with 2-1/2" CSA male threads that extends through the pump panel.</p>			
	<p>Discharge Cap</p> <p>One (1) chrome plated, Class 1, 2-1/2" rocker lug cap with lug vent and chain shall be furnished.</p>			
	<p>Right Side Front Discharge</p> <p>The forward discharge on the right (curb) side of the pump panel shall contain:</p> <p>A 2-1/2" discharge shall be provided. The discharge outlet shall have a 2-1/2" quarter-turn swing-out valve. The discharge shall be provided with chrome plated 30-degree discharge elbow with 2-1/2" CSA male threads that extends through the pump panel. One (1) chrome plated, Class 1, 2-1/2" rocker lug cap with lug vent and chain shall be furnished.</p>			
	<p>Right Side Rear Discharge</p> <p>The second from the forward discharge on the right (curb) side of the pump panel shall contain:</p> <p>A 4" discharge shall be provided. The discharge shall be provided with chrome plated straight discharge with 4" NST threads that extends through the pump panel.</p> <p>Control of the outlet shall be accomplished using an electric controller. There shall be an LED indicator on the controller to indicate the valve position.</p>			

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		YES	NO	
	<p>Storz Adapter</p> <p>One (1) 4" NHFemale swivel thread 30-degree down to 4" Storz hard coated aluminum adapter shall be provided.</p> <p>One (1) 4" Storz cap and lanyard with a suction gasket shall be provided.</p>			
	<p>Back Discharge</p> <p>A 2-1/2" discharge shall be provided. The discharge outlet shall have a 2-1/2" quarter-turn swing-out valve. The discharge shall be provided with chrome plated 30-degree discharge elbow with 2-1/2" CSA male threads that extends through the pump panel.</p> <p>One (1) chrome plated, Class 1, 2-1/2" rocker lug cap with lug vent and chain shall be furnished</p>			
	<p>Pump Crosslays</p> <p>There shall be two (2) 1 3/4 X 200ft hose storage crosslay areas mounted on top of the pump module. They shall be arranged in a double stack design with a divider in the center. Each hose storage area shall be provided with dimensions of 7" wide x 78" deep x 13" tall [4 cu. ft. each].</p>			
	<p>Discharge Valves</p> <p>There shall be one (1) discharge outlet in each hose storage compartment.</p> <p>The discharge outlet shall have a 2" quarter-turn swing-out valve with a push pull type control handle adjacent to the valve.</p> <p>The discharge shall be provided with a swivel head with 1-1/2" NPSH male threads that extend through the hose compartment floor.</p>			
	<p>Crosslay Hose Guides</p> <p>Brushed stainless steel hose guides shall be provided on the left and right side of each hose bed.</p>			
	<p>Crosslay Hosebed Cover</p> <p>A vinyl coated nylon hose bed cover shall be provided over the crosslay hose beds. The vinyl crosslay cover shall be Midnight Black in color.</p>			
	<p>Elkhart/Akron Ball Valves</p> <p>All discharge ball valves shall be Elkhart/Akron heavy duty swing out valve with stainless steel ball unless specified otherwise.</p>			

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		YES	NO	
	<p>Tank to Pump The tank to pump piping shall be capable of delivering water to the pump at a rate of five hundred (500) gallons per minute. This flow shall be sustained while pumping to a minimum of 80% of the certified tank capacity with the apparatus on level ground. The tank to pump line shall run from the pump to the front face of the water tank and down into the tank sump. A rubber coupling shall be included in this line to prevent damage from vibration or chassis flexing. The tank to pump line shall be 3". I.D. piping with a 3" ball valve.</p>			
	<p>Tank Refill A 2" tank refill line shall be provided using a 2" quarter-turn full flow ball valve controlled from the pump operator's panel with a manual locking handle. The tank refill shall be plumbed with high pressure flexible piping and high-pressure flexible piping stainless steel couplings.</p>			
	<p>Purchase Intent The apparatus being purchased is expected to have an 18 to 20-year service life. Based on this requirement, the department is extremely concerned that the apparatus remains structurally sound and the outward appearance remains in a "like new" condition, with minimal maintenance and upkeep, throughout the intended service life. Aluminum apparatus bodies and differing construction designs will be reviewed and considered ONLY if the builder / manufacture provides in the respondent specifications adequate proof that procedures and materials employed in the design prevent corrosion over the intended service life. Burden of proof is on the bidder and final determination of acceptability will be solely determined by the department. The entire body design shall be of a laser machined, bolted design to allow for ease of removal for repair or replacement, without cutting welds.</p>			
	<p>Apparatus Body Design and Construction The apparatus body shall be corrosive resistant and shall be designed exclusively for Fire Service use. The overall body width shall be at least 95 inches wide. All metal work shall be free of sharp edges, objects or corners.</p>			

