

Fire Department of _____
TOP MOUNT ENCLOSED PUMPER

COMMERCIAL TOP MOUNT ENCLOSED CONTROLS PUMPER

Fire Department of _____
 TOP MOUNT ENCLOSED PUMPER

	SPECIFICATIONS	YES	NO	DETAILS
A.1	ADMINISTRATIVES REQUIREMENTS:			
A.1.1	Delivery conditions from Dealer			
A.1.2	Training to be provided			
A.2	<u>Documents to be provided with bid</u>			
A.2.1	Proof of insurance coverage			
A.2.2	Drawings			
A.2.3	Weight repartition			
A.2.4	ISO certificate			
A.2.5	CWB certificates			
A.2.6	Weldon V-Mux certificates			
A.2.7	Other...			
A.2.8	Other...			

Fire Department of _____
TOP MOUNT ENCLOSED PUMPER

	SPECIFICATIONS	YES	NO	DETAILS
1.1	TECHNICAL REQUIREMENTS			
1.1.1	This fire apparatus shall conform to this specification, and to the most recent CAN/ULC-S515 standard. The vehicle shall meet the NFPA 1901-2009 standard.			
1.1.2	The fire apparatus shall be ULC homologated. A pump test shall be made by ULC at the apparatus manufacturer plant, and all costs incurred to perform this test shall be covered by the bidder. A ULC certificate shall be provided prior to delivery.			
1.1.3	The vehicle shall meet the Canadian Motor Vehicles Safety Standards (CMVSS).			
1.1.4	All components used to manufacture the vehicle shall be brand new and of high quality. The choice of all elements or all parts shall correspond to the best-recognized quality standards in the fire apparatus vehicle manufacturing industry. When a part number is specified, no substitute shall be accepted.			
1.1.5	The vehicle should have no more than 375" in overall length and 130" in height.			
1.2	DOCUMENTATION UPON DELIVERY			
1.2.1	Two (2) digital copies of chassis operation manuals.			
1.2.2	Two (2) digital copies of wiring, for the chassis and the body. The diagram shall be « As Built Wiring Diagrams ».			
1.2.3	Two (2) digital copies of engine and transmission operation manuals.			
1.2.4	Two (2) digital copies of ULC documentation (CD or USB flash drive).			
1.2.5	One (1) copy of warranties, instruction and/or maintenance manuals of equipments added to the vehicle.			
1.2.6	Two (2) operation manuals of the truck, including operation of the pump, the foam system and a troubleshooting guide.			

Fire Department of _____
 TOP MOUNT ENCLOSED PUMPER

	SPECIFICATIONS	YES	NO	DETAILS
2.1	CUSTOM CHASSIS WITH TILT CAB			
2.1.1	Freightliner M2-106 commercial chassis YEAR : 2017 TYPE : Day cab			
2.1.2	The chassis shall be designed for Canada. The apparatus shall be a pumper vehicle designed for emergency service use which shall be equipped with a permanently mounted fire pump.			
2.2	CAB			
2.2.1	Aluminum cab, 2 doors			
2.2.2	GVWR: 41,600 lb			
2.3	VEHICLE DATA RECORDER			
2.3.1	The chassis shall have a Vehicle Data Recorder (VDR) system installed to meet NFPA 1901 requirements. The following data shall be monitored: -Vehicle speed; -Acceleration; -Deceleration; -Engine speed : RPM; -Engine throttle position : % of full throttle; -ABS Event : On/Off; -Seat occupied status : Yes/No by position; -Seat belt buckled status : Yes/No by position; -Master Optical Warning Device Switch : On/Off; -Time : 24 hour time; -Date : Year/Month/Day;			
2.4	ENGINE			
2.4.1	Cummins ISL9 engine shall offer a rating of 350 HP at 2000 RPM. The torque rating shall feature 1000 lb-ft of torque at 1400 RPM.			

Fire Department of _____
TOP MOUNT ENCLOSED PUMPER

	SPECIFICATIONS	YES	NO	DETAILS
2.4.2	There shall be two (2) controls for the diesel particulate filter. One (1) control shall be for regeneration and one (1) control shall be for regeneration inhibit.			
2.4.3	A high idle switch will be provided, inside the cab that will automatically maintain a preset engine RPM.			
2.4.4	Cummins exhaust brake integral with Variable Geometry Turbo with ON/OFF dash switch.			
2.5	COOLING			
2.5.1	A Horton fan clutch shall be provided. The fan clutch shall be constantly engaged when in "Pump" position.			
2.5.2	The cooling package shall include Extended Life Coolant (ELC). The coolant shall contain a 50/50 mix of ethylene glycol and de-ionized water to keep the coolant from freezing to a temperature of -34°F (-37 °C).			
2.5.3	A single bundle type coolant to water heat exchanger shall be installed between the engine and the radiator. This shall allow the use of water from the discharge side of the pump to assist in cooling the engine.			
2.5.4	Gate blue stripe hose type shall be used for all engine coolant lines.			
2.6	AIR INLET			
2.6.1	Air intake with NFPA compliant ember screen and fire retardant air cleaner. Chrome mounted air intake grille.			
2.7	EXHAUST			
2.7.1	The exhaust system shall be mounted in officer cab step with tailpipe, exit forward of right rear tires at 90 degrees with temperature mitigation system.			
2.8	TRANSMISSION			
2.8.1	Allison 5th generation, model EVS 3000.			
2.8.2	6-speed, with "Package 198".			
2.8.3	The transmission fluid shall be monitored electronically.			
2.8.4	The transmission shall include a cooler system.			

Fire Department of _____
TOP MOUNT ENCLOSED PUMPER

	SPECIFICATIONS	YES	NO	DETAILS
2.9	PTO			
2.9.1	The transmission shall feature two (2) 10-bolt PTO pads located on the converter housing for future provision.			
2.10	DRIVELINE			
2.10.1	All drivelines shall be heavy duty metal tube and equipped with Spicer 1710 universal joints.			
2.10.2	The driveline must not be modified by the fire truck manufacturer to accommodate the split shaft pump.			
2.11	FUEL SYSTEM			
2.11.1	Spin-on Cummins primary filter with water separator and water-in-fuel sensor.			
2.11.2	A 50 gallon fuel tank will be provided and mounted in the driver step			
2.11.3	Alliance fuel filter/water separator with Primer pump			
2.12	FRONT AXLE			
2.12.1	DETROIT front axle shall be rated at 14,700 lb.			
2.13	FRONT SUSPENSION			
2.13.1	The front axle shall be furnished with shock absorbers.			
2.13.2	The taperleaf front suspension spring capacity shall be rated at 14,600 lb.			
2.14	STEERING			
2.14.1	The steering wheel shall be 18.00" in diameter, have tilting and telescoping capabilities, and a 4-spoke design.			
2.14.2	The chassis shall have a front axle cramp angle of 48-degrees to the left and right.			
2.14.3	The power steering pump shall be a TRW TAS-85.			
2.15	REAR AXLE			
2.15.1	MERITOR rear axle shall have a rated capacity of 27,000 lb. A driver controlled differential lock shall be installed on the rear axle.			
2.15.2	The top speed of the vehicle shall be approximately 110 km/h (68 MPH) +/-3 Km/h.			
2.15.3	The rear differential ratio shall be 6.14.			

