



Shop Order

The Corporation of the Town of Innisfil  
 Accounts Payable  
 2101 Innisfil Beach Road  
 Innisfil, ON L9S 1A1

**Exp. Date:** 02/01/2018  
**Quote No:** E-Innisfil-ON-0618  
**Job/Order No:** 20047  
**BODY:** 00-10-15 Metalfab Pumper - ULC 05/13

05/09/2019

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PART NO	S	DESCRIPTION	QTY	ID
		<b>== Metalfab Pumper - ULC 05/13 - 0.000 ==</b>	<b>1</b>	<b>MTL</b>
	<b>S</b>	<b>CHANGE ORDER E</b>	<b>1</b>	<b>MTL</b>
00-10-1500		Metalfab Pumper E	1	MTL
00-20-1000		Company Profile E	1	MTL
00-20-1500		Standard Body Warranty	1	MTL
00-20-1550		Metalfab Limited Ten (10) Year Paint and Corrosion Warranty	1	MTL
<b>00-20-1700</b>		<b>Hale Pump Warranty - 5 years</b>	<b>1</b>	<b>MTL</b>
<b>00-20-1800</b>	<b>S</b>	<b>Polypropylene Tank Lifetime Warranty</b>	<b>1</b>	<b>MTL</b>
00-20-2000		Plant Visits - unlimited at customer expense	1	MTL
<b>00-20-3000</b>	<b>S</b>	<b>No Bonding Requested</b>	<b>1</b>	<b>MTL</b>
00-20-3500		Certification for Fusion Welding of Aluminum	1	MTL
<b>00-20-4000</b>	<b>S</b>	<b>Quality System registered to ISO 9001:2015</b>	<b>1</b>	<b>MTL</b>
00-20-4500		Fire Apparatus Manufacturers' Association Membership	1	MTL
		<b>GENERAL INFORMATION</b>	<b>1</b>	<b>MTL</b>
10-11-0000		Intent E	1	MTL
<b>10-11-0110</b>		<b>Vehicle data recorder included with chassis</b>	<b>1</b>	<b>MTL</b>
<b>10-11-1101</b>	<b>S</b>	<b>ULC S515-13 and NFPA 1901-2016 Compliance</b>	<b>1</b>	<b>MTL</b>
10-11-1500		> ULC Testing - Pumper	1	MTL
		<b>ENG. NOTE:</b>		
		Note in the shop note if the Fire Department wishes to witness the test		
10-11-2100		Maximum length not specified E	1	MTL
10-11-2200		Maximum height not specified E	1	MTL
<b>10-11-2400</b>		<b>Overall length is 30' or more</b>	<b>1</b>	<b>MTL</b>
10-11-2500		General Construction	1	MTL
<b>10-11-3000</b>		<b>Manuals - two copies</b>	<b>1</b>	<b>MTL</b>
		<b>***Two copies of chassis manuals are required.</b>		
		The manuals shall be provided in both electronic form on a flash drives clearly labeled as to the contents and a hard copy.		
<b>10-11-3600</b>	<b>S</b>	<b>&gt; Delivery - FOB Fire Department - by CCEV</b>	<b>1</b>	<b>MTL</b>
		<b>ENG. NOTE:</b>		
		Note in the shop note if more than 4 hours of training is required		
<b>10-11-4300</b>	<b>S</b>	<b>Payment Terms - Chassis and Body NET 30</b>	<b>1</b>	<b>MTL</b>
<b>10-20-1400</b>	<b>S</b>	<b>&gt; Hose capacity exceeding ULC/NFPA requirements</b>	<b>1</b>	<b>MTL</b>
		<b>ENG. NOTE:</b>		
		Specify the type of hose and quantity of hose to be carried on the vehicle		
		<b>The main hose bed shall carry a minimum of;</b>		
		<b>180 m (600 feet) of 65 mm, (2-1/2") hose</b>		
		<b>180 m (600 feet) of 45 mm, (1-3/4" hose</b>		
		<b>240 m (800 feet) of 100mm, (4") hose.</b>		
10-20-2000		Equipment carrying capacity - standard ULC Pumper	1	MTL
		<b>CHASSIS INFORMATION</b>	<b>1</b>	<b>MTL</b>