ITEMS	DESCRIPTIONS	CONFORMITY		SPECIFICATIONS
		YES	NO	
	<p>Modular Body Requirements</p> <p>The body shall be completely modular in design allowing transfer of body components to a new chassis in the event of an accident or wear. Body components shall be removable from chassis without cutting or bending. The modular design shall also facilitate ease of repair or replacement of major or minor body parts. The mounting of the apparatus body shall be separate and distinct from the water tank mounting and the pump module mounting.</p>			
	<p>Compartment Roof Construction</p> <p>Each compartment top shall be able to support roof loads of up to 500 pounds per square foot without permanent roof deformation. The stainless roof sections shall attach the compartment rear wall and compartment vertical sides through a fastened joint creating a full perimeter compartment attachment of the stainless roof section.</p>			
	<p>Compartment Interior Finish</p> <p>For better interior visibility, to reflect light better, ease of maintenance and prevent the masking of poor welds and questionable workmanship the interior of the body compartments shall remain uncoated.</p>			
	<p>Beveled Rear Tailboard</p> <p>A rear tailboard 8" deep shall be provided at the rear from stainless steel. The tailboard shall provide recessed for the rear ICC marker lights. It shall be bolted to the rear support structure. The corners of the rear bumper shall be beveled back to reduce the rear bumper swing of the vehicle.</p>			

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		YES	NO	
	<p>Chassis Frame Extension</p> <p>There shall be a rear three (3) inch x four (4) inch x 1/4-inch wall ASTM A- 500 grade B rectangular tubing frame extension to provide frame support for the rear of the apparatus body.</p> <p>Two vertical mounting plates are to be welded to the tubing to provide a drop frame connection to the truck chassis. This extension assembly is to be bolted to the truck chassis with eight (8) 1/2 grade 8 bolts with hardened flat washers to form an integral part of the truck frame assembly.</p>			
	<p>Receiver Hitch</p> <p>There shall be a Class IV receiver hitch assembly as an integral part of the chassis rear and front frame extension that is located at the center front and rear of the apparatus below the front bumper and rear step.</p>			
	<p>Extension Paint Finish</p> <p>The rear frame extension assembly and hitch assembly is to be black powder coated prior to installation.</p>			
	<p>Compartment Design and Construction</p> <p>All compartments shall be manufactured from corrosive resistant high visibility material. Wherever possible, body bolts shall be hidden from plain view for appearance and ease of apparatus cleaning.</p>			
	<p>Compartment Ventilation</p> <p>Each compartment shall be provided with a louver to provide adequate ventilation.</p>			
	<p>Vent Filtration</p> <p>There shall be filters provided for compartments L1, L3, R1 and R3. The protective louver covering the filter shall be removable to allow for filter changing.</p>			

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		YES	NO	
	<p>Water Tank Capacity</p> <p>The water tank shall be rectangular shaped and shall have a capacity of 300 – 400 IMP Gallons.</p>			
	<p>Tank Lid & Fill Tower</p> <p>The tank shall have a combination vent and fill tower.</p>			
	<p>Overflow and Vent Pipe</p> <p>The fill tower shall be fitted with an integral 4" ID, Schedule 40 PVC combination overflow/vent pipe running from the fill tower through the tank to a 4" coupling flush mounted into the bottom of the tank to allow water to overflow beneath the chassis.</p>			
	<p>Body Module Capacities and Hosebed Height</p> <p>The total capacity of the body module exterior compartments shall be 139 cubic feet.</p> <p>The total capacity of the body hosebed shall be approximately 40 cubic feet.</p> <p>The body shall have an overall length of 108".</p>			
	<p>Apparatus Body Hosebed</p> <p>The hose bed shall be constructed in such a manner that will prevent damage to fire hose. The hosebed shall comply with the current NFPA requirements. The interior of the hosebed shall be free of projections such as nuts, sharp edges or brackets that may damage hose. The hosebed and walls shall be manufactured corrosive resistant material.</p> <p>An aluminum extrusion shall be installed over the rear opening of the hosebed to protect the body from wear. The hosebed bottom shall be fitted with removable slatted, ribbed 6" heavy-duty extruded aluminum floorboards.</p>			