Fire Department of _____
 TOP MOUNT ENCLOSED PUMPER

	SPECIFICATIONS	YES	NO	DETAILS
2.16	REAR SUSPENSION			
2.16.1	Flat leaf spring suspension shall be provided. The rear suspension capacity shall be rated at 27,000 lb.			
2.17	TIRES			
2.17.1	Front tires shall be MICHELIN 12R22.50 radials, 16 ply XDN2 tread. The Rating load capacity shall be 14,780 lb per axle with a speed rating of 112 km/h when properly inflated to 120 psi.			
2.17.2	Rear tires shall be MICHELIN 12R22.50 16 ply XDN2 tread. The tire stamped load capacity shall be 27,120 lb per axle with a speed rating of 112 km/h when properly inflated to 120 psi.			
2.17.3	A visual green-red “pop-up” style shall be installed on the valve of each tire to indicate that air pressure is sufficient. That system shall monitor each tire's pressure. A sensor will be provided on the valve stem of each tire for a total of six (6) tires.			
2.17.4	All tires will be balanced			
2.18	WHEELS			
2.18.1	Front aluminum wheel 22.50” x 8.25” polished.			
2.18.2	Rear aluminum wheel 22.50” x 8.25” polished.			
2.18.3	Front and rear wheels shall have a center chrome cover and chrome nut covers on each nuts			
2.19	BRAKE			
2.19.1	Meritor WABCO 4S4M, anti-lock braking system			
2.19.2	Meritor front brakes will be drum, dimension 16.5" x 5.00", cam operated with automatic slack adjusters.			
2.19.3	Meritor rear brakes will be drum, dimension 16.5" x 7.00", cam operated with automatic slack adjusters.			
2.20	AIR SYSTEM			
2.20.1	Air compressor shall be a Cummins/WABCO with a capacity of 18.7 CFM.			
2.20.2	Automatic drain valves shall be installed on all tanks of the air supply system.			

Fire Department of _____
 TOP MOUNT ENCLOSED PUMPER

	SPECIFICATIONS	YES	NO	DETAILS
2.20.3	The air dryer shall be a BENDIX AD-9SI, with heater.			
2.20.4	The air system on the chassis shall be plumbed with color coded nylon tubing air lines.			
2.21	FRAME			
2.21.1	Each simple rail shall have yield strength of 120,000 psi.			
2.21.2	Frame components shall be painted black.			
2.22	FRONT BUMPER			
2.22.1	Three-piece front bumper constructed from steel, chromed finished with cutout for the siren speaker.			
2.22.2	Non-extended.			
2.22.3	Two (2) painted steel tow hooks shall be installed, under the bumper and attached to the front frame members.			
2.23	HOOD			
2.23.1	Fiber glass hood with chrome front grille.			
2.23.2	A LED, 32" stripe NFPA compliant light mounted under the hood for area work lighting on the engine. The light shall have a switch in the cab.			
2.23.3	Two (2) air horns « EMERGENCY TONE » above the front wheel well and controlled with two (2) foot switches, driver and officer.			
2.23.4	Hood liner, added firewall and floor heat insulation			
2.23.5	2½" inch fender extensions			
2.24	WINDOWS			
2.24.1	Tinted door glass LH and RH with tinted operating wing windows.			
2.24.2	RH and LH electric powered windows, passenger switches on door(s).			
2.24.3	Omit rear window.			

Fire Department of _____
TOP MOUNT ENCLOSED PUMPER

	SPECIFICATIONS	YES	NO	DETAILS
2.25	CLIMATE CONTROL			
2.25.1	Heater, defroster and air conditioner. Standard HVAC ducting with snow shield for fresh air intake. Denso heavy duty air conditioner compressor.			
2.25.2	Main HVAC controls with recirculation switch.			
2.25.3	Premium insulation.			
2.26	INTERIOR			
2.26.1	One (1) 12V, 15 amp, power point plug.			
2.26.2	Molded plastic door panel without vinyl insert with aluminum kickplate lower door.			
2.26.3	Opal gray vinyl interior.			
2.26.4	Gray/charcoal flat dash.			
2.26.5	A 12 volt positive and negative wiring shall be located on the dash for future radio installation.			
2.26.6	Forward roof mounted console with upper storage compartments without netting.			
2.26.7	A console made of 1/8" thick aluminum and painted with black Zolatone shall be made and installed between the front seats. The hinged cover shall be maintained open by a gas cylinder. The console shall have four compartments for binders and 2 compartments for maps.			
2.26.8	A LED red/Clear 4" dome light shall be added in the cab with an integrated switch.			
2.27	SEATS			
2.27.1	A seat belt monitoring system (SBMS) shall be provided. The SBMS shall be capable of monitoring up to ten (10) seat positions indicating the status of each seat position with a green or red LED indicator as follows: <ul style="list-style-type: none"> • Seat Occupied & Buckled = Green • Seat Occupied & Unbuckled = Red • No Occupant & Buckled = Red • No Occupant & Unbuckled = Not Illuminated 			

Fire Department of _____
TOP MOUNT ENCLOSED PUMPER

	SPECIFICATIONS	YES	NO	DETAILS
2.27.2	A Seats Incorporated, 911, scissor action, air ride, mid-height with headrest style seat shall be provided in the cab for the driver.			
2.27.3	A Seats Incorporated, 911, non-Suspension seat shall be provided in the cab for the officer.			
2.27.4	All seating positions shall be furnished with three (3)-point shoulder type orange seat belt.			
2.27.5	All seat shall be black Cordura plus cloth.			
2.27.6	Each passenger shall have a helmet holder close to the seat.			
2.28	CAB EXTERIOR			
2.28.1	Windshield wiper control shall have high, low, and intermittent modes.			
2.28.2	Composite exterior sun visor			
2.28.3	LH and RH exterior grab handles with single rubber insert.			
2.28.4	Two (2) Door mounted mirrors dual west coast bright finish heated mirrors with lh and rh remote.			
2.28.5	Mud flaps shall be installed behind the front wheels.			
2.28.6	RH down view mirror.			
2.28.7	The original side steps on both sides of the cab shall be removed and replaced by ULC compliant monocoque side steps, made of anti-slip aluminum checkered plate with grip strut inserts.			
2.29	CHARGING SYSTEM			
2.29.1	(2) Alliance model 1231, group 31, 12V maintenance free 2250 cca threaded stud batteries			
2.29.2	One (1) set of battery jumper studs with plastic color-coded covers shall be included near the battery compartments.			
2.29.3	Delco-Remy, 275 amp, 12V alternator.			