PART NO	S	DESCRIPTION	QTY	ID
20-11-1000	S	<b>Chassis supplied by Metalfab - Spartan Metro Star EMFD 10" R Roof</b> 47,000 lb GVW 20,000 lb front axle 27,000 lb rear axle 195" wheelbase 135" cab to axle Cummins L9 400 hp @ 2100 rpm, 2200 governed rpm 1250 ft-lb torque at 1400 rpm 3000 EVS automatic transmission 320 Amp alternator ABS/ATC/ESC 68 US gallon fuel tank Polished aluminum wheels Two tone paint with Classic break line PPG FBCH 2185 white over PPG FBCH 71663 ALT Red 12-Volt Multiplex wiring with dual Vista Touchscreen IV displays Groeneveld Lube system 1710 Spicer driveline with jackshaft C/L of pump suction inlet to C/L of rear axle - 113" Engineering to supply the following information for chassis order Hale gearbox drop - _____ Pump ratio - _____ Mount the fog lamps under the bumper beside the fog lamps towards the outside edge. The Brow light is to be disabled when the Park Brake is off. Mount the Spot light that was shipped loose on the doghouse towards the rear cabinet and centered between the driver and officer.	1	MTL
20-11-1500		2013 Emission chassis modifications	1	MTL
20-11-1700	S	<b>Chassis Motor Vehicle Inspection required - by CCEV</b>	1	MTL
20-21-0500		<b>Fluid capacity plate</b>	1	MTL
20-21-0600		<b>Pumping test plate</b>	1	MTL
20-21-1030		<b>Maximum riders sign - 5 persons</b>	1	MTL
20-21-1510	S	<b>Seat belt warning labels - 4 door chassis - with chassis</b>	1	MTL
20-21-1520	S	<b>Helmet warning label - do not wear helmet - with chassis</b>	1	MTL
20-21-1550	S	<b>Tire Pressure Indicators - supplied with chassis</b> Tire pressures are supplied with the chassis.	1	MTL
20-21-1600		<b>Apparatus Information Label</b> An information label is provided in the chassis cab, visible to the driver, stating: "When manufactured, this vehicle was: ** m high ** m long ** kg GVW Changes in height since the apparatus was manufactured shall be noted on this plate by the Fire Department"	1	MTL
20-21-2000		Non removable key	1	MTL
20-21-2500		Shifter lock not required E	1	MTL
20-21-3500		Rear step warning label	1	MTL
20-21-3810		<b>Front mudflaps provided with chassis E</b>	1	MTL
20-21-4000		Rear mudflaps - Metalfab Logo	1	MTL
20-31-0100		Fuel tank or step covers not required	1	MTL
20-31-0200		Fuel fill label -Ultra Low Sulfur Diesel only	1	MTL
20-31-1900	S	<b>Chassis cab painted by chassis OEM - two tone white over red</b>	1	MTL
20-31-47AA	U	<b>Installation of hose lays in bumper extension</b> The front bumper of the chassis shall be extended 28" from the front of the chassis complete with gravel shield and hose well compartment by Spartan. The hose well will be modified for two recessed cross lays, each with a capacity of 60 m (200 feet) of 45mm hose plus nozzle. The cross lay plumbing shall terminate one on each side of the gravel shield (left side is pre-plumbed by Spartan). The cross lays shall be fitted with a hinged aluminum checker plate cover and latching mechanism. The design of the cross lay shall be such that most of the hose storage shall be below the top of the bumper and that the raise of the lid will be minimal if at all. SOPT #656 - Truck specific Add a small grab handle on the cover to make opening the cover easier. Have slots for the pre-connected hose with edge trim around the slots.	1	

PART NO	S	DESCRIPTION	QTY	ID
20-41-0600	S	<b>Intake air shutoff for engine not requested</b>	1	MTL
20-41-0900		<b>Auxiliary braking system disabled when pumping</b>	1	MTL
20-41-1100		Transmission programming - Allison WT ***Includes "Pump Engaged" light next to pump shift on chassis instrument panel.	1	MTL
20-41-1500		<b>Extend exhaust pipe - RS front of rear wheels E</b> Engineering to specify exhaust pipe material as required by the chassis manufacturer. Engineering to sign off on the exhaust configuration to make sure it meets the chassis manufacturer's emission specifications. The exhaust pipe is 90 degree square cut to accommodate a Neiderman Exhaust Capture System.	1	MTL
20-41-1900		Battery boost terminals with chassis E	1	MTL
20-41-2200	S	<b>Chassis batteries relocated to body compartment</b> The chassis batteries will be relocated to the right side of the storage above the pump house (70-11-5100) towards the right side and they will be covered with a protective cover to protect them from damage.	1	MTL
20-41-2550		<b>Fuel fill at LS rear fender well</b>	1	MTL
20-41-2600		Chassis fuel tank remains in OEM location	1	MTL
20-41-5010		<b>Rear Tow Hooks - through rear of body E</b>	1	MTL
20-51-0700		<b>Master Battery Disconnect included with chassis</b>	1	MTL
20-51-2500		<b>Back up alarm included with chassis</b>	1	MTL
20-51-3100	S	<b>Air inlet not requested</b>	1	MTL
20-51-3400		Protection valve installed for air operated accessories	1	MTL
20-51-6501	S	<b>Battery charger and 110 VAC air compressor with chassis</b> The air compressor will be installed under the rear seats as supplied by Spartan. The compressor will be 120 VAC.	1	MTL
20-51-7101	S	<b>Electric System Management with chassis - multiplex</b>	1	MTL
20-51-7500	S	<b>Super Auto eject for 120 v - 20 A with sealed enclosure</b> The auto eject connection will be installed on the left side of the chassis cab under the window between the driver entry door and rear entry door. The cover will be yellow in colour.	1	MTL
20-51-8010	S	<b>120 volt - 20 A volt inlet</b> There will be a shoreline outlet installed in the cabinet 20-99-10AA beside the inverter outlet. This will allow items to charge when the unit is plugged into the hall.	1	MTL
20-51-9001	S	<b>Air horns included with chassis</b>	1	MTL
20-52-0010	U	<b>Air horn control on pump panel</b> SOPT #475 The label on the pump panel shall read "AIR HORN"	1	
20-52-3500		> <b>Chassis steering wheel lined up by Metalfab E</b> ENG. NOTE: Freightliner, Sterling, and Spartan only	1	MTL
20-52-4003	U	<b>Installation of rear view camera when supplied with Spartan chassis</b> SOPT #1056	1	
20-60-0400		Chassis wheelbase does not change	1	MTL
20-90-1810	U	<b>Extend air tank moisture ejectors to rub rail and tag</b> SOPT #507	1	
20-99-10AA	U	<b>Cabinet/shelving behind Officers seat</b> Behind Captain's seat, and across the back of the doghouse. Equipment storage shelves with a recessed top. 2 X 12VDC power supply lines for radio, flashlight chargers. Webbed netting to secure loose items. Details discussed at pre-construction meeting 09.19.2018 The portion behind the dog house will measure approximately 26" high x 30" wide x 16" deep at the top with a 2" lip all around the top. There will be a fixed shelf in the middle and the Inverter 50-99-10AA will be installed in the upper left side portion. The portion behind the captain seat will measure approximately 34" high x 30"	1	

PART NO	S	DESCRIPTION	QTY	ID
		wide x 16" deep at the top with a 4" lip all around the top. There will be a hinged cover on the top that will flip towards the seat and there will be a fixed shelf in the middle bottom storage. Both rear openings will be covered with nylon webbing. See drawing from department in F/Data/Jacques/Current Projects/Innisfil/Innisfil console. SOPT #1040 - Truck specific The 12-volt connections to be used are the ones from the Spartan chassis dog house. They are to be moved to the open top of the cabinet and mounted at each corner towards the back of the storage (adjacent to the dog house and pointed towards each other).		
20-99-25AA	U	<b>Bumper guides, chrome, lighted</b> There will be a pair of lighted bumper guides installed on the front bumper.	1	
<b>PUMP AND PLUMBING</b>			1	MTL
30-11-8100		<b>Hale QMAX 1250 IGPM