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		YES	NO	
	<p>Adjustable Hose Bed Dividers</p> <p>Two adjustable hosebed divider shall be provided. The divider shall be fabricated from thick smooth aluminum plate.</p> <p>There shall be two hand hold openings provided. One (1) at the rear in a vertical position and one (1) approximately 24 inches in from the rear in a horizontal position.</p>			
	<p>Hosebed Cover</p> <p>A black vinyl hosebed cover shall be provided and designed to cover the entire main hosebed area. The cover shall be installed with "stretch cord type" fasteners along each side of the hosebed. A weighted flap shall be incorporated into the rear edge of the cover.</p> <p>The hosebed cover rear flap shall have a positive locking device to meet the requirements of NFPA.</p>			
	<p>Left Side Compartment Dimensions Forward of Wheel Well</p> <p>There shall be one (1) rescue style, full height, full depth compartment ahead of the rear wheels. The compartment dimensions shall be 20" wide x 45.5" high x 21.5" deep with the door closed.</p>			
	<p>Above Wheel Well</p> <p>There shall be one (1) high side full depth compartment centered over the rear wheels. The compartment dimensions shall be 39.5" wide x 21.5" high x 22" deep with the door closed. The door opening shall be 42" wide x 21.5" tall.</p>			
	<p>Rear of Wheel Well</p> <p>There shall be one (1) rescue style, full height, full depth compartment behind the rear wheels. The compartment dimensions shall be 30.5" wide x 45.5" high x 21.5" deep with the door closed. The door opening shall be 19" wide x 49-1/2" tall.</p>			
	<p>Fender Side Skirts</p> <p>There shall be stainless steel fender side skirts located in the area of the rear wheels. The design of the fender sides shall be a minimal length to provide maximum compartment space in the apparatus.</p>			
	<p>Fuel Fill - Side Body</p> <p>The fuel fill shall be located in the rear fender area on the apparatus body. The spring-loaded fuel fill door shall have "Diesel Fuel" laser cut in the face of the door.</p>			

ITEMS	DESCRIPTIONS	CONFORMITY		SPECIFICATIONS
		YES	NO	
	<p>Rollup Door Construction - Left Side</p> <p>All left side compartments shall be provided with roll up doors. The roll up doors shall be constructed of double- sided aluminum extrusions connected with a ball and socket joint. The extrusions shall be 1-3/8" wide x 3/8" thick and shall be painted to match the job color. A flexible EDPM extrusion shall be provided between each slat to insure a weather tight seal. Aluminum extrusions shall be individually replaceable without disassembling the entire door by removing push out clips on each end.</p> <p>Side channels for each door to ride in shall be provided with seals to prevent dirt and moisture from entering the exterior compartment. A single piece top drip rail shall be provided with a seal to prevent dirt and moisture from entering the compartment when the door is fully closed.</p> <p>The bottom of each door shall also be provided with a seal. All nonmetallic parts shall be glass filled nylon.</p> <p>The left side door latches shall be non-locking stainless steel lift bars and shall be provided with a magnetic door ajar switch system.</p>			
	<p>Rear Axle Mud Flaps</p> <p>Two (2) black, anti-sail, mud flaps shall be mounted behind the rear wheels.</p>			
	<p>Right Side Compartment Dimensions Forward of Wheel Well</p> <p>There shall be one (1) rescue style, full height, full depth compartment ahead of the rear wheels. The compartment dimensions shall be greater than 20" wide x 45.5" high x 21.5" deep with the door closed.</p>			
	<p>Above Wheel Well</p> <p>There shall be one (1) high side full depth compartment centered over the rear wheels. The compartment dimensions shall be 39.5" wide x 21.5" high x 21.5" deep with the door closed.</p>			
	<p>Rear of Wheel Well</p> <p>There shall be one (1) rescue style, full height, full depth compartment behind the rear wheels. The compartment dimensions shall be 30" wide x 45.5" high x 21.5" deep with the door closed.</p>			

ITEMS	DESCRIPTIONS	CONFORMITY		SPECIFICATIONS
		YES	NO	
	<p>Rollup Door Construction - Right Side</p> <p>All right-side compartments shall be provided with roll up doors. The roll up doors shall be constructed of double- sided aluminum extrusions connected with a ball and socket joint. The extrusions shall be 1-3/8" wide x 3/8" thick and shall be painted to match the job color. A flexible EDPM extrusion shall be provided between each slat to insure a weather tight seal.</p> <p>Aluminum extrusions shall be individually replaceable without disassembling the entire door by removing push out clips on each end.</p> <p>Side channels for each door to ride in shall be provided with seals to prevent dirt and moisture from entering the exterior compartment. A single piece top drip rail shall be provided with a seal to prevent dirt and moisture from entering the compartment when the door is fully closed.</p> <p>The bottom of each door shall also be provided with a seal. All nonmetallic parts shall be glass filled nylon.</p> <p>The right-side door latches shall be non-locking stainless steel lift bars and shall be provided with a magnetic door ajar switch system.</p>			
	<p>Rear Compartment Dimensions</p> <p>There shall be one (1) full height compartment at the rear of the body. It shall have approximate dimensions of 46.5" wide x 20.5" high x 22" deep.</p>			
	<p>Rollup Door Construction - Rear</p> <p>The rear compartment shall be provided with a roll up door that shall be constructed of double-sided aluminum extrusions connected with a ball and socket joint. The extrusions shall be 1-3/8" wide x 3/8" thick with satin anodized finishing. A flexible EDPM extrusion shall be provided between each slat to insure a weather tight seal. Aluminum extrusions shall be individually replaceable without disassembling the entire door by removing push out clips on each end.</p> <p>Side channels for the rear door to ride in shall be provided with seals to prevent dirt and moisture from entering the exterior compartment. A single piece top drip rail shall be provided with a seal to prevent dirt and moisture from entering the compartment when the door is fully closed.</p> <p>The bottom of the door shall also be provided with a seal.</p> <p>All non-metallic parts shall be glass filled nylon. The rear door latch shall be a non-locking stainless steel lift bar and shall be provided with a magnetic door ajar switch system.</p>			

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		YES	NO	
	<p>Rear Body Reflective Chevron Striping</p> <p>The rear-facing vertical surfaces of the rear taillight panels and the rear body inset area beside the full height rear door(s), visible from the rear of the apparatus, including the rear compartment door(s), shall be equipped with six (6) inch wide retroreflective striping in a chevron pattern sloping downward and away from the centerline of the vehicle at an angle of 45 degrees.</p> <p>Each stripe in the chevron shall be a single-color alternating between red (3M #-82) and yellow (3M #-81).</p>			
	<p>Hard Suction Hose and Trays - Left Side</p> <p>Two (2) stainless steel hard suction trays shall be installed on the top of the compartment on the left (driver's) side of the apparatus.</p> <p>Each tray shall be designed to accommodate hard suction hose in a three (3) m length. Two 6" NH thread clear hard suction hoses to be included. The suction shall be held in place with straps attached to the tray with footman loops. One (1) 6" NH floating strainer to be provided.</p>			
	<p>Roof Ladder</p> <p>One (1) 14' aluminum channel rail roof ladder with folding roof hooks shall be provided with the apparatus.</p>			
	<p>Attic Ladder</p> <p>One (1) 10' aluminum folding attic ladder shall be provided with the apparatus.</p>			
	<p>Extension Ladder</p> <p>One (1) 24' two-section solid beam, aluminum extension ladder shall be provided with the apparatus.</p>			
	<p>Apparatus Compartment Lighting</p> <p>Two (2) LED, armor protected, strip lights shall be provided one (1) each side of the compartment at the door frame for each body compartment. Each body door shall have an automatic compartment light switch.</p> <p>There shall be a white/red color selector switch in the cab that controls the color of this lighting.</p>			
	<p>Underbody Lighting</p> <p>Underbody ground lights shall be provided under the apparatus body. These ground lights shall be LED strips mounted in armor guards. The lights shall illuminate when the parking brake is set.</p>			

ITEMS	DESCRIPTIONS	CONFORMITY		SPECIFICATIONS
		YES	NO	
	<p>Folding Steps</p> <p>Three (3) folding steps shall be provided on the left rear of the apparatus body.</p> <p>The folding step(s) shall include an integrated LED light beneath each step. This light shall illuminate when the apparatus ground lights are activated. The bottom of the step and step mounting shall include white reflective material to aide in locating the step when the vehicle ground lights are not activated.</p>			
	<p>Apparatus ICC Marker Lighting and Reflectors</p> <p>Three (3) red LED clearance lights shall be supplied, mounted in the rear of the apparatus.</p> <p>There shall be a diamond shaped amber reflector mounted on each front corner of the apparatus body and a diamond shaped red reflector mounted on each rear corner of the body.</p>			
	<p>Rear Stop/Tail/Turn/Backup Lights</p> <p>The rear of the apparatus should be equipped lights.</p> <p>Red stop/taillight</p> <p>Clear backup light</p> <p>Yellow turn signal</p>			
	<p>Back-Up Alarm</p> <p>A solid-state electronic backup alarm shall be installed on the rear of the apparatus and wired to the backup light circuit.</p> <p>One (1) license plate mounting, and LED light shall be provided. The light and bracket shall be located on the rear of the apparatus.</p>			
	<p>Body Led Worklights</p> <p>Two (2) LED hosebed floodlights shall be provided. One (1) mounted at the front right corner and one (1) on the front left corner of the body. The lights shall be controlled from a switch on the lamp head.</p>			

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		YES	NO	
	<p>Left Front Flood Light</p> <p>12-volt</p> <p>Generate minimum 2600 lumens.</p> <p>The weatherproof on-off toggle switch shall be on the lamp head.</p> <p>The light head shall be mounted on a side mount push up telescopic pole.</p> <p>The light pole shall be corrosion resistant.</p> <p>Wiring shall extend from the pole bottom with a 4' retractile cord.</p>			
	<p>Aluminum Shelves - Adjustable</p> <p>Four (4) adjustable aluminum shelves shall be provided with one (1) each installed in R1, L1, R3 and L3 compartments. The shelves shall have a flange 1-1/2" deep with a minimum material thickness of .190". Each shelf shall be adjustable in height and held in place by four (4) extruded uprights.</p>			
	<p>Aluminum Shelves - Adjustable</p> <p>Two (2) adjustable aluminum shelves shall be provided with one (1) each installed in R2 and L2 compartments. The shelves shall have a flange 1- 1/2" deep with a minimum material thickness of .190". Each shelf shall be adjustable in height and held in place by four (4) extruded uprights.</p>			

ITEMS	DESCRIPTIONS	CONFORMITY		SPECIFICATIONS
		YES	NO	
	<p>Aluminum Shelf - Adjustable</p> <p>One (1) adjustable aluminum shelf shall be provided and installed in the RR1 compartment. The shelf shall have a flange 1-1/2" deep with a minimum material thickness of .190". The shelf shall be adjustable in height and held in place by four (4) extruded uprights.</p>			
	<p>Aluminum Trays - Pull Out</p> <p>Five (5) heavy duty pullout trays shall be installed and shall be equipped with slides and a gas shock to hold the tray in both the in and out positions and shall be made from .190" aluminum with a maximum capacity of 250 pounds. One (1) each are to be installed on the floor of the L1, L3, R1 R3 and B1 compartments.</p>			
	<p>Aluminum Tool Boards</p> <p>The rear wall of the L1 and the rear wall of the L2 compartments shall be covered with tool mounting board.</p>			
	<p>Right Front Flood Light</p> <p>12-volt</p> <p>Generate minimum 2600 lumens.</p> <p>The weatherproof on-off toggle switch shall be on the lamp head.</p> <p>The light head shall be mounted on a side mount push up telescopic pole.</p> <p>The light pole shall be corrosion resistant.</p> <p>Wiring shall extend from the pole bottom with a 4' retractile cord.</p>			

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		YES	NO	
	<p>Cab Forward Roof Mounted Lightbar</p> <p>A light bar shall be provided and is to be mounted on the roof of the cab,</p> <p>The light bar shall have both red and blue LED lights. The red to blue ratio should be 50/50.</p> <p>These light bars fulfill the requirements for Upper Zone A and in combination with the upper rear warning devices fulfills the requirements for Upper Zones B, C, and D. Any clear warning light(s) in the light bar shall be disabled automatically for the “Blocking Right of Way” mode.</p>			
	<p>Combination Front Warning and Ground Light</p> <p>There shall be two (2) combination 180° warning/ground lights mounted on the front brush guard facing to the side.</p> <p>The warning light shall consist of two LEDs with clear TIR reflectors maximum illumination.</p> <p>The ground light shall consist of three white Super-LEDs installed at 45° angle with a TIR reflector for supreme radiance.</p>			
	<p>Combination Front Warning and Ground Light</p> <p>There shall be two (2) combination 180° warning/ground lights mounted on each side of the body in the forward wheelwell area.</p> <p>The warning light shall consist of two LEDs with clear TIR reflectors maximum illumination.</p> <p>The ground light shall consist of three white Super-LEDs installed at 45° angle with a TIR reflector for supreme radiance.</p>			

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		YES	NO	
	<p>Rear Upper-Level Warning / Perimeter Lights</p> <p>There shall be two (2) combination 180° warning/perimeter lights mounted facing the rear, one (1) each side of the body in the upper position.</p> <p>There shall be two (2) combination 180° warning/perimeter lights mounted, one (1) mounted on the upper rear sides of the apparatus.</p> <p>The perimeter light shall consist of three white LEDs installed at 45° angle with a TIR reflector for supreme radiance. Perimeter lighting is switched with the ground lighting.</p>			
	<p>Rear Upper-Level Warning / Perimeter Lights</p> <p>There shall be two (2) combination 180° warning/perimeter lights mounted facing the rear, one (1) each side of the body in the lower position.</p> <p>The perimeter light shall consist of three white Super-LEDs installed at 45° angle with a TIR reflector for supreme radiance. Perimeter lighting is switched with the ground lighting.</p>			
	<p>Wheel Chocks</p> <p>One pair of heavy-duty rubber wheel chocks shall be provided with the apparatus.</p>			
	<p>Foam Tank Capacity</p> <p>20 IMP Gallons. Sperate from water tank</p>			
	<p>Reflective Safety Stripe</p> <p>A 1" x 4" wide 3M brand reflective stripe shall be affixed to the perimeter of the vehicle. The striping shall be placed up to 60" above ground level and shall conform to NFPA reflectivity requirements. At least 60% of the perimeter length of each side and width of the rear, and at least 25% of the perimeter width of the front of the vehicle shall have reflective stripe.</p>			
	<p>Reflective Stripe Color</p> <p>The apparatus body striping shall be white reflective. The smaller accent stripe(s) shall be white reflective.</p>			

ITEMS	DESCRIPTIONS	CONFORMITY		SPECIFICATIONS
		YES	NO	
	<p>Water and Foam Tank Warranty Lifetime warranty is to be provided by the tank manufacturer. The water tank is to be free from defects in material and workmanship for the normal service life of the apparatus in which the water tank is installed. If a tank has a defect in material or workmanship covered by the warranty, the tank manufacturer shall repair at their cost, by authorized personnel or authorized third parties. The tank manufacturer shall try to effectuate repair within 48 hours following initial notification of a covered defect. The tank manufacturer shall make a reasonable effort to repair tank at most convenient location to end user. The tank manufacturer shall reimburse all reasonable costs associated with rendering the tank accessible for repair, including, but not limited to, removal and reassembly of the hose bed floor.</p>			
	<p>ULC / NFPA Standards The apparatus shall comply with the ULC /NFPA standards. A plate that is highly visible to the driver while seated shall be provided. This plate will show the overall height, length, and gross vehicle weight rating. The complete apparatus shall be certified and tested to the ULC, Automobile Fire Fighting Apparatus Standard, CAN/ULC-S515-13, by Underwriters Laboratories Inc. / Underwriters Laboratories of Canada, and the vehicle shall bear the ULC Mark, indicating compliancy to the standard. The Vendor, at his expense, shall have Underwriter’s Laboratories of Canada Inc. conduct the tests required under “Certification Initial Attack Apparatus”, latest version. A certificate of compliance with these tests shall be forwarded to the Purchaser within 90 days of the apparatus delivery date.</p>			
	<p>PMCV Inspection and Licensing PMCV inspection and licensing of the vehicle is the responsibility of the bidder prior to delivery cost to be included in proposal.</p>			
	<p>Axles / weight distribution Weight distribution shall meet or exceed recommendations of the NFPA and shall include all anticipated firefighting equipment for a Tanker. The apparatus shall meet or exceed all applicable requirements of the Canadian Federal Motor Vehicle Safety Standards in effect at the time the contract is awarded. The apparatus shall have a certified Gross Vehicle Weight Rating sticker applied to the vehicle to assure the apparatus conforms to all laws pertaining to weight carrying capacity in the Province of Ontario. Axle weights SHALL NOT exceed the rated capacity of the axles.</p> <p>Vendor shall provide weight analysis with proposal based on the most current NFPA 1901 edition.</p>			