Fire Department of _____
TOP MOUNT ENCLOSED PUMPER

	SPECIFICATIONS	YES	NO	DETAILS
2.30	ELECTRICAL POWER DISTRIBUTION			
2.30.1	A Kussmaul 1200 Pump Plus battery conditioner shall be supplied. The battery conditioner shall be mounted in the LH crew cab compartment. The Kussmaul battery conditioner display shall be supplied and installed near the electric shoreline. A GAST model 1HAB10M100X - 120V air compressor shall be supplied. The air compressor shall be installed in the LH crew cab compartment. The air compressor shall be plumbed to the air brake system to maintain air pressure.			
2.30.2	A Kussmaul 20 amp super auto-eject electrical receptacle shall be supplied with a red cover. It shall automatically eject the plug when the starter button is depressed. The electrical inlet shall be installed on the left hand side of cab in the step.			
2.31	LIGHTS			
2.31.1	Sides and front of cab shall include LED marker lights.			
2.31.2	The hood shall include two (2) integral headlight/marker assemblies with chrome bezel.			
2.32	OPTICAL WARNING DEVICE			
2.32.1	A LED flashing red light clearly labeled "Do Not Move Apparatus". In addition to the flashing red light, an audible alarm shall be included which shall sound while the light is activated. The flashing red light shall be located centered left to right for a better visibility.			
2.33	BACKUP SAFETY DEVICE			
2.33.1	A solid-state electronic audible back-up alarm that actuates when the truck is shifted into reverse will be provided.			
2.33.2	A FEDERAL SIGNAL model CCD with night vision rearview camera shall be installed to the rear of the vehicle. The 7" color LCD monitor shall be installed close to the driver. A protective aluminum cover shall be installed above the camera.			
2.34	INSTRUMENTATION			

Fire Department of _____
TOP MOUNT ENCLOSED PUMPER

2.34.1	Instrumentation and gauges shall have Standard/Metric Hybrid measurement.			
2.34.2	Engine hour meter required.			
2.35	ADDITIONAL EQUIPMENT			
2.35.1	One (1) 2.50 lb D.O.T approved fire extinguisher with BC rating shall be shipped loose with the cab.			
2.35.2	One (1) emergency road safety kit.			
2.35.3	A total of two (2) door keys for the manual door locks.			

Fire Department of _____
TOP MOUNT ENCLOSED PUMPER

	SPECIFICATIONS	YES	NO	DETAILS
3.1	PUMP			
3.1.1	<p>A brand new current year HALE DSD150 pump NFPA rated at 1500 GPM.</p> <p>The pumping system shall have a TRIDENT AIR-MAX pressure relief valve.</p> <p>The pump shall have mechanical type seal.</p> <p>Pump shall be Class A and shall provide the following ratings at an altitude of less than 600 meters (2000 ft):</p> <ul style="list-style-type: none"> ➤ 1250 IGPM-100% of rating at 165 PSI ➤ 1250 IGPM-100% of rating at 150 PSI ➤ 840 IGPM-70% of rating at 200 PSI ➤ 625 IGPM-50% of rating at 250 PSI 			
3.2	PUMP SHIFT			
3.2.1	<p>Pump shift shall be pneumatically-controlled and activated from inside.</p> <p>All indicators lights and pump engagement shall be NFPA 1901-2009 compliant.</p>			
3.3	PRESSURE GOVERNOR			
3.3.1	<p>A FRC pressure governor «PUMP BOSS» shall be installed on the operator control panel.</p> <p>The pressure governor shall be calibrated by the manufacturer in mode «pressure/preset » and the pressure specified by the customer, which is about 120 PSI.</p>			
3.4	PRIMER			
3.4.1	<p>The priming system shall be a Trident AirPrime, 3 barrel with push button control.</p>			
3.5	HEAT EXCHANGER			
3.5.1	<p>Water flow from the fire pump shall be used to cool the engine coolant. The control, «¼ turn type» shall be located on pump panel and equipped with a ¾" valve.</p>			

Fire Department of _____
 TOP MOUNT ENCLOSED PUMPER

	SPECIFICATIONS	YES	NO	DETAILS
3.6	DRAIN SYSTEM			
3.6.1	A Class 1 automatic air actuated master drain valve shall be installed on the pump panel with a toggle switch. The master drain shall provide independent ports for low point drainage of the fire pump and auxiliary devices.			
3.6.2	An Innovative Control brand ¾" bleeder valve with lift-up handle shall be provided for each inlet and discharge. The drain shall be located at lowest point drainage of the fire pump.			
3.7	PLUMBING			
3.7.1	All fabricated piping shall be a minimum of Schedule 10 stainless steel for superior corrosion resistance and decreased friction loss. The pump system shall utilize a stainless steel discharge manifold system and flexible high pressure hoses with stainless steel ends that allows a direct flow of water to discharge valves. The manifold is "foam ready" for Hale Foam Logix or FoamPro system with 3" plumbing. The specified foam system shall be plumbed to 1½" first speedlay, 1½" second speedlay, 2½" rear discharge.			
3.7.2	All the valves on the truck shall be ELKHART UNIBODY series. When flexibility is needed, a "Victaulic" fitting shall be installed.			
3.7.3	The pump and steel accessories shall be painted black. Stainless steel plumbing components are not painted.			

Fire Department of _____
TOP MOUNT ENCLOSED PUMPER

	SPECIFICATIONS	YES	NO	DETAILS
3.8	INTAKES AND DISCHARGES (GENERAL)			
3.8.1	<p>All controls handles for tank fill and all discharges, except foam discharges shall be push-pull «T» style controls, Innovative Controls brand and located in the crew cab.</p> <p>The valve control levers shall be a chrome push-pull locking "T" handle located at the pump operator`s panel and shall visibly indicate the position of the valves at all times – NO CABLES – only stainless steel rod. The control levers shall be located directly adjacent to one another and shall be mounted in line so they are in the same position when shut off. The control lever shall be connected directly to its respective valve by a 0.718" OD rod to form a direct linkage control system. Valve control levers with cables instead or rods will not be accepted.</p>			
3.8.2	<p>All discharges and intake located at the sides and rear panels shall be provided with Innovative Controls brand. Chrome bezel with color identification.</p> <p>These bezels shall be screwed into the panel without nuts at the back.</p>			
3.8.3	All discharges, except the 1½" and 2" discharges shall have a 30 degree chrome droop adapter.			
3.8.4	<p>The hoses threads on the vehicle shall be :</p> <p>1½ " : NPSH</p> <p>2½" : BAT (2.999" X 8 tpi)</p> <p>6" : NH</p>			
3.9	INTAKES			
3.9.1	Two (2) 6" diameter suction ports with 6" NST male threads and removable zinc screens shall be provided, one (1) each side.			

Fire Department of _____
TOP MOUNT ENCLOSED PUMPER

	SPECIFICATIONS	YES	NO	DETAILS
3.9.2	<p>One (1) ELECTRIC Elkhart Unibody model EB6D high efficiency butterfly valve shall be provided on the officer's side main pump inlet.</p> <p>The 6.00" inlet valve shall be provided with a TRIDENT AIR-MAX pressure relief valve and a 3/4" bleeder valve shall be provided on the inlet side of the valve.</p> <p>A TRIDENT air priming valve shall be installed for independent priming the inlet.</p> <p>One (1) 2-1/2" suction inlet with a manually operated 2-1/2" Akron valve shall be provided on the left side pump panel.</p> <p>The valve shall come equipped with a brass inlet strainer, 2-1/2" female chrome inlet swivel and shall be equipped with a chrome plated, rocker-lug plug with a retainer device.</p> <p>The valve control shall be located at the pump operator`s panel and shall visually indicate the position of the valve at all times.</p> <p>A 3/4" bleeder valve assembly shall be installed on the operator`s panel side pump panel.</p>			
3.10	DISCHARGES			
3.10.1	All 2½" discharges shall be equipped with a 2½" female chrome-plated reducer to a male 1½" with a 1½" chrome plug retained by a chrome chain.			
3.10.2	<p>Four (4) 2½" discharges, with 2½" valves, 30 degree chrome droop adapter shall be installed on each side and rear of the apparatus.</p> <p>These discharges shall be located as follows:</p> <p>Two (2) discharges left side with control on pump panel operator.</p> <p>One (1) discharge right side with control on pump panel operator.</p> <p>One (1) discharge rear, left side with control on pump panel operator.</p>			

Fire Department of _____
TOP MOUNT ENCLOSED PUMPER

	SPECIFICATIONS	YES	NO	DETAILS
3.10.3	Two (2) speedlay discharges shall be provided. Each speedlay section shall include one (1) 2" brass swivel above each hose compartment with a 1½" hose connection to allow the use of the hose from either side of the apparatus. The speedlay piping shall consist of two (2) 2" heavy duty hoses coming from the pump discharge manifold to the 2" swivel.			
3.10.4	One (1) discharge, 3" valve shall be installed on the top of the truck, for a deck gun, with the control on the pump panel. Flange #ANSI 150 shall be installed on this discharge.			
3.10.5	One (1) LDH, 30 degrees, 4" Storz discharge with a cap and a 3" valve shall be located on the right side with control on the pump operator's panel.			
3.11	TANK FILL AND TANK-TO-PUMP			
3.11.1	One (1) 2" valve to fill water tank shall be provided and installed. The adapter on the tank shall be in stainless steel.			
3.11.2	One (1) 4" butterfly valve air operated shall be installed between the pump suction and the booster tank, 4" piping, with flex hose and stainless steel hose clamps connected to the tank. The valve control shall be located at the pump operator's panel and shall visually indicate the position of the valve at all times with a red/green lamps. The fire pump suction inlet shall be provided with a tank-to-pump check valve. The check valve is designed to automatically open when drafting from the on-board water tank and close if the pump suction receives water pressure from an outside source.			

3.12	FOAM			
3.12.1	A FOAMPRO 2001 12V electric motor drive positive displacement foam concentrate pump, rated up to 2.5 gpm (9.5 L/min) @ 150 psi with operating pressures up to 400 psi (27.6 BAR).			
3.12.2	A foam level indicator shall be installed on pump panel, same model than the water level.			
3.12.3	The system shall be capable of handling Class A foam.			

Fire Department of _____
TOP MOUNT ENCLOSED PUMPER

3.12.4	Full flow Stainless Steel check valve shall be provided to prevent foam contamination of fire pump and water tank or water contamination of foam tank.			
3.12.5	The foam system shall be connected to two (2) speedlay and one (1) 2½" at the rear. All valves for foam discharges shall be electric. Elkhart Unibody with UBEC1 controler.			
3.12.6	The system shall be installed in a suitable, accessible location. The system shall be installed and calibrated by the manufacturer before delivery.			
3.12.7	A label that specifies the warning message " DO NOT MIX BRANDS AND TYPE OF FOAM" shall be placed near the foam concentrate tank fill opening			
3.12.8	A system rating panel placard shall be install near the foam controller.			

Fire Department of _____
 TOP MOUNT ENCLOSED PUMPER

	SPECIFICATIONS	YES	NO	DETAILS																										
4.1	PUMP OPERATOR CONTROL PANEL																													
4.1.1	<p>Controls and gauges shall be located on the top mount enclosed crew cab.</p> <p>The side intake/discharge pump panels and the operator's panel shall be 3/16" aluminum ZOLATONE painted black. Each panel shall be removable for easier maintenance access to plumbing components.</p> <p>Pump operator control panel shall be 3/16" aluminum ZOLATONE painted black. The panel section shall be full hinged on one side for easier maintenance access to electrical components.</p> <p>Color coded pump panel labels shall be in accordance with the recommendations of NFPA 1901 as follows:</p> <table border="1"> <thead> <tr> <th>Discharge</th> <th>Color</th> </tr> </thead> <tbody> <tr> <td>Preconnect #1 or front bumper jump line</td> <td>Orange</td> </tr> <tr> <td>Preconnect #2</td> <td>Red</td> </tr> <tr> <td>Preconnect #3 or discharge #1</td> <td>Yellow</td> </tr> <tr> <td>Preconnect #4 or discharge #2</td> <td>White</td> </tr> <tr> <td>Discharge #3</td> <td>Blue</td> </tr> <tr> <td>Discharge #4</td> <td>Black</td> </tr> <tr> <td>Discharge #5</td> <td>Green</td> </tr> <tr> <td>Deluge/deck gun</td> <td>Silver</td> </tr> <tr> <td>Large-diameter hose</td> <td>Yellow with white border</td> </tr> <tr> <td>Foam line(s)</td> <td>Red with white border</td> </tr> <tr> <td>Booster reel(s)</td> <td>Gray</td> </tr> <tr> <td>Inlets</td> <td>Burgundy</td> </tr> </tbody> </table>	Discharge	Color	Preconnect #1 or front bumper jump line	Orange	Preconnect #2	Red	Preconnect #3 or discharge #1	Yellow	Preconnect #4 or discharge #2	White	Discharge #3	Blue	Discharge #4	Black	Discharge #5	Green	Deluge/deck gun	Silver	Large-diameter hose	Yellow with white border	Foam line(s)	Red with white border	Booster reel(s)	Gray	Inlets	Burgundy			
Discharge	Color																													
Preconnect #1 or front bumper jump line	Orange																													
Preconnect #2	Red																													
Preconnect #3 or discharge #1	Yellow																													
Preconnect #4 or discharge #2	White																													
Discharge #3	Blue																													
Discharge #4	Black																													
Discharge #5	Green																													
Deluge/deck gun	Silver																													
Large-diameter hose	Yellow with white border																													
Foam line(s)	Red with white border																													
Booster reel(s)	Gray																													
Inlets	Burgundy																													

Fire Department of _____
TOP MOUNT ENCLOSED PUMPER

	SPECIFICATIONS	YES	NO	DETAILS
4.1.2	<p>Innovative Controls gauges reading in psi and kPa. All 4½" and 2½" pressure gauges shall be filled with interlube.</p> <p>There shall be one (1) 4½" diameter, 30"-0-400 psi (100-0-2800 kPa) gauge connected to the pressure manifold and another one (1) connected at the pump inlet, the whole thing in a single assembly with chrome bezel and colored labels.</p> <p>There shall also be one (1) 2½" diameter, 30"-0-400 psi (100-0-2800 kPa) connected to every discharge.</p>			
4.1.3	<p>Pump control panel shall include the following elements:</p> <ul style="list-style-type: none"> ➤ Instruments showing battery voltage, engine temperature, engine oil pressure and engine RPM. ➤ A FRC WLA300-A00 water level. ➤ A vacuum and pressure port for annual pump performance testings and checking the accuracy of pump panel gauges. ➤ Six (6) rocker switches in a chromed switch bank for scene lights, pump heater, crew cab heater, fan, dome lights and pump lights. The heaters shall have a red pilot light. ➤ Water tank drain valve control. ➤ Heat exchanger control. <p>An extra space shall be left for future deck gun controller (8" wide x 12" long)</p>			
4.2	COLD PACKAGE			
4.2.1	A 42,000 BTU heater shall be installed in the pump compartment. This heater shall use the truck coolant system.			
4.2.2	A 2-section aluminum heat pan shall be installed below the pump house to prevent freezing and shall be removable without any tools.			
4.2.3	A 42,000 BTU heater shall be installed in the crew cab, under seats. This heater shall use the truck coolant system.			

Fire Department of _____
TOP MOUNT ENCLOSED PUMPER

	SPECIFICATIONS	YES	NO	DETAILS
5.1	TANK			
5.1.1	A 1200 gallon (U.S.) booster tank and a 30 gallon (U.S.) foam tank shall be supplied. The booster tank shall be completely removable without disturbing or dismounting the apparatus body structure.			
5.1.2	The booster tank shall be entirely in ½" thick copolymer polypropylene with 3/8" swash partitions. The assembly shall be welded utilizing thermoplastic welding technology. The booster tank shall have lifting eyelets for facilitating the removal.			
5.1.3	The water/foam tank design shall be in accordance with CAN/ULC-S515 and NFPA 1901 requirements. The foam tank shall have one (1) air intake installed on the top of the foam tank. The tank shall provide two (2) openings, one (1) for the injection system supply and the second one to allow tank cleaning with a 1" hose with Class 1, model BV10, 1" valve.			
5.1.4	At the front, under the tank, there shall be a dirt collector with a 1½" drain and a 3" plug. The drain shall be installed at the bottom of the collector to allow fully draining of the tank. This drain control shall be on the operator pump panel, not in a compartment. The valve shall be enclosed in the heat pan assembly to prevent freezing.			
5.1.5	One (1) manual fill tower shall be located to the left forward area of the tank. The tower shall be 14"x14" and a 6" vent/overflow pipe shall be installed halfway-up the tower. This pipe shall empty behind rear wheels.			

Fire Department of _____
 TOP MOUNT ENCLOSED PUMPER

	SPECIFICATIONS	YES	NO	DETAILS
6.1	GENERAL (BODY, CREW CAB AND PUMP HOUSE)			
6.1.1	<p>The aluminum used to build the body, crew cab and pump house shall be 5052-H32 marine grade and 6061-T6/6063-T5 for aluminum extrusions.</p> <p>The thickness of the aluminum shall be 3/16" for the bottom and the back of each compartment and for the front and back of the body. Only the wall between compartments shall be 1/8" thick.</p> <p>The aluminum tread plates shall be 3003-H22, 1/8" thick and shall meet NFPA slip resistance, when specified.</p>			
6.1.2	<p>All joints that may corrode or degrade by calcium and water infiltration shall be sealed by a continuous welding cord outside.</p> <p>Where there is a possibility of water infiltration between aluminum tread plates and painted aluminum, gray silicon sealer shall be applied.</p>			
6.1.3	<p>The design of the body is such that the water tank of the truck shall not be visible outside. Any type of "WET SIDE" design shall be refused.</p>			
6.1.4	<p>All joints and weldings shall be polished and so leave no sharp edge.</p>			
6.2	PUMPHOUSE AND ENCLOSED CREW CAB			
6.2.1	<p>The pump house and the top mount enclosed crew cab shall be in one entire module.</p>			
6.2.2	<p>A step shall be installed each side of the pump house, on its full width. The step shall have 11¾" in depth built from aluminum grip-strut.</p>			

Fire Department of _____
TOP MOUNT ENCLOSED PUMPER

	SPECIFICATIONS	YES	NO	DETAILS
6.2.3	<p>The pump house section shall have a total width of 26" and an upper two-speed lay storage compartment. This storage compartment area shall accommodate two preconnected handlines (150' of 1¾" hose with nozzle). The bottom of this compartment shall be at approximately 65" from the ground. This compartment includes two storage trays. The trays shall be constructed of 1/8" smooth aluminum plate with an exterior sanded finish. The walls and floor of the tray shall be slotted to prevent the accumulation of water and allow for ventilation of wet hoses.</p> <p>A protective strip of 3/8" UHMW Polyethylene shall be bolted on each side of the compartment to contain the trays.</p> <p>Two (2) 1" stainless steel rolls shall be installed, one on each side, to facilitate the removal and insertion of the trays in this compartment.</p> <p>Both side accesses shall have a restraint system consisting of a vinyl tarp with Velcro along the entire perimeter.</p> <p>There shall be four (4) doors to the pump for service. The doors shall be secured with tool-free hardware:</p> <ul style="list-style-type: none"> ➤ One (1) in L1 ➤ One (1) in R1 ➤ One (1) in the front pump house, in the crew cab ➤ One (1) on the top, in front of the body 			
6.2.4	A «P» shaped rubber gasket of about 1" shall be installed between the pumphouse and the body to avoid friction of the modules.			
6.2.5	The crew cab and pumphouse module shall be attached to the chassis with rubber insulation between the module and the chassis.			
6.2.6	The crew cab section shall have a total width of 62" and the upper rear section shall have 78" interior height and 98" width.			

Fire Department of _____
 TOP MOUNT ENCLOSED PUMPER

	SPECIFICATIONS	YES	NO	DETAILS
6.2.7	<p>Two (2) enclosed compartments shall be built on front of crew cab. 25" width x 24" depth x 19" height</p> <p>Two (2) aluminum painted doors shall be built to give access to these compartments, one each side. The doors shall be equipped with a D-Ring handle. The doors shall be maintained in the open position with a gas cylinder.</p> <p>The compartment shall be lit by two (2) LED lights Amdor Lumabar, 12".</p>			
6.2.8	<p>The crew cab shall have rubrails mounted along the sides. The rubrails shall be C-channel in design and constructed of 3/16" thick aluminum extrusion. The rubrail shall be 2-1/4" height x 1-1/4" depth and shall extend beyond the body width to protect the compartment doors and the body side. The depth shall allow marker and/or warning lights to be recessed inside for protection.</p>			
6.2.9	<p>The bottom front corners of the crew cab shall be covered with 1/8" thick aluminum treadplate on a height of approximately 18".</p>			
6.2.10	<p>The crew cab shall have two (2) 28" x 98" access doors, one on each side.</p> <p>The inside of the doors shall be made of aluminum treadplate.</p> <p>Each door shall have a 20" x 38" window. The sash window shall be tinted and shall have a screen.</p> <p>The doors shall be equipped with a stop arm [model] and a stainless steel hinge.</p> <p>Stainless steel « D-Ring » door handles, interior and exterior.</p>			
6.2.11	<p>The crew cab shall be accessible by two (2) interior steps on each side. The steps and the floor of the crew cab shall be covered with slip resistant Solflex Altro Designer 25.</p>			

Fire Department of _____
TOP MOUNT ENCLOSED PUMPER

	SPECIFICATIONS	YES	NO	DETAILS
6.2.12	<p>The crew cab shall offer a panoramic view to its occupants. The windows shall be tinted, made of tempered glass, with rounded corners :</p> <ul style="list-style-type: none"> ➤ Front of the crew cab, upper part : two (2) 10" x 42" windows ➤ Back of the crew cab, above the control panel, looking towards the deck gun : two (2) 15" x 44" windows ➤ On each side, in front of each access door : one (1) 23" x 38" window on each side ➤ On each side, between the access door and the body, above the control panel : one (1) 23" x 26" window of a triangular form on each side ➤ On each side of the control panel, looking at the 6" inlets from the inside of the crew cab : one (1) 6 ½" x 24" window on each side 			
6.2.13	<p>Four (4) HO Bostrom Tanker 450 ABTS seats shall be installed, rear-facing, with 3-point red or orange seatbelts.</p> <p>The seats shall be installed on a structure tested in conformity with the CMVSS.</p> <p>Captors in the seatbelts and in the seats shall be linked to the VDR system.</p> <p>Each seat shall have a ZICO model ULLH-ES SCBA bracket.</p>			
6.2.14	The crew cab shall be insulated with 1½" of sprayed urethane.			
6.2.15	The interior of the crew cab shall be finished with 1/8" aluminum and Zolatone painted.			
6.2.16	Two (2) 20"-wide aluminum shelves shall be installed above the SCBA seats to store flashlights or portable radios or else.			
6.2.17	An Intercom FRC model ICA100-A00-PTT shall be installed between the cab and the crew cab. The PTT shall be installed in the crew cab.			

Fire Department of _____
 TOP MOUNT ENCLOSED PUMPER

	SPECIFICATIONS	YES	NO	DETAILS
6.3	BODY ATTACHMENT			
6.3.1	The main body shall be attached to the chassis frame rails with six (6) U-bolts. U-bolts shall be made of two (2) 5/8" diameter steel bolts and two (2) 1/2" thick x 2" width steel plates. There shall be insulation between U-bolts and body. The mounting shall allow easy removal of the body in case of major repair.			
6.3.2	There shall be a rubber insulation to avoid contact between the aluminum body and the steel frame rails.			
6.4	BODY			
6.4.1	The wheel well shall have monohull fiberglass fenders.			
6.4.2	A "P" shaped fenderette shall be constructed from fiber glass with a bright black finish.			
6.4.3	The wheel well outer side face shall be made of 3/16" aluminum thick and shall be painted the same color as the body.			
6.4.4	The body shall have rubrails mounted along the sides and at the rear. The rubrail shall be C-channel in design and constructed of 3/16" thick aluminum extrusion. The rubrail shall be 2-1/4" height x 1-1/4" deep and shall extend beyond the body width to protect compartment doors and the body sides. The depth shall allow marker and/or warning lights to be recessed inside for protection.			
6.4.5	The body structure shall be made from aluminum extrusion 2" x 3" x 1/4" and 3" x 3" x 1/8". The body design shall allow the booster tank to be completely removable without disturbing or dismantling the apparatus body structure in case of repair.			

Fire Department of _____
TOP MOUNT ENCLOSED PUMPER

	SPECIFICATIONS	YES	NO	DETAILS
6.5	HOSE BED			
6.5.1	<p>The hose bed shall be made above the water tank and shall have a width of at least 66", a length of at least 116" and a height of at least 10".</p> <p>The sides of the hose bed shall be made from aluminum tread plate.</p> <p>The hose bed floor shall be made of easily removable interlocking plastic tiles, minimum 5/8" thick.</p>			
6.5.2	<p>The one (1) hose bed divider shall be constructed of 3/16" brushed aluminum plate with a reinforced aluminum base welded to the bottom. The rear end of the divider shall have a 3" radius corner and a handle shall be integrated to the divider.</p>			
6.5.3	<p>A black vinyl tarp shall cover the hose bed, retained by a Velcro strip fixed all around the hose bed. A hole shall be made around the fill tower, allowing opening of the fill tower cover freely.</p> <p>The tarp for the speedlays shall be made from the same black vinyl.</p> <p>An orange strap shall be installed to visually show where to open the tarp.</p>			
6.6	COMPARTMENTS			
6.6.1	<p>Each compartment seam shall be sealed using a permanent pliable silicone caulk.</p> <p>The walls of each compartment shall have openings for adequate ventilation.</p> <p>Each compartment shall have aluminum extrusion tracks for use with adjustable shelves. The tracks shall be vertically mounted and attached to the side and/or rear walls of the compartments.</p> <p>The flooring shall have drain holes to prevent the accumulation of water.</p> <p>The flooring shall be covered by plastic interlocking tiles 5/8" thick.</p>			

Fire Department of _____
TOP MOUNT ENCLOSED PUMPER

	SPECIFICATIONS	YES	NO	DETAILS
6.6.2	<p>Compartments doors shall be roll-up type with anodized aluminum finish.</p> <p>Doors shall be AMDOR brand.</p> <p>Compartments lights switch shall be located at the top of the door. The switch shall be magnetic type AMDOR brand.</p>			
6.6.3	<p>The top and the front of the compartments shall be covered by 1/8" thick aluminum tread plate.</p>			
6.6.4	<p>One (1) shelf shall be installed in each compartment lower section except in compartments above rear wheels.</p> <p>Each exterior shelves mentioned in this proposal should be built as specified in this section unless otherwise mentioned. Each shelves shall be as wide and deep as possible.</p> <ul style="list-style-type: none"> • Maximum load capacity of at least 400 lb • Constructed of 3/16" aluminum, with a 2" lip and as deep as possible according to the size of the compartment. • Bottom of the shelves are covered by rubber tiles of at least 5/8" thick. 			
6.6.5	<p>Each bottom compartment shall be equipped with a roll-out tray. Each roll-out tray mentioned in this proposal should be built as specified in this section unless specified brand and model are required or otherwise mentioned. Each tray shall be as wide and deep as possible.</p> <ul style="list-style-type: none"> • Maximum load capacity of at least 400 lb when fully extended • Minimum exterior slide extension should be about 20". • Constructed of 3/16" aluminum, with a 2" lip and as deep as possible according to the size of the compartment. • Shall be maintained in open or close position with a gas cylinder or with self locking tray slides when cylinder installation is not possible. • Bottom of the shelves are covered by rubber tiles of at least 5/8" thick. <p>All trays installed on the bottom of the compartments shall have two (2) aluminum runners with nylon cover installed near the center to avoid the tray from collapsing.</p>			

Fire Department of _____
TOP MOUNT ENCLOSED PUMPER

	SPECIFICATIONS	YES	NO	DETAILS
6.7	LEFT SIDE COMPARTMENTS			
	(Front of rear wheels) – L1			
6.7.1	The compartment door opening shall be approximately 53" width x 28" depth x 61" height.			
	(Above rear wheels) – L2			
6.7.2	The compartment door opening shall be approximately 58" width x 14" depth x 22" height.			
	(Rear of rear wheels) – L3			
6.7.3	The compartment door opening shall be approximately 37" width x 28" depth x 61" height.			
6.8	RIGHT SIDE COMPARTMENTS			
	(Front of rear wheels) – R1			
6.8.1	The compartment door opening shall be approximately 53" width x 28" depth x 30" height.			
	(Rear of rear wheels) – R2			
6.8.2	The compartment door opening shall be approximately 37" width x 28" depth x 30" height.			
6.9	REAR COMPARTMENT			
6.9.1	The compartment door opening shall be approximately 39" width x 28" depth x 54" height.			
6.10	REAR ACCESS			
6.10.1	All steps shall meet NFPA requirement.			
6.10.2	A tailboard step shall be provided at the rear of the body. The tailboard shall have 11" in depth. The tailboard step shall be formed from 1/8" aluminum tread plate shall be in accordance with current ULC requirements and shall include three (3) grip strut inserts incorporated into the diamond plate.			

Fire Department of _____
 TOP MOUNT ENCLOSED PUMPER

	SPECIFICATIONS	YES	NO	DETAILS
6.10.3	<p>All handrails on body and pump compartment shall be 1¼" diameter aluminum extrusion knurled, to provide a positive gripping surface.</p> <p>Chrome plated end stanchions shall support the handrail. Plastic gaskets shall be used between end stanchions and any painted surfaces.</p> <p>Drain holes shall be provided in the bottom of all vertically mounted handrails.</p> <p>Handrails shall be provided to meet NFPA and ULC requirements.</p>			
6.10.4	<p>Four (4) CAST PRODUCTS with LED, 8" x 8" folding steps, shall be installed at the back on right side to allow access to the hose bed.</p> <p>The step light shall be activated when the parking brake is set, or when the vehicle marker lights are activated.</p>			
6.10.5	<p>The rear tires shall have a set of black mud flaps mounted behind the rear chassis wheels.</p>			
6.10.6	<p>Two (2) heavy duty tow eyes made from steel having 2-1/2" diameter shall be mounted below the body at the rear of the vehicle to allow towing (not lifting).</p> <p>The tow eyes shall be painted black.</p> <p>There shall be a plate specifying the capacity of the assembly.</p>			
6.11	LADDER RACK:			
6.11.1	<p>The rack shall contain one (1) 2-section 24' ladder, one (1) 14' roof ladder section above the right side compartments. The ladders (not supplied) shall be Duo Safety brand.</p> <p>The ladders shall be retained by two (2) Zico model LHA brackets.</p>			

Fire Department of _____
 TOP MOUNT ENCLOSED PUMPER

	SPECIFICATIONS	YES	NO	DETAILS
6.12	6” SUCTION TUBE RACK			
6.12.1	Two (2) brackets for 6" x 10' suction tubes shall be installed above the ladder rack, right side.			
6.13	REAR WHEELS WELL OUTFITTING:			
6.13.1	The body wheel well area shall store up to four (4) SCBA bottles, two (2) each side. Each storage area shall provide individual storage for a bottle and shall not allow forward or rearward movement of the bottle. The door shall be a CAST PRODUCTS aluminum door.			

Fire Department of _____
TOP MOUNT ENCLOSED PUMPER

	SPECIFICATIONS	YES	NO	DETAILS
7.1	ELECTRICAL SYSTEM			
7.1.1	<p>The electrical system shall meet CAN/ULC S515 and NFPA 1901 requirements.</p> <p>The electrical system shall include the following:</p> <ul style="list-style-type: none"> a) The wiring in the body shall be securely fastened with stainless steel bolts attached to all each 8"-10"; b) Electrical terminals in weather exposed areas shall have a non-conductive grease or spray applied; c) Adhesive device shall be not acceptable; d) Every electrical wiring shall be covered by a plastic split sleeve; e) Any electrical component that is installed in a exposed area shall be mounted in a manner that shall not allow moisture to accumulate in it; f) Heat shrink material and sealed connectors shall be used to protect exposed connections; g) A coil of wire must be provided behind an electrical appliance to allow them to be pulled away from mounting area for inspection and service work; h) All lights that have their sockets in a weather exposed area shall have corrosion preventative compound added to the socket terminal area. 			
7.1.2	The wiring of the body shall be color coded and number coded at each 3".			
7.1.3	<p>Every circuits added to the chassis shall be protected by internal electronic circuit breakers with transistor outputs. The system shall operate in accordance with the J1939 communication protocol.</p> <p>The system shall comprise three nodes of at least 8 inputs and 16 outputs, each node shall be protected by an individual breaker GROTE model 54-852PL. They shall be located to optimize the wiring, two (2) back into the compartments and one (1) in the pumphouse.</p> <p>The vehicle shall have one (1) programming plug installed near the multiplex node in the pumphouse.</p>			
7.1.4	The switches in cab and pump panel shall have an identification meets ULC and NFPA.			

Fire Department of _____
TOP MOUNT ENCLOSED PUMPER

	SPECIFICATIONS	YES	NO	DETAILS
7.2	WARNING AND EMERGENCY			
7.2.1	Two (2) FEDERAL SIGNAL QL64 SERIES red light heads, red lens, shall be provided. The lights shall include chrome flanges. The lights shall be mounted facing forward of the apparatus, above the headlights.			
7.2.2	Four (4) FEDERAL SIGNAL QL64 SERIES red light heads, red lens, shall be provided. The lights shall include chrome flanges. The lights shall be mounted as close to the corner points of the apparatus as is practical as follows: <ul style="list-style-type: none"> ➤ Two (2) each side in the rear wheel well ➤ Two (2) each corner side of the front bumper 			
7.2.3	A FEDERAL SIGNAL # NVG60-NFPA6 LED lightbar shall be installed on the cab roof.			
7.2.4	Two (2) LED beacon Federal Signal model VSLR-R1A02 shall be supplied and installed on upper of the rear body.			
7.2.5	An alternating high beam headlight flashing system shall be installed into the high beam headlight circuit which shall allow the high beams to flash alternately from left to right			
7.2.6	A Federal EQ2B electronic siren shall be provided and installed in the cab. The siren shall feature 200-watt output.			
7.2.7	The siren shall feature 200-watt output, with one (1) 200w speaker BP200 with a stainless steel grill.			
7.2.8	An amber directional traffic lightbar, eight (8) LED lighthouse FEDERAL SIGNAL model SL8S-A shall be recess at the rear of the body. The control shall be located in the cab.			
7.3	LIGHTING			
7.3.1	LED, GROTE model 47962 / 47963 clearance/marker lights.			
7.3.2	The center top rear marker lights shall be a GROTE model 253-4400-1 for marker light AND for brake light signal.			

Fire Department of _____
TOP MOUNT ENCLOSED PUMPER

	SPECIFICATIONS	YES	NO	DETAILS
7.3.3	<p>Two (2) kits of FEDERAL SIGNAL QL64 SERIES LED lights shall be installed in a four (4) light vertical housing # QL64Z4V each side at rear.</p> <p>Light functions shall be as follows : two (2) red running light with red brake light, two (2) clear backup light, two (2) amber populated arrow pattern turn signal, two (2) lower NFPA warning light.</p> <p>The rear part of the lights, visible from the compartment shall be entirely covered with a protective aluminum cover which shall protect the rear part of the light and the electrical wiring.</p> <p>Two (2) amber, GROTE #47963 LED auxiliary turn lights one each side front of body shall be installed recessed in the rubrail.</p>			
7.3.4	<p>One (1) white LED GROTE #60681 licence plate light mounted at the rear of the body.</p> <p>The plate shall be mounted with four (4) stainless steel bolts.</p>			
7.4	AUXILIARY LIGHTS			
7.4.1	<p>Two (2) 12" LUMABAR # AY-9500-012 LED lights shall be mounted under a light shield directly above each side intake / discharge panel.</p> <p>These lights shall automatically turn on when the pump is engaged or when the "pump light" switch is on and when the park brake is set.</p>			
7.4.2	<p>One (1) Amdor AY9220-031 LED light shall be installed in the pumphouse and it shall be controlled by the "pump light" switch on the pump panel.</p>			
7.4.3	<p>Two (2) LED lights AMDOR LUMABAR compartment light strips shall be mounted in each body compartment.</p> <p>Length of each light is the same as the door opening height (+/- 5").</p>			

Fire Department of _____
TOP MOUNT ENCLOSED PUMPER

	SPECIFICATIONS	YES	NO	DETAILS
7.4.4	<p>All perimeter lights under cab and body shall be Truck Lite, 40 or 60 series LED lights, as follow :</p> <ul style="list-style-type: none"> ➤ Four (4) under cab steps ➤ Two (2) under pumphouse steps ➤ Two (2) under rear bumper <p>The ground lighting shall be activated by the opening of a cab door, or when the parking brake is set and when the marker lights are turned on, or when the transmission is on reverse.</p>			
7.4.5	<p>A LED TecNiq model E03 light shall be installed under each 6" inlet on pump panel for steps lighting.</p> <p>The lights shall turn on when the parking brake is set and the marker lights are turned on or with the pump light switch.</p>			
7.4.6	<p>One (1) LED light GROTE # 63F61 or JETCO # 300-3161F-8 shall be used for hose bed light and for the deck gun. It shall be installed in the front of the body.</p> <p>The hose bed light shall turn on when the parking brake is set and when the marker lights are turned on, or with the hose bed switch.</p>			
7.4.7	<p>Two (2) LED light GROTE # 63F61 or JETCO # 300-3161F-8 installed at the rear, upper body, close to the beacon warning lights.</p> <p>The rear light lights shall turn on when the parking brake is set and the rear lights switch is "on" or when the transmission is on reverse.</p> <p>The rear lights switch shall be waterproof and installed in a sealed aluminum box CAST PRODUCTS on the left rear side.</p>			
7.4.8	<p>One (1) FRC model SPA900 LED scene lights shall be installed on the rear face of the vehicle. It shall turn on with the back-up lights or with the same waterproof rear switch, located on the rear left side, which controls the upper body rear lights (GROTE #63F61).</p> <p>Two (2) other FRC model SPA900 LED scene lights shall be installed near the pump compartment or on the crew cab. The waterproof switch shall be located on the pump panel. These lights shall turn off when the parking brake is not set.</p>			

Fire Department of _____
TOP MOUNT ENCLOSED PUMPER

	SPECIFICATIONS	YES	NO	DETAILS
8.1	BODY FINISH DETAILS			
8.1.1	All nuts and rivets installed on the apparatus shall be stainless steel unless a superior strength is required.			
8.1.2	Where dissimilar metals are to be mounted together, the mounting base material shall have an isolation barrier prior to assembly to prevent dissimilar metal reaction.			
8.1.3	Caution, Warning, Danger and other safety related signs shall meet the requirement of ANSI Z535.4, Product Safety Signs and Labels.			
8.1.4	A rust preventive barrier, Sinto or Tectyl, shall be sprayed under the entire body and body substructure, before their installation on the chassis so that no area is left unprotected.			
8.2	BODY PAINT			
8.2.1	The painting shall be conducted in accordance with best practices followed in the heavy equipment industry to ensure the best protection against corrosion and abrasion.			
8.2.2	Paint and primer used shall be of good quality and type « base Coat / Clear Coat ». The painting process shall be in accordance with the paint manufacturer.			
8.2.3	All removable parts such as brackets, lights, doors, and steps shall be removed before painting the body and shall be painted separately if required.			
8.2.4	The cab and body shall be painted red equivalent to Pierce #90.			
8.2.5	The body compartment interiors shall have a Zolatone grey (20-72) finish.			
8.2.6	The exterior of the pumphouse and crew cab module shall be painted the same color as the body. The painting shall be in accordance with best practices followed in the industry.			
8.2.7	All shelves and trays shall have a Zolatone painted finish in accordance with the color specified by the customer.			

Fire Department of _____
 TOP MOUNT ENCLOSED PUMPER

	SPECIFICATIONS	YES	NO	DETAILS
8.3	LETTERING, STRIPING			
8.3.1	A reflective stripe, 4" wide shall be installed according to the ULC standard : <ul style="list-style-type: none"> ➤ At least 50 % of the total length of the vehicle. ➤ At least 25 % of the width of the front of the vehicle. 			
8.3.2	At minimum, 50 % of the rear body visible surface shall be covered by chevron stripes according to NFPA. The stripes shall be red and yellow, 3M-983 brand, (models 72 and 71).			
8.3.3	A 3'' wide chevron type stripe shall be installed on each cab door and each crew cab door. The covering surface shall be at minimum 200 square inches.			

Fire Department of _____
 TOP MOUNT ENCLOSED PUMPER

	SPECIFICATIONS	YES	NO	DETAILS
9.1	LOOSE EQUIPMENT TO BE SUPPLIED BY BIDDER			
9.1.1	Two (2) folding wheels chocks ZICO, 44" diameter tires with brackets shall be installed under L1 compartment.			
9.1.2	One (1) 6" NH chrome caps for pump inlets.			
9.1.3	One (1) 6" NH female x 4" storz 30 degrees elbow with cap for pump inlet.			

Fire Department of _____
TOP MOUNT ENCLOSED PUMPER

	SPECIFICATIONS	YES	NO	DETAILS
10.1	WARRANTY			
10.1.1	The warranty is effective upon delivery of the vehicle.			
10.1.2	One (1) year material and workmanship limited warranty (bumper-to-bumper). The chassis warranty shall be the manufacturer basic warranty			
10.1.3	A Cummins five (5) year/160,000 km limited engine warranty will be provided.			
10.1.4	A TRW one (1) year limited steering gear warranty will be provided on the pump.			
10.1.5	The chassis manufacturer five (5) years chassis frame limited warranty will be provided.			
10.1.6	A two (2)-year/160,000 km parts and labor warranty will be provided for front axle.			
10.1.7	A two (2)-year/160,000 km parts and labor warranty will be provided for rear axle.			
10.1.8	A Wabco three (3) year parts and labor limited warranty on brake system ABS/ATC/RSC/ESC.			
10.1.9	Ten (10) year limited warranty on structural integrity of the body. This warranty will cover all the structural components of the body and pump house against defects in materials and workmanship. Excluded from this warranty is hardware, mechanical and electrical items or paint finish.			
10.1.10	One (1) year limited warranty on the cab paint. This warranty will cover the paint and perforations due to corrosion, delaminating and cracking under normal use of the vehicle.			
10.1.11	Five (5) year pro-rated limited warranty on the body paint. This warranty will cover the paint and perforations due to corrosion, delaminating and cracking under normal use of the vehicle.			
10.1.12	Five (5) year/unlimited km parts and labor warranty will be provided for transmission.			

Fire Department of _____
TOP MOUNT ENCLOSED PUMPER

	SPECIFICATIONS	YES	NO	DETAILS
10.1.13	The transmission cooler will carry a five (5) year parts and labor warranty (exclusive to the transmission cooler).			
10.1.14	Ten (10) year pump stainless steel plumbing components limited warranty. This warranty will cover all components of the pump except the valves against defects in materials and workmanship. Excluded from this warranty are the breakage caused by freezing.			
10.1.15	A Hale, 5-year limited warranty covering parts and labor for the first two (2) years and only parts (no labor) for the remaining three (3) years of the warranty. This warranty will cover all components of the pump except the valves against defects in materials and workmanship. Excluded from this warranty are the breakages caused by freezing.			
10.1.16	The water/foam tank parts and labor warranty shall be provided for life (25 years) against any manufacturing defects.			