

REQUEST FOR TENDER

TENDER:	Supply and Delivery of Commercial Tanker Truck - Drumheller Fire Department					
DATE:	January 27,	2022				
INITIATOR:	Greg Peters	, Director o	Emergen	cy and F	Protective Servic	ces
DATE TENDER RE	QUIRED:					
YEAR: 2022 M	ONTH: Mar	ch DA	Y: 1	TIME:	2:00 PM Loc	al Time

Submit Tender in a clearly marked and sealed envelope to the attention of:

Procurement Department Town of Drumheller 224 Centre Street Drumheller, Alberta T0J0Y4

"RFT - Supply and Delivery of Commercial Tanker Truck"

This Request for Tender document is comprised of:

- RFT General Instructions
- Schedule A Evaluation Criteria
- Schedule B Technical Specifications
- Appendix 1 Axle Load Table
- Appendix 2 Submission Label

If you do not have all of these components the RFT package is incomplete - please contact the Initiator. **The Town of Drumheller will NOT accept electronic submissions.**

Your firm is invited to submit a Tender, pursuant to the general conditions for the scope of work as described. This Tender shall not be considered authorization to proceed with work herein described. All Procurement processes must comply with Town of Drumheller Purchasing Policy C-09-20.

SECTION #1 - SCOPE OF WORK:

The Town of Drumheller invites Tenders for the supply and delivery of one (1) Commercial Tanker Truck for the Drumheller Fire Department. The unit must be single axle and have at least a 9,092 litre (2,000 gallon imperial gallons) water capacity and have pump and roll ability with remote front nozzle and supply powered hose reel and hose and nozzle. The Town will consider tenders where the proposed vehicle does not have the remote front nozzle and powered hose reel already installed; installation may take place after the award, but the total equipment pricing must be included in all tender submissions.

The successful proponent shall deliver equipment fully assembled and operational with all fluids, oil, batteries, fuel, etc., installed upon delivery. No crated or non-operational equipment requiring assembly or adjustments of any kind shall be accepted.

The successful proponent must also provide all repair and parts manuals for engine, chassis, electrical, body, drive train, service specifications, wiring diagrams and power train control/emissions manuals. All repair and parts manuals must be delivered with the machine and applicable attachments - no exceptions.

The provider will also be required to operate and demonstrate all features and operational modes to Drumheller ire Department personnel as part of the onsite training requirements.

All specifications are listed in Schedule B – Technical Specifications. All bidders must supply delivery timeline and warranty information.

Servicing location for unit must be specified and maintenance schedule and pricing to be identified in tender. Successful unit to be delivered to Main Fire Hall located at 224 Centre Street, Drumheller, Alberta.

The supplier is required to complete all necessary sections of this Request for Tender.

SECTION #2 - TENDER AMOUNT:

Price for One (1) Single Axle Commercial Tanker Truck with specified equipment:

Total Cost FOB Drumheller:

\$_____

All pricing to be quoted in Canadian funds, excluding GST.

Tender Make & Model: _____

Production Year: _____

Tender submission price in effect for **30** days from date of acceptance from the Town of Drumheller.

Delivery Timeline: unit to be provided within **30** days of award.

SECTION #3 - SUBMISSION REQUIREMENTS:

This Request for Tender represents the requirements for an open and competitive process. The Town of Drumheller requires that all submissions shall include the following:

- 1. All pages of this Request for Tender;
- 2. All issued Addenda;
- Certificate of Recognition (COR) or Small Employer Certificate of Recognition (SECOR);
- 4. List of applicable Safe Work Procedures (SWP),
- 5. Table of Contents of the Corporate Safety Manual;
- 6. Workers Compensation Board (WCB) Coverage Letter;
- 7. Proof of Commercial Liability Insurance;
- 8. Town of Drumheller Business License to be obtained within three (3) business days upon award of project;

Each Bidder must submit two (2) copies of their tender in a sealed envelope or package clearly marked with the Submission Label provided in Appendix 2.

The sealed envelope containing the RFT, filled out in its entirety, shall be delivered before the RFT Closing to the address above by

March 1, 2022 at 2:00 PM Local Time. Any tenders received after this date and time will be returned to the sender. All tenders must be signed by an official agent or representative of the company submitting the tender.

If the organization submitting a tender must outsource or contract any work to meet the requirements contained herein, this must be clearly stated in the tender. Additionally, all costs included in tenders must be all-inclusive to include any outsourced or contracted work. Any tenders which call for outsourcing or contracting work must include a name and description of the organizations being contracted. All costs must be itemized to include an explanation of all fees and costs.

Inquiries:

All requests for information regarding this RFT must be addressed in writing and received **five (5) business days prior to the closing date.** Any inquiries respecting this RFT should be directed to:

Greg Peters Director of Emergency and Protective Services Town of Drumheller Phone: (403) 823-1363 Email: gpeters@drumheller.ca

No other Town representative, agent, employee or elected official is authorized to speak on behalf of the Town with respect to this RFT. Any attempt by a Proponent to contact any Town representative, agent, employee or elected official with respect to this RFT may result in the Town rejecting the Proponent's tender. The decision making authority for this RFT rests with the Town.

SECTION #4 - INELIGIBILITY:

The Town of Drumheller shall deem a submission to be ineligible under the following situations:

- a) Submissions that are unsigned, incomplete, improperly signed or sealed, conditional, illegible, obscure, contain arithmetical errors, erasures, alterations or irregularities of any kind shall be considered ineligible.
- b) Submissions that do not include the items listed in Section #3 Submission Requirements, and;
- c) Submissions that are not received prior to the closing date and time, as determined by the time keeping of the Town of Drumheller computer system.

SECTION #5 - INSURANCE:

Insurance:

The Town of Drumheller requires that all Tenders include proof of \$5,000,000.00 Commercial Liability Insurance for any service work or maintenance performed onsite.

SECTION #6 - EVALUATION CRITERIA:

The lowest, or any evaluated Tender, may not necessarily be accepted. The Town of Drumheller reserves the right to reject any or all Tenders or to accept the Tender evaluated to be in the best interest of the Town of Drumheller.

The Town's evaluator shall score each submission on the basis stated in Schedule A: Evaluation Criteria. The Town of Drumheller will have the sole and unfettered discretion to award up to the maximum number of points for each criterion listed in Schedule A: Evaluation Criteria.

By submitting a Tender, you acknowledge and agree to waive any right to contest through legal proceedings. The decision to award points in respect to the criteria noted below will be at the sole discretion of the Town of Drumheller.

By submitting a Tender, you acknowledge that you have reviewed the Ineligibility Criteria contained herein and you confirm that your Tender meets all requirements of *the Town*.

SECTION #7 – REFERENCES:

Reference #1
Company Name:
Contact Name:
Contact Title:
Contact Phone Number:
Contact Email:
Reference #2
Company Name:
Contact Name:
Contact Title:
Contact Phone Number:
Contact Email:
Reference #3
Company Name:
Contact Name:
Contact Title:
Contact Phone Number:
Contact Email:

SECTION #8 - INTENT:

The undersigned contractor hereby provides a Tender to supply the goods as described herein in its entirety for the cost as described in Section 2.

COMPANY:	
Print name of authorized personnel:	
Signature:	Corporate Seal:
Email Address:	
Telephone number:	
TOWN OF DRUMHELLER:	
Print name of authorized personnel:	
Signature:]
DATE: YEAR 2022 MONTH	DAY

Upon completion of signatures above, this document will represent a contract agreement between the contractor and the Town of Drumheller.

SCHEDULE A – EVALUATION CRITERIA

Section A.1 – Evaluation Criteria Breakdown:

EVALUATION BASED ON:	100%	
Cost	40%	
Specifications	25%	
Delivery Timeline	15%	
Qualifications	10%	
References	10%	

Section A.2 – Evaluation Criteria Definitions:

Cost: 40%

Full scoring for cost shall be given to the lowest Total Project Cost value submission. A score of zero (0) shall be given to the highest Total Project Cost value submission. All other submissions shall be awarded a pro-rated value between these two amounts.

Specifications: 25%

The Town of Drumheller shall evaluate the submission to confirm that the Tender represents a clear understanding of the performance and technical requirements.

Delivery Timeline: 15%

The Town of Drumheller shall evaluate the submission to confirm that the Tender clearly identifies an acceptable delivery timeline.

Qualifications: 10%

The Town of Drumheller will evaluate submissions on the basis of proof to provide the work to expected industry standard levels of performance. The Town evaluator(s) shall review all submissions for qualification on the basis of:

- 1. Past work performance with the Town;
- 2. Proof of task and scope of work appropriate worker qualifications (tradespersons tickets, proof of certification from manufacturer, etc.), and;
- 3. Proof of work procedures and quality control and assurance programs.

References: 10%

The scoring for references shall be based on number of references and quality of references. Scoring shall be assigned as follows:

- 0 references 0% of score;
- 1 reference 15% of the score;
- 2 references 20% of the score, and;
- 3 or more references 50% of the score.

The remaining 50% of the score shall be based on the quality of the reference as determined by the evaluator(s).

SCHEDULE B – TECHNICAL SPECIFICATIONS

Section B.1 – Technical Specifications:

1. TESTING AND CERTIFICATION

	Comply	Variance
The completed vehicle shall be tested and labeled to		
CAN/ULC-S515-04 Second Edition by an independent		
third-party certification organization.		
The third-party organization shall be accredited		
for testing systems on Fire Apparatus in		
accordance with ISO/IEC 17020 or ISO/IEC Guide		
65.		
The certification organization shall not be owned or		
controlled by manufacturers or vendors of the		
apparatus being tested.		
The certification organization shall be primarily		
engaged in certification work and shall not have a		
monetary interest in the product's ultimate		
profitability.		
The certification organization shall witness all tests		
and shall refuse to certify any test result for a system		
if the components do not pass the testing required		
by this system.		
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.		
Apparatus Test Preparation - Pumper		

2. CARRYING CAPACITY PLATE

	Comply	Variance
A warning label shall be provided in the cab within		
sight of the driver stating the seating capacity of the		
cab/crew cab.		
An additional warning label shall be provided in the		
cab within sight of the driver that the occupants		
must be seated and belted.		

3. VEHICLE DIMENSION PLATE

	Comply	Variance
A warning label shall be provided in the cab within		
sight of the driver stating the following apparatus		
dimensions:		
Total vehicle height in standard and metric		

measurements - must not exceed 9' 6 1/2"	
(nine feet six and one-half inches) in total height.	
Total vehicle length in standard and metric	
measurements - must not exceed 25' 3 1/4"	
(twenty-five feet three and one-quarter inches) in	
total length.	
Total vehicle width in standard and metric	
measurements - must not exceed 98"	
(8' 1.66", eight feet one and 2/3 inches) in total	
width.	
Wheelbase in standard and metric measurements -	
must be at least 188" (15' 8" [fifteen feet eight inches]).	
Gross vehicle weight rating in pounds and kilograms.	
The angle of approach for the apparatus shall not be	
less than eight (8) degrees as specified by the	
current edition of National Fire Protection	
Association (NFPA) #1901.	
The angle of departure for the apparatus shall not be	
less than eight (8) degrees as specified by the	
current edition of NFPA #1901.	

4. DIELECTRIC VOLTAGE TESTING

	Comply	Variance
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.		

5. FLUID CAPACITY AND TYPE LABEL

	Comply	Variance
A permanent label shall be provided and shall state		
the type and quantity of the following fluids used in		
the vehicle:		
- Engine oil		
- Engine coolant		
- Chassis transmission fluid		
- Drive axle fluid		
- Pump gear case		
- Primer lubricant (if applicable)		

6. ENGINEERING BLUEPRINTS/DRAWINGS

	Comply	Variance
All submissions must include blueprints, CAD design		
drawings or construction drawings that are		
representative of the vehicle being proposed. These		
documents shall be submitted to the purchaser prior to		
commencement of the manufacturing process. The		
design of the equipment shall be in accordance with the		
best engineering practices.		
A copy of these documents shall be signed and returned		
to the Apparatus manufacturer and become part of the		
vehicle contract.		
These documents shall show at a minimum the		
front, left, right and rear views of the vehicle, as it		
will look at the time of completion. The equipment		
design and accessory installation shall permit		
accessibility for use, maintenance and service. All		
components and assemblies shall be free of		
hazardous protrusions, sharp edges, cracks or other		
elements, which might cause injury to personnel or		
equipment.		
All oil, hydraulic, and air tubing lines and electrical		
wiring shall be located in protective positions		
properly attached to the frame or body structure		
and shall have protective loom or grommets at		
each point where they pass through structural		
members, except where a through-frame		
connector is necessary.		
Parts and components shall be located or		
positioned for rapid and simple inspection and		
recognition of excessive wear or potential failure.		
Whenever functional, layout of operating		
components determines that physical or visual		
interference between items cannot be avoided, the		
item predicted to require the most maintenance		
shall be located for best accessibility.		

7. BODY MANUAL – DIGITAL

	Comply	Variance
One (1) digital manual shall be provided on		
operation of the complete apparatus. This compact		
disc manual(s) shall include a troubleshooting guide		
complete with recommended daily, weekly and		
annual maintenance procedures.		
The apparatus manufacturer shall supply a		

complete wiring diagram for the colour-coded	
wiring harness.	

8. CHASSIS SPECIFICATIONS

	Comply	Variance
A commercial two (2) door chassis shall be supplied.		

9. VEHICLE CONFIGURATION

	Comply	Variance
Conventional chassis		
Model year specified		
Set back axle – truck		
Straight truck provision		
Left hand primary steering location		

10. GENERAL REQUIREMENTS

	Comply	Variance
Fixed Canadian exchange		
Fire service		
Emergency vehicles business segment		
Expected front axle(s) load: 16,000.0 Lbs.		
Expected back axle(s) load: 30,000.0 Lbs.		
Expected Gross Vehicle Weight capacity: 46,000.0 Lbs.		
Fixed front grill assembly to allow for front turret		

11. ENGINE

	Comply	Variance
360 BHP at 2,000 RPM		

12. ELECTRONIC PARAMETERS

	Comply	Variance
110 kmph (68 Mph) road speed limit.		
Cruise control speed limit same as road speed limit.		
PTO mode engine RPM limit – 1,100 RPM.		
PTO mode brake override - service brake only enabled.		
PTO mode brake override - service brake only enabled.		
PTO RPM with cruise resume switch - 800 RPM.		
PTO mode cancel vehicle speed – 8 kmph (5 Mph).		
PTO governor ramp rate - 250 RPM per second.		
PTO minimum rpm – 700.		
Regenerated inhibited speed threshold - 8 kmph (5 mph).		

13. ENGINE EQUIPMENT

	Comply	Variance
Standard oil pan.		
Engine mounted oil check and fill.		
Side of hood air intake with NFPA compliant ember screen and fire-retardant.		
12v 200 amp alternator with remote battery volt sense.		
Two (2) maintenance free 1125 Cold cranking amps (CCA) threaded stud batteries.		
Battery box - frame mounted.		
Standard battery jumpers.		
Single battery box frame mounted left hand side under cab.		
Wire ground return for battery cables with additional frame ground return.		
Positive load disconnect with cab mounted control switch mounted outboard driver seat.		
Turbocharged 18.7 Cfm air compressor with internal safety valve.		
Standard air compressor governor.		
Exhaust brake integral with variable geometry turbo with on/off dash switch.		
Right hand outboard under step mounted horizontal aftertreatment system assembly with rh horizontal tailpipe exiting forward of rear tires.		
Engine aftertreatment device, automatic over the road regeneration and dash mounted regeneration request switch.		
Standard exhaust system length.		
Right hand horizontal tailpipe, exit forward of rear tires.		
22.7 liter (5 imperial gallons) diesel exhaust fluid tank.		
On/off fan drive.		
Automatic fan control with dash switch and indicator light, non-engine mounted.		
Spin on fuel filter.		
Combination full flow/bypass oil filter.		

1,100 square inch aluminum radiator.	
Standard extended life coolant (ELC) to -37°C	
Radiator drain valve.	
Lower radiator guard.	
1000 Watt/115 Volt block heater.	
Electric grid air intake warmer.	

14. TRANSMISSION EQUIPMENT

	Comply	Variance
Allison vocational package 198 - available on 3000/4000 product families with vocational model EVS.		
Allison Vocational Rating for Fire truck/emergency vehicle applications available with all product families.		
Vehicle interface wiring with body builder connector mounted back of cab.		
Electronic transmission customer access connector mounted back of cab.		
PTO mounting, left hand side of main transmission.		
Magnetic plugs, engine drain, transmission drain, axle(s) fill and drain.		
Push button electronic shift control, dash mounted.		
Transmission prognostics – enabled 2013.		
Water to oil transmission cooler, in radiator end tank.		
Transmission oil check and fill with electronic oil level check.		
Synthetic transmission fluid – specify type.		

15. FRONT AXLE AND EQUIPMENT

	Comply	Variance
16,000 lbs drop front single front axle.		
Cast Spider cam front brakes, double anchor fabricated shoes.		
Fire and emergency severe service, non-asbestos front lining.		
Cast iron front brake drums.		
Front brake dust shields.		
Vented front hub caps with window, center and side plugs – oil.		
Automatic front slack adjusters.		

16. FRONT SUSPENSION

	Comply	Variance
16,000 lbs. Taper leaf front suspension.		
Maintenance free rubber bushings - front suspension.		
Front shock absorbers.		

17. REAR AXLE AND EQUIPMENT

	Comply	Variance
30,000 lbs. U-Series single rear axle.		
5.38 Rear axle ratio.		
6.5x7 P Cam rear brakes, double anchor cast shoes.		
Fire and emergency severe service non-asbestos rear brake lining.		
Brake cams and chambers on forward side of drive axle(s).		
Cast iron rear brake drums.		
Rear brake dust shields.		
Long stroke 1-drive axle spring parking chambers.		
Automatic rear slack adjusters.		

18. REAR SUSPENSION

	Comply	Variance
31,000 lbs. Flat leaf spring rear suspension with radius		
rod for fire/emergency service.		
Spring suspension - 2.00" axle spacer.		

19. BRAKE SYSTEM

	Comply	Variance
Air brake package.		
Equipped with ABS and traction control.		
Pull cables on all air reservoirs.		

20. WHEELBASE & FRAME

	Comply	Variance
Square End of Frame.		
Rear Tow Hooks.		
Front Closing Crossmember.		
Lightweight Heavy-Duty Aluminum Engine		
Crossmember.		
Standard midship #1 crossmember.		
Standard rearmost crossmember.		
Standard suspension crossmember.		

21. CHASSIS EQUIPMENT

	Comply	Variance
Front tow hooks - frame mounted.		
Bumper mounting for single license plate.		
Fender and front of hood mounted front mud flaps.		

22. FUEL TANKS

	Comply	Variance
50 gallon/189 liter short rectangular aluminum fuel tank		
– LH.		
Plain aluminum/painted steel fuel/hydraulic tank(s)		
with painted bands.		
Plain step finish.		
Fuel Tank Cap(s).		
Fuel filter/water separator with heated bowl and		
primer pump.		
Auxiliary fuel supply and return ports located on LH fuel		
tank.		

23. TIRES

	Comply	Variance
Radial front tires.		
Radial rear tires.		

24. WHEELS

	Comply	Variance
Front aluminum wheels.		
Rear aluminum wheels.		

25. CAB EXTERIOR

	Comply	Variance
106 Inch Conventional cab.		
Air cab mounts.		
2-1/2 Inch Fender extensions.		
LH and RH exterior grab handles with single rubber insert.		
Fiberglass hood.		
Tunnel/firewall liner.		
Single electric horn.		
Door locks and ignition switch keyed the same.		
Rear license plate mount end of frame.		
Integral headlight marker assembly with chrome bezel.		

(5) Amber marker lights.	
Daytime running lights.	
Standard front turn signal lamps.	
Dual west coast bright finish heated mirrors with LH And RH remote.	
Door mounted mirrors.	
102 Inch Equipment width .	
LH And RH 8 Inch bright finish convex mirrors mounted under primary mirrors.	
Standard side/rear reflectors.	
Dual level cab entry steps on both sides.	
Tinted rear window.	
Tinted door glass LH And RH with tinted non-operating wing windows.	
Manual door window regulators.	
Tinted windshield.	
2 Gallon (9.09 liters) Windshield washer reservoir without fluid level indicator, frame mounted .	

26. CAB INTERIOR

	Comply	Variance
Gray vinyl interior.		
Molded plastic door panel.		
Molded plastic door panel.		
Black mats with single insulation.		
In dash storage bin.		
(2) Cup holders LH and RH dash.		
Gray/charcoal flat dash.		
Heater, defroster and air conditioner.		
Standard HVAC ducting.		
Main HVAC controls with recirculation switch.		
Standard heater plumbing.		
Heavy duty air conditioner compressor.		
Premium insulation.		
Solid-state circuit protection and fuses.		
12v Negative ground electrical system.		
Dome door activated LH and RH, dual reading lights, forward cab roof.		

Cab door latches with manual door locks.	
(2) 12 Volt power receptacles mounted in dash.	
High back air suspension driver seat.	
High back non air suspension passenger seat.	
LH and RH integral door panel armrests.	
Vinyl with vinyl insert driver seat.	
Vinyl with vinyl insert passenger seat.	
3 Point High visibility orange retractor driver and RH front passenger seat belts with NFPA 1901-2009 compliant sensor and dash harness.	
Adjustable tilt and telescoping steering column.	
4-Spoke 18 inch (450mm) steering wheel.	
Driver and passenger interior sun visors.	

27. INSTRUMENTS & CONTROLS

	Comply	Variance
Gray driver instrument panel.		
Gray center instrument panel.		
Engine remote interface with park brake and neutral interlocks.		
Black gauge bezels.		
Low air pressure light and buzzer.		
2 Inch primary and secondary air pressure gauges .		
Dash mounted air restriction indicator with graduations.		
Electronic cruise control with switches in LH switch panel.		
Key operated ignition switch and integral start position; 4 position off/run/start/accessory.		
Odometer/trip/hour/diagnostic/voltage display: 1x7 character, 26 warning lamps, Data Linked, Icu3.		
Diagnostic interface connector, 9 Pin, SAE J1939, located below dash.		
2 Inch Electric fuel gauge .		
Engine remote interface for remote throttle.		
Engine remote interface connector at back of cab.		
Electrical engine coolant temperature gauge.		
2 Inch transmission oil temperature gauge .		
Engine and trip hour meters integral within driver display.		

Furnished and installed PTO controls.	
Electric engine oil pressure gauge.	
Overhead instrument panel.	
Roof/overhead console CB radio provision with face plate.	
Electronic Kph speedometer with secondary Mph scale, without odometer.	
Standard vehicle speed sensor.	
Electronic 3000 Rpm tachometer.	
Ignition switch controlled engine stop.	
Pre-flight, All outputs flash with smart switch.	
Digital voltage display integral with driver display.	
Single electric windshield wiper motor with delay.	
Marker light switch integral with headlight switch.	
Alternating flashing headlamp system with dash switch and no park brake interlock.	
One valve parking brake system with warning indicator.	
Self-canceling turn signal switch with dimmer, washer/wiper and hazard in handle.	
Integral electronic turn signal flasher with hazard lamps overriding stop lamps.	
Back-up camera and dash camera.	

28. COLOUR

	Comply	Variance
Cab colour paint : 2303 red.		
Black, high solids polyurethane chassis paint.		

29. CERTIFICATION / COMPLIANCE

	Comply	Variance
Canada CMVSS certification, except sales cabs and		
glider kits.		

30. CHASSIS PREPARATION

	Comply	Variance
The chassis shall be inspected for compliance		
to the required specifications and to assure		
that it is ready for apparatus construction.		
Any components that require relocation or modification		
shall be done at this time.		

31. SPEAKER COVER – BUMPER MOUNT

	Comply	Variance
The chassis bumper shall come with A cut out for		
mounting the siren speaker behind. The cutout		
shall come with a stainless-steel cover that Is		
slotted to allow sound to pass through.		
The bumper shall be chromed after the cutout has been		
made .		

32. EXHAUST SYSTEM

	Comply	Variance
The chassis exhaust system shall be modified and		
routed to the right hand side of the apparatus		
ahead of the rear wheels. The end of the exhaust		
shall have A straight cut end which is suitable for a		
fire hall exhaust extraction system.		
Where the chassis exhaust piping passes under or near		
a body compartment, the exhaust piping shall be		
shielded to prevent compartment exposure to radiant		
heat.		

33.FRONT AND REAR MUD FLAPS

	Comply	Variance
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.		

34. CHAINED IGNITION KEY

	Comply	Variance
The key utilized for the ignition shall be securely		
chained to either the steering column or the cab		
dash to prevent loss or removal of the ignition key.		

35. AIR INLET CONNECTION

	Comply	Variance
There shall be an air inlet shoreline installed at		
the left cab door area and connected into the		
chassis air brake system. The air fitting for this		
inlet shall be male.		

36. 12V POLARIZED BATTERY INLET

	Comply	Variance
Automatic charger with auto eject plug.		
15 amp wiring kit shall be provided complete with a weatherproof cover. This system shall allow the chassis batteries to be maintained at an operating level from an external charging source.		

37. PUMP MODULE

	Comply	Variance
The pump module shall be mounted to the chassis		
frame rails. The pump module panels shall be 14		
gauge brushed stainless steel. The panels hall be an		
integral part of the module.		

38. PUMP – 500 GPM

	Comply	Variance
The pump shall be of a size and design to mount on		
commercial and custom truck chassis and have the		
capacity Of 500 U.S. Gallons (1891 liters, 416		
imperial gallons) per minute, NFPA 1901 rated		
performance.		
The entire pump shall be manufactured and tested at		
the pump manufacturer's factory.		
The pump shall be driven by A transmission		
mounted power take-off (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.		
The entire pump, both suction and discharge		
passages, shall be hydrostatically tested to a		
pressure of 500 PSI. The pump shall be fully tested at		
the pump manufacturer's factory to the		
performance spots as outlined by the latest NFPA		
standard 1901. The pump shall be free from		
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. All moving parts in contact with water		
shall be of high-quality bronze or stainless steel. The		
pump utilizing castings made of lower tensile		
strength cast iron is not acceptable. The pump body		
shall be vertically split, on a single plane, for easy		
removal of impeller assembly, including clearance		
rings.		
Optional main center suction and discharge		
manifolding shall be manufactured and tested at		
the pump manufacturer's facility.		
The lower optional suction manifold section shall		
incorporate A 700 GPM flow capacity tank to pump		
line check valve.		
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 shaft shall have only one mechanical seal. The mechanical seal shall be spring loaded, maintenance free and self-adjusting. 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 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 impellers or pump volute body.	
The pump shaft shall be electric furnace heat-treated and corrosion resistant with a positive impeller lock. Pump shaft must be sealed with double lip oil seal to keep road dirt and water out of gearbox.	

39. GEARBOX

	Comply	Variance
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 gearbox shall be designed of ample		
capacity for lubrication reserve and to maintain the		
proper operating temperature.		
The gearbox drive shaft shall be of heat-treated		
chromium steel and shall withstand the torque of		
the engine in pump operating conditions.		
All gears shall be of highest quality electric furnace		
chrome nickel steel. Bores shall be ground to size and		
teeth integrated, crown-shaved 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 (no		
exceptions).		
The pump ratio shall be selected by the apparatus		
manufacturer to give maximum performance with the		
engine, transmission and power take-off selected.		

40. PIPING AND MANIFOLDS

	Comply	Variance
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 2-1/2" (5.08 and 6.35cm) pre-connect valves.	
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°F to 210°F. Full flow couplings are precision machined from high tensile strength stainless steel. All female couplings are brass 3/4" and 1" male couplings are brass.	

41. PRIMING PUMP - ENVIROMENTALLY SAFE

	Comply	Variance
The priming pump shall be a positive displacement,		
oil-less rotary vane electric motor driven pump or air		
operated.		
The pump shall be capable of producing a minimum		
24 hg vacuum at 2000 feet above sea level. The		
electric motor shall be a 12 VDC totally enclosed		
unit.		
The priming pump shall not require lubrication.		
The priming pump shall be operated by a single push-		
button control mounted on the pump panel.		

42. STANDARD WARRANTY

	Comply	Variance
The pump shall carry the 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 will cover parts and labour for the		
first two (2) years and parts only for the remaining		
(3) years.		

43. RELIEF VALVE

	Comply	Variance
There shall be one (1) suction side stainless steel		
relief pump valve provided on the pump system.		

44. BALL VALVES

	Comply	Variance
The valves including the ball shall be cast of 316		
stainless steel with full flow capability. The valve shall		
have dual seats made of acetal resin with dual seals		
made of an internally lubricated rubber compound with		
a steel band.		
The valves shall be of floating ball design with a flow		
pressure rating to exceed NFPA-1901 standards rating		
of 600 psi. the valve shall have lubrication capability		
from a supplied Zerk fitting on the adapters for the		
valve body with the knowledge that lubrication is not		
required.		
All 3.0" (7.62cm) discharge valves shall be supplied with		
a true slow close mechanism, which is required to be no		
less than 70 lb. (31.8kg) of hand pressure over a three		
second throw. the valve shall also require a maximum		
actuation force of 75 lb. (34 kg). The 2½" (6.35cm) side		
mounted swing handle valve shall also have a true		
locking mechanism, which shall be made of a cam and		
pin arrangement or a twist lock for true locking when		
the valve is gated. All side control valves will be		
supplied with push pull controls unless otherwise		
noted.		
The valve shall be warranted for a period of ten (10)		
years on all stainless-steel components, against defects		
in design and manufacturing processes. The wear items		
such as the seats, seals and "o" rings shall have a		
warranty of two years on replacement parts only.		

45. LEFT SIDE FRONT DISCHARGE

	Comply	Variance
One (1) 2-1/2" (6.35cm) discharge with a stainless-steel		
valve 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 2-1/2"		
(6.35cm) outlet shall be equipped with an integral,		
stainless steel, 30-degree elbow terminating with 2-1/2"		
(6.35cm) bat 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.		

46. LEFT SIDE REAR DISCHARGE

	Comply	Variance
One (1) 2-1/2" (6.35cm) discharge with a stainless-steel		
valve 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 2-1/2"		
(6.35cm) outlet shall be equipped with an integral,		
stainless steel, 30-degree elbow terminating with 2-1/2"		
(6.35cm) bat 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 1/2" 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.		

47. LEFT SIDE AUXILLARY SUCTION

	Comply	Variance
One (1) 2- ¹ / ₂ " (6.35cm) intake with a stainless-steel		
valve 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, 2-1/2 (6.35		
cm) chrome inlet swivel and ¾" drain valve.		

48. STEAMER INLET

	Comply	Variance
One (1) 4" or 5" steamer inlets will be provided on		
the pump panels.		

49. TANK TO PUMP - AIR

	Comply	Variance
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.		

50. TANK FILL

	Comply	Variance
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.	

51. 1½" DISCHARGES – HOSEBED SPEEDLAY

	Comply	Variance
There shall be two (2) 1.5" discharges plumbed to the		
front hose bed divider wall as speedlay discharges. A 1-		
1/2" chrome threaded hose connector shall be used in		
each discharge. Each discharge shall have one (1) 2"		
(5.08cm) stainless steel 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		
galvanized or stainless-steel hose. 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 1/2" pressure gauge mounted on the panel near		
each control to indicate pressure. Each discharge shall		
also come equipped with a quarter-turn ³ / ₄ " drain valve.		

52. MASTER PUMP DRAIN

	Comply	Variance
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.		

53. BLEEDERS

	Comply	Variance
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.		

54. DISCHARGE GAUGES - KPA & PSI

	Comply	Variance
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.		

55. MASTER GAUGES - KPA & PSI

	Comply	Variance
All gauges shall be fully filled with pulse and vibration		
dampening inter-lube to lubricate the internal		
mechanisms to prevent lens condensation and to		
ensure proper operation to minus 40°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.		
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.		

56. FOAM SYSTEM

	Comply	Variance
The vehicle shall be equipped with an electronic, fully		
automatic, variable speed direct injection, discharge		
side foam proportioning system. The system shall be		
capable of handling foam concentrate. The foam		
proportioning operation shall be based on direct		
measurement of water flows, and remain consistent		
within the specified flows, and pressures. The system		
must be capable of delivering accuracy to within 3% of		
calibrated settings over the advertised operation range		
when installed according to factory standards. The		
system shall be equipped with a control module		
suitable for installation on the pump panel.		
Incorporated within the motor driver shall be a		
microprocessor that receives input from the system		
flow meter, while also monitoring foam concentrate		
pump output, comparing values to ensure that the		
operator pre-set proportional amount of foam		
concentrate is injected into the discharge side of the		
fire pump.		
A paddlewheel type flow meter shall be installed in the		
discharges specified to be foam capable. As this system		
uses more than one flow meter an interface electronics		
module will be provided to totalize these flows and		
send the flow total to the microprocessor in the		
computer control display. The digital computer control		
display shall enable the pump operator to perform the		

followi	ng control and operation functions for the foam	
	tioning system.	
-	e push-button control of foam proportioning	
rates f		
0	0.1% To 9.9% In .1% Increments.	
0	Show the current flow per minute of water.	
0	Show the total volume of water discharged	
Ŭ	during and after foam operations are	
	completed.	
0	Show the total amount of foam concentrate	
Ű	consumed.	
0	Slow the flow rates for manual operation.	
0	Perform setup and diagnostic functions for the	
Ũ	computer controlled microprocessor.	
0	Flash a "low concentrate" warning when the	
_	foam concentrate tank(s) run low.	
0	Flash a "no concentrate" warning and shut the	
	foam concentrate pump off, preventing damage	
	to the pump should the foam tank(s) empty.	
A 12 vo	olt electric motor driven positive displacement	
	oncentrate pump shall be provided. The pump	
	ty shall be 2.5 GPM at 400 psi. A pump motor	
-	onic driver shall receive signals from the computer	
contro	l display and power the 1/2 hp electric motor	
directly	y coupled to the concentrate pump in a variable	
speed	duty cycle to ensure that the correct proportion	
of cond	centrate pre-set by the pump operator is injected	
into th	e water stream. A full flow check valve shall be	
provid	ed to prevent foam contamination of the fir	
pump	and water tank or water contamination of the	
foam t	ank(s).	
The 20	00 Series Components Shall Include:	
0	an operator control and display	
0	paddlewheel flow meters	
0	foam pump and electric motor/motor driver	
0	all required wiring harness	
0	low level tank switch(s)	
0	multi-flow electronic module	
0	an electronic dual tank valve or manual dual	
	tank valve	
0	a foam injection check valve	
An Ope	erations Manual shall be provided for the unit.	

57. FOAM SYSTEM DISCHARGE MANIFOLD

		Comply	Variance	
Ab	prass foam discharge manifold shall be provided for			
the	e foam system.			

This foam manifold shall have four (4) outlets for	
connection into the apparatus plumbing system.	

58. MONITOR - ELECTRIC REMOTE CONTROLLED

	Comply	Variance
An electric remote controlled 500 GPM rated monitor		
shall be supplied and installed. The monitor shall have a		
single waterway constructed of lightweight pyrolite.		
The monitor shall have cast-in turning vanes in each		
elbow and a fully enclosed 12 volt motor / gears with		
manual overrides for both horizontal and vertical		
rotation that can be operated simultaneously. The		
monitor is not to exceed 11 3/4" high and 11 1/2" wide.		
The vertical travel shall be from 45° below To 90° above		
horizontal with adjustable stops at -20° and +45°. The		
horizontal rotation shall be 320° with adjustable stops at		
+- 90°. The logic box shall include coated, solid state		
components to resist water corrosion. Each control box		
shall control the vertical and horizontal rotation of the		
monitor, and the pattern of the nozzle.		

59. FRONT BUMPER TURRET MOUNT

	Comply	Variance
The front bumper shall have an aluminum mounting		
structure for a front turret. Structure shall be painted		
body colour with checker plate trim. There shall be a		
Class 1 digital pressure gauge installed in the chassis for		
the front bumper turret. A weatherproof transducer		
(transmitter) shall be supplied and mounted in the		
appropriate location in the piping system. The		
individual transducers shall be connected to the		
readout using the appropriate wiring in strict		
accordance with the instructions supplied by Class 1. A		
joystick shall be supplied to operate the monitor. the		
joystick shall control the electric valve, monitor nozzle		
direction and flow pattern of the nozzle. The joystick		
shall incorporate an automatic oscillation on/off feature		
and automatic stow button. A 12V electric operated		
monitor nozzle shall be supplied with the monitor. The		
monitor nozzle shall have spinning teeth for an effective		
fog pattern complete with a flush feature to eliminate		
debris build-up. The nozzle shall have an adjustable		
baffle with the capacity to flow 30-60-95-125GPM of		
water. A 2" electric valve shall control water flow from		
the pump to the monitor. A combination of 2" heavy-		
duty stainless piping and Class 1 SBR synthetic rubber		
hose with stainless steel couplings shall be routed from		
the pump to the remote monitor. The piping shall come		
equipped with an automatic drain.		

60. CANOPY / PUMPHOUSE ENCLOSURE HEATERS

	Comply	Variance
One (1) 33,000 BTU or two (2) 17,500 BTU forced air		
coolant heaters shall be installed. The heaters shall be		
mounted low in the pump house so that the heat will		
be distributed evenly in the pump house and will keep		
the drain lines open. A two speed switch shall be		
mounted on the pump panel for operation of the		
heaters.		

61. TOTAL PRESSURE GOVERNOR (TPG)

	Comply	Variance
Apparatus shall be equipped with a Class 1 "total		
pressure governor" (TPG).		
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.		
The 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 presets for RPM and		
pressure settings shall be easily configurable. The TPG		
shall incorporate configurable parameters in the menu		
structure accessed through a diagnostic password.		
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.		

62. LIGHT TANK LEVEL GAUGE - RED

	Comply	Variance
The apparatus shall be equipped with a Class1 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:		
 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.		

0	A super bright LED 4-light display with a visual	
	indication at nine accurate levels.	
0	A set of weather resistant connectors to	
	connect to the digital display, to the pressure	
	transducer and to the apparatus power.	

63. PUMP COOLER VALVE

	Comply	Variance
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.		

64. ENGINE COOLER VALVE

	Comply	Variance
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 through 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.		

65. PUMP MODULE TRIM

	Comply	Variance
The open portion above the pump module will come		
with a removable 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.		

66.THREAD TYPE - DISCHARGE 2.5"

	Comply	Variance
The threads that shall be provided for the 2.5"		
discharges and 2.5" suction inlets shall be BAT.		

67. BOOSTER TANK

	Comply	Variance
2,000 Imperial gallons (9,092 litres)		
This tank shall be provided with a lifetime warranty tank manufacturer.		
The transverse and longitudinal swash partitions shall be manufactured of Polyprene® 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.	
The tank shall have a combination vent and fill tower.	
the fill tower shall be constructed of 0.5" thick	
Polyprene [®] 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 0.25" thick	
removable Polyprene [®] screen and a Polyprene [®] 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" that is designed to run through the	
tank and shall be piped behind the rear wheels where	
specified by the purchaser so as to maximize traction.	
The tank cover shall be constructed of recessed 0.5"	
thick Polyprene [®] , stress relieved, U.V. stabilized	
material. A minimum of two lifting dowels shall be	
drilled and tapped 0.5" x 2" to accommodate the lifting	
eyes.	
There shall be one (1) sump standard per tank. the	
sump shall be constructed of 0.5" Polyprene [®] and be	
located in the left front corner of the tank.	
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 GPM (4,546 litres)	
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.	
The tank must be isolated from the cross members	
through the use of hard rubber strips with a minimum	
thickness and width dimension of 0.25" x 2" and a	
minimum Rockwell hardness of 60 durometer.	
Additionally, the tank must be supported around the	
entire bottom outside perimeter and capture front and	
rear as well as side to side to prevent tank from shifting	
during vehicle operation.	

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 0.25" 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
tank shall be supported. the bottom of the tank shall be completely isolated from the frame by heavy-duty 0.25" thick rubber strips. There shall be a picture frame type cradle mount system utilized for the purpose of
completely isolated from the frame by heavy-duty 0.25" thick rubber strips. There shall be a picture frame type cradle mount system utilized for the purpose of
thick rubber strips. There shall be a picture frame type cradle mount system utilized for the purpose of
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.
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.
The tank shall be completely removable without
disturbing or dismantling the apparatus structure.

68. BOOSTER TANK – PAINTED

	Comply	Variance
The booster tank shall be painted with the PPG paint		
process for a polypropylene plastic surface. 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°Fahrenheit (18.3°Celsius)		
temperature.		

69. FIREMAN'S FRIEND - 4" EXTERNAL TANK FILL - REAR RIGHT

	Comply	Variance
There shall be a 2.5" external tank fill with a Storz fitting provided at the rear right of the apparatus body. A 2.5 "BAT thread (female swivel) adapter will be provided.		

70. 10" DUMP VALVE - 180º DEGREE SWIVEL

	Comply	Variance
One (1) 10" "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 180° so it can be used on the left, rear and		
right side of the truck.		

A Newton manually operated telescoping extension chute shall be provided for the dump valve. The dump chute shall be painted to match the apparatus colour.	

71. TANK DRAIN

	Comply	Variance
The tank drain shall be installed in the bottom of the		
tank.		

72. REMOTE TANK LEVEL DRIVER

	Comply	Variance
A Class 1 remote tank level indicator driver shall be		
supplied for operation of the externally mounted tank		
level indicator lights. The module works in conjunction		
with the master level gauge to provide power to the		
external lights. The module shall provide 7.5 amps per		
output (x4) and mimic the function of the master tank		
level gauge.		

73. WATER LEVEL GAUGE

	Comply	Variance
In addition to the supplied tank water level gauge, there shall be one (1) PSTANK level gauge(s) installed as per the fire departments instructions. The tank status lights shall consist of 96 steady burn green, blue, amber and red LED lights. The dimensions of the light shall be 1 3/8" W x 11" H.		

74. HOSE BED

	Comply	Variance
The main hose bed shall be located above the booster		
tank. The hose bed shall be an integral part of the poly		
water tank.		
The hose bed flooring shall be fitted with vinyl type		
matting to allow for air movement under the hose.		
There shall be a partition at the front portion of the		
water tank that separates the hose storage area with		
the hose storage area. This divider shall be		
manufactured from aluminum.		
The rear track shall have a snap cover to prevent the		
hose couplings from catching the track.		

75. HOSE BED DIVIDERS - ADJUSTABLE

	Comply	Variance
There shall be two (2) adjustable hose bed dividers provided.		
Each partition shall be easily adjustable in the hose bed slide tracks.		
Each divider shall be constructed from 3/16" aluminum which shall be welded into a custom aluminum extrusion base frame.		
Each hose bed divider shall have an oval handhold provided at the rear portion of the divider.		

76. HOSE BED TARP

	Comply	Variance
One (1) heavy duty vinyl hose bed tarp shall be		
provided with 1/4 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 colour.		

77. APPARATUS BODY

	Comply	Variance
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.		
The body shall be engineered and designed to provide a		
low centre of gravity and carry a correct load		
distribution.		
The entire body sub frame shall be constructed of		
heavy-duty tubular aluminum and channels to provide a		
rigid body design.		
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. The 3/16 panels will provide		
reinforcement to the compartment, for installation of		
heavy equipment. The 3/16" aluminum panels, shall		
provide extreme strength, rust corrosion resistance,		
and maximum durability.		
Skilled craftsmen shall perform all welding operations		
on the body. all welding shall be electronically with the		
highest quality components.		
Certified welders shall perform all welding. proof of		
welder certification shall be provided with the		
completed vehicle.		

78. BODY SUBFRAME

	Comply	Variance
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.		
The body frame rails shall be constructed of		
6061T6/6063-T6, 3" x 3" aluminum extrusions, with a		
wall thickness of 1/4".		
The front cross member shall be a heavy duty 3" x 2" x		
1/4" aluminum extrusions providing maximum strength		
and durability.		
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.		
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.		
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.		
The body sub frame and the chassis frame shall be		
insulated and separated by a rubberized belt. There		
shall be rear drop sub frame bolted to chassis frame		
made from formed heavy steel rails.		
The body shall be mounted to the chassis frame rails		
with two double flex mounts at the front, two steel		
channels in the middle, bolted to the chassis frame at		
the rear end of chassis frame and four single flex		
mounts at the drop frame. This shall provide for		
maximum mounting strength and flexibility.		

79. CORROSION PROTECTION

	Comply	Variance
All body components or attachments made from		
dissimilar metals shall be fastened to the body utilizing		
a UHMW/polyethylene material to prevent metal-to-		
metal contact preventing dielectric corrosion.		
All fasteners used in attaching or fastening or aluminum		
panels shall be installed with stainless steel hardware.		
Rivets shall not be acceptable.		
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.		

80. BODY COMPARTMENTS

	Comply	Variance
The body compartments shall be fabricated with 3/16"		
aluminum panels. these panels shall be non-corrosive,		
durable, and add strength and integrity to the body		
construction.		
The interior compartment seams shall be sealed and		
caulked with a permanent, pliable automotive type		
sealer.		
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.		
All compartments shall have sweep out floors. all		
compartments shall be weatherproof.		

81. REAR BODY SECTION

	Comply	Variance
The rear section of the apparatus body shall have a		
painted finish.		

82. LEFT SIDE BODY COMPARTMENTS - LOW

	Comply	Variance
The following compartments shall be provided on the		
driver's side of the apparatus body.		
One (1) compartment forward of the rear wheel		
measuring 74"W x 40"H x 13.5 / 26"D frame opening.		

83. ROLL UP DOORS – DRIVERS SIDE

	Comply	Variance
The driver's side of the apparatus shall be 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.		
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.		
For every inch of height an integral continuous hinge		
joint spans the width of the door to provide superior		
strength.		

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.	
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.	
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.	
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.	

84. RIGHT SIDE BODY COMPARTMENTS - LOW

	Comply	Variance
The following compartments shall be provided on the		
curb side of the apparatus body.		
One (1) compartment forward of the rear wheel		
measuring 74"W x 40"H x 13.5 / 26"D frame opening.		

85. COMPARTMENT MATTING

	Comply	Variance
There shall be versatile PVC matting supplied on the all		
body compartment floors. The matting shall be		
interlocking and 1" high to allow for air movement.		

86. REAR FENDERS

	Comply	Variance
The rear fender outer skin shall be fabricated from		
3/16" aluminum and have a painted finish. the rear		
fender skin shall be permanently attached to the body.		

87. WHEEL WELL LINER

	Comply	Variance
Both wheel wells shall have a liner.		

88. RUB RAILS

	Comply	Variance
Aluminum rub rails shall be bolted into place with nylon spacers on the lower framework below the compartments. The rub rail will extend to the outside edges of the side running boards for protection of the body from impact damage.	. ,	

89. REAR TOW EYES - PAINTED

	Comply	Variance
Two (2) heavy duty steel painted tow eyes shall be		
bolted directly to the rear frame rails. These tow hooks		
shall be easily accessible from the rear of the apparatus		
body.		

90. TAILBOARD

	Comply	Variance
A heavy-duty 16" deep tailboard shall be provided.		
The tailboard shall be covered with slip resistant 3/16"		
embossed checker plate. The aluminum checker plate		
shall be bolted to the tailboard sub frame with non-		
corrosive stainless-steel bolts. The bolt on aluminum		
tread plate shall allow for easy removal for service.		
The forward section of the tailboard shall be gapped to		
allow washing without dirt being trapped and for the		
drainage of accumulated water.		

91. BODY HANDRAIL

	Comply	Variance
The following handrails shall be installed on the		
apparatus body. Two (2) 48" handrails mounted		
vertically on the curbside rear.		
One (1) 42" handrail mounted horizontally on the		
upper rear for hose bed access. One (1) 12"		
mounted on the roadside upper rear hose bed area.		
The body handrail shall be 1 1/4" in diameter and shall		
be knurled aluminum for maximum grip and safety.		
The handrail shall be installed and supported with		
chrome plated polished cast brackets.		
The handrail shall be installed and supported with		
chrome plated polished cast brackets.		
The handrail brackets shall be provided with an		
isolation gasket and held in place with stainless steel		
bolts.		

92. FOLDING STEPS - CURB SIDE REAR

	Comply	Variance
One (1) folding aluminum steps shall be installed on the		
curb side rear of the apparatus. 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.		

93. CAST STEPS - ROAD SIDE REAR

	Comply	Variance
Three (3) cast aluminum fixed steps shall be installed on		
the roadside rear of the apparatus. Each step shall		
come with a hand hold built into the step.		
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.		

94. FOLDING STEPS - ROAD SIDE REAR

	Comply	Variance
One (1) folding aluminum steps shall be installed on		
the roadside rear of the apparatus. 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.		

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95. ELECTRICAL SYSTEM

	Comply	Variance
The manufacturer shall design the wiring system for		
the apparatus in accordance with the Society of		
Automobile Engineers (SAE).		
The manufacturer shall determent the circuit loads		
and designs the system to accommodate these loads		
with appropriate circuit routings and relays.		
All wiring harnesses shall be properly secured and		
routed. All passages required for routing shall have a		
grommet and sealed as required.		
All wiring shall be easily accessible for servicing.		
All wiring shall be SAE J1128 and SAE J1292 GXL type		
wire, as per fire industry standards. All exposed		
wiring shall be crimped and heat shrunk for added		
protection.		
The wiring harnesses shall be pre-engineered for		
correct circuit loading and shall be custom made.		
the harnesses shall be function, number, and colour		
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.		
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.		
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.	
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.	
All wiring shall have a strain pull test on wiring	
connections of 40 pounds.	

96. BATTERY MASTER SWITCH

	Comply	Variance
The battery master switch shall be supplied by the		
chassis manufacturer.		

97. ELECTRONIC SIREN AND SIREN SPEAKER

	Comply	Variance
There shall be a 100-Watt electronic siren speaker		
provided at the front bumper and connected into		
the electronic siren. The 100-Watt speaker shall be		
of compact design and shall be 5.9" high x 5.5" long x		
2.7" deep. The speaker shall be fully encapsulated		
with no terminals exposed and built to withstand		
tough conditions.		
There shall be an electronic siren, with microphone		
and installed in the cab. included with 5 basic siren		
tones, pa, radio rebroadcast, and air horn sound with		
siren override.		
System shall allow for effective intersection traffic		
clearing capability without removing your hands		
from the steering wheel or your eyes from the road.		
There shall also include a "press-and-hold" function,		
depressing and holding the horn ring will produce an		
alternate sound for as long as the operator keeps the		
horn ring circuit depressed. The siren's PA volume		
level can be controlled with a rotary GAIN switch		
located on the unit's backlit front panel, and radio		
rebroadcast volume is adjustable via an easily		
accessible rotary pot. The siren also shall include a		
permanent noise- canceling microphone that		
produces high quality voice reproduction without		
feedback squeal, and the microphone's push-to-talk		
switch will override any siren tone for instant PA use.		

98. LIGHTBAR – LED (Light Emitting Diode)

	Comply	Variance
An LED (Light Emitting Diode) light bar warning		
system shall be furnished and rigidly mounted to		
meet the requirements of Zone A Lighting as per		
NFPA 1901 (latest edition) and ULC S515-04		

99. HEADLIGHT WIG WAG FLASHER

	Comply	Variance
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.		

100. FRONT EMERGENCY LIGHTING

	Comply	Variance
Two (2) LED warning lights complete with chrome bezel		
and mounting gasket shall be installed on the front of the		
vehicle. These lights shall have red lenses.		

101. SIDE EMERGENCY LIGHTING

	Comply	Variance
Four (4) LED warning lights complete with chrome		
bezel and mounting gasket shall be installed on the		
lower sides of the vehicle, two (2) on the left side		
and two (2) on the right side. These lights shall have		
red lenses.		

102. REAR EMERGENCY LIGHTING - LOWER

	Comply	Variance
Two (2) LED warning lights complete with chrome bezel		
and mounting gasket shall be installed on the rear lower		
portion of the apparatus body. These lights shall have		
red lenses.		

103. REAR WARNING LIGHTS - UPPER

	Comply	Variance
Two (2) red LED beacon lights shall be provided and		
mounted on the upper rear stanchions, one (1) each		
side, and controlled by a switch located in the cab.		

104. TAILLIGHTS – LED (Light Emitting Diode)

	Comply	Variance
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.		

105. HANDHELD CAB SPOTLIGHT

	Comply	Variance
One (1) 300,000 candle power handheld LED spot		
light, with a momentary type control switch, coiled		
cord, and bracket, shall be provided and mounted on		
the right side in the cab and wired into the 12 volt		
electrical system.		

106. HOSEBED FLOOD LIGHT(S)

	Comply	Variance
There shall be one (1) LED 12V light provided at the		
front of the hose bed. The light(s) shall be furnished		
with LED flood light bulbs.		

107. STEP LIGHTS

	Comply	Variance
All steps on the body shall have adequate LED lights		
for illumination.		

108. GROUND LIGHTS – LED (Light Emitting Diode)

	Comply	Variance
There shall be six (6) 12" LED ground lights with		
outward facing angle brackets installed underneath		
the apparatus.		

109. ENGINE COMPARTMENT LIGHT

	Comply	Variance
One (1) 4" clear LED engine compartment light shall		
be installed in the engine compartment area and		
shall be activated by a mercury switch.		

110. COMPARTMENT LIGHTS – LED (Light Emitting Diode)

	Comply	Variance
All 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.		
All 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.		

111. DOOR AJAR SYSTEM

	Comply	Variance
A red 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 and the park brake is released. There shall be a		
magnetic sensor switch located in the compartment		
that will indicate when a door has been opened.		
A red 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 and the park brake is released.	

112. CLEARANCE AND MARKER LIGHTS - LED

	Comply	Variance
All clearance / marker lights reflectors shall comply with		
department of transport motor vehicle safety standards.		
The clearance / marker lights shall be LED type.		

113. BACK UP ALARM

	Comply	Variance
A 107db back up alarm shall be installed at the rear of		
the apparatus body. This back up alarm shall be		
activated when the chassis transmission is placed into		
reverse.		

114. TWO WAY RADIO POWER SUPPLY

	Comply	Variance
There shall be a dedicated 12V power supply line coiled		
underneath the chassis dash for the future install of a		
customer supplied Kenwood two-way radios.		

115. ANTENNA MOUNT(S)

	Comply	Variance
One (1) mount 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.		

116. COMPARTMENT FINISH

	Comply	Variance
The interior of all compartments of the body shall also		
be sealed and caulked. A textured finish of grey		
urethane paint shall be applied to all compartment		
interiors.		

117. FINISH AND PAINTING

	Comply	Variance
The painting shall be done in accordance with		
automotive practices using high solids polyurethane		
paint with the PPG painting process. All painting shall		
be baked at 160°F for a minimum 45 minutes to provide		
an automotive quality finish. After assembly, the body		
substructure shall be de-burred and hand sanded.		
All edges inside and outside shall be cleaned and		
sealed.		

118. BODY UNDERCOATING

	Comply	Variance
The whole frame / cross members / and wheel well		
area of the apparatus body shall be thoroughly		
prepared and sprayed with undercoating that will help		
prevent rust and corrosion. A minimum of 8-10 mils of		
undercoating shall be sprayed. The bottom, sides and		
tops of the cross members shall be fully covered.		

119. COMPARTMENT FINISH

	Comply	Variance
The interior of all compartments of the body shall also		
be sealed and caulked. A textured finish of urethane		
paint shall be applied to all compartment interiors.		

120. 4" REFLECTIVE BODY PRIMARY STRIPING

	Comply	Variance
There shall be a four-inch-wide reflective stripe applied		
to the left, right and rear sides of the apparatus. The		
reflective stripe shall be a 3M Scotchlite [®] product.		
There shall be a one-inch-wide reflective stripe applied		
to the front of the apparatus. The reflective stripe shall		
be made of high visibility material.		

121. CHEVRON STRIPPING

	Comply	Variance
There shall be 6" chevron stripping decals applied to		
the rear face of the apparatus. The chevron decals		
shall be made of high visibility material that is red /		
yellow in colour and shaped to form an "A" style		
pattern. a minimum of 50% of the rear body shall be		
covered with chevron.		

122. HARD SUCTION HOSE MOUNTING

	Comply	Variance
Suction hose storage for four (4) lengths of 3" hard		
suction hose shall be installed above the body		
compartments. One rack shall be installed above the		
left side body compartments and the other rack shall		
be installed above the right-side body compartments.		
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.		

123. HARD SUCTION HOSE

	Comply	Variance
Four (4) ten foot section(s) of 3" PVC lightweight,		
flexible, hard suction hose shall be provided with		
lightweight male and female cam-lock couplings.		

124. BARREL STRAINER

	Comply	Variance
One (1) 3" barrel strainer shall be provided and		
shipped loose with the completed vehicle.		

125. PORTABLE TANK CARRYING BRACKETS - FOLDING ENCLOSED

	Comply	Variance
There shall be a lower/lift assist mechanism with a set		
of "L" shaped folding portable tank brackets with a		
quick release mechanism installed on the apparatus		
body. The portable tank rack shall be enclosed with an		
aluminum surround.		
A set of assist handles complete with retention clip		
shall be provided with the folding porta tank		
brackets. the handles will help aid in lifting and		
lowering the porta tank rack.		

126. PORTABLE TANK RACK ENCLOSURE - ALUMINUM PAINTED

	Comply	Variance
There shall be an enclosure installed on the porta		
tank rack for storage of the porta tank. T he		
enclosure shall be manufactured from aluminum and		
painted with the same process as the body.		

127. FRAMED PORTABLE TANK

	Comply	Variance
One (1) 2080 lg / 2500 USG collapsible portable		
tank made with 22 oz. Full tubular aluminum		
frame shall be provided. The liner includes a 10"		
quick-drain tube which will empty the tank in		
seconds.		
Open tank dimensions with liner: 12'3" x 12'3" x 29"		
Closed tank dimensions with liner: 8" x 8'3" x 29".		

128. AUTO TIRE CHAINS

	Comply	Variance
A set of automatic tire chains shall be installed at the		
rear tires. the automatic tire chain system shall be air		
actuated from the chassis air system and shall be		

controlled with an activation switch located in the cab.	
within easy reach of the driver.	

129. REQUIRED OPTION ITEMS

	Comply	Variance
Pump and roll		
Foam pro – plumbed to 1.5 "pre-connects and front		
turret.		
Front turret mounted nozzle with single joystick control		
mounted in cab for one person operation.		
Porta-tank lower/lift assist mechanism		
Winter front		
Winter package (winterized pump box with heater		
including belly pan)		
2 inch rear receiver hitch		
Back up camera installed		
Dash camera installed		
4 hi-intensity LED scene lights installed on left (2) and		
right (2) sides of apparatus		
Interior cab gauges for water tank and foam tank		
Tank to pump control inside of cab		
120-volt inverter to operate additional power		
tools/scene lights		
Hi-intensity light bar (driving) mounted front grill		
Trailer plug – 7 pole RV plug		
Exhaust system remote shall be installed and a magnet		
plate fixed to the side of body above horizontal exhaust		
pipe.		
Wrench set(s) and mounting plates		
Crowbar bracket with 54 inch steel crowbar		
One (1) 2.5 lb. ABC vehicle type fire extinguisher with		
mounting bracket.		
One (1) standard first aid kit shall be provided		
One (1) set of three (3) dual faced triangular warning		
flares to meet the department of transportation's motor		
vehicle safety standards.		

130. LOCAL SERVICE VEHICLE SUPPORT

-

	Comply	Variance
All submissions must include clear information on		
local service vehicle support and maintenance for the		
proposed unit. Service and maintenance must be		
performed by qualified staff. Identification of on-site service and maintenance capabilities must also be		
made. Any on-site service will require proper and		
appropriate liability insurance in the amount of		
\$ 5,000,000.00 per Section 5 of this document.		
Service Shop and Sources to Handle the Following?		
o Body Repairs Including Welding:		
o Minor Paint Work:		
o Chassis Repairs and Service:		
o Major Component Repairs and Service:		
o Electrical Repairs and Service:		
Service Center Name:		
Location:		
Telephone:		
• Email:		
Contact Name:		
Square Footage of Service Center:		
Is the Service Center Enclosed and Heat	ed?	
Number of Service Technicians and EVT:	6:	
Number of Mobile Service Trucks:		

131. LOCAL PRE-DELIVERY INSPECTION

	Comply	Variance
After completion and transit from the final stage		
manufacturer's facilities, the unit / apparatus shall		
undergo a detailed Pre-Delivery Final Inspection at the		
identified service center. This will be done prior to		
final delivery and onsite training of the completed		
apparatus to the Town of Drumheller Fire		
Department. This inspection shall be performed by		
qualified EVT service technicians and shall include the		
following:		
CHASSIS AND FIRE PACKAGE		
Check all fluid levels,		
Adjust headlights		
Check for leaks, Coolant, Oil, Air system		
Fire pump/body to truck mounting bolts for		
tightness		
Frame to body isolation rubber in place and		
fastened		
Check and torque all wheel nuts to manufacturer's		
specifications		
Check wheels and tires for damage confirm/adjust		
tire pressures		
Check air filters, engine, generator, CAFS		
Check drive belts, engine, compressors		
 Grease, drive and PTO shafts and bearings, 		
steering and suspension components		
Check bumper extension and all steps for		
excessive movement or vibration		
Check weather stripping and seals		
Check shelves and trays for deformation and		
operation		
Check ladder and auxiliary equipment for damage		
and secure retention systems		
Inspect paint for damage		
 Inspect all seats and seat belts, upholstery and 		
interior finish		
Operate all windows, mirrors and climate control-		
ventilation systems		
Confirm the presence of all placards and warning		
labels		
Operate all electrical systems, load test chassis		
batteries		

PUMP TEST	
Check for presence of all suction screens, p	roper
provincial threads	
Inspect and adjust all linkages for smooth	
operation	
Pressure test pump, valves and plumbing f	or leaks
Test primer system	
Operate and check pump engagement syst	em and
confirm indicator operation	
Perform vacuum test Fill water and form tanks inspect for looks	and
• Fill water and foam tanks inspect for leaks level gauge operation and accuracy	anu
 Calibrate foam system and water flowmete 	arc
 Pump water and test governor/relief valve 	
operation	
 Check pump and driveline smooth and pro 	per
operation	
• Flow water out of all discharges, including	aerial if
applicable	
Operate CAFS if applicable	
Test pump and roll system if applicable inc	uding
transmission parameters	
ROAD PERFORMANCE TEST	
A road performance test shall be conducted wi	th the
apparatus fully	
loaded with water and a continuous run of no	ess
than ten (10) miles (16	
km). During that time the apparatus shall show	no loss
of power nor will it	
overheat. The transmission drive shaft or shaft	sand
the axles will run quietly and be free of abnormal vibration or no	ico Tho
apparatus will meet	
NFPA #1901 braking requirements.	
Perform 40 minute road test covering both	city
and highway driving	
Weigh apparatus and record	
Check handling of apparatus, tracking, stee	ring
wheel centered	
Check air system, brake, retarder and park	brake
operation	
Check accuracy of speedometer with GPS	
Check for proper engine and transmission	

•	operation Check all gauges working	
•	Check back up/side cameras for operation Wash truck and check for leaks Arrange for Provincial Safety Inspection prior to	
	delivery	

132. TRAINING AND SAFETY

	Comply	Variance
All bidders shall provide an equipment training and safety summary. If you are the successful proponent, what training on the operation of new equipment,		
safety and maintenance will you provide. Training must be provided by a manufacturer's representative, certified by the manufacturer (stating the certification type).		
Training is to be provided in the Town of Drumheller and to comply with the requirements of the NFPA #1002.		
The Town requires that a manufacturer's training representative be present for a minimum of three (3) days for on-site orientation and training upon delivery of equipment and initial start-up.		

APPENDIX 1 – AXLE LOAD TABLE

Axle Load Table:

Complete the following table, indicating wheelbase, curb to curb and wall to wall turning radius, GVWR, GAWR front and rear, maximum and tare axle loads front and rear, and maximum payload:

	Front Axle (kg)	Rear Axle (kg)	Total (kg)
Chassis			
Body			
Tare			
Payload			
Gross			

APPENDIX 2 – SUBMISSION LABEL

Submission Label:

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All Bidders must use the Submission Label below to submit their tender.

FROM:	
	Procurement Department Town of Drumheller 224 Centre Street
	Drumheller, Alberta T0J 0Y4 RFP – Supply & Delivery of One (1) Commercial Tanker Truck
	Closing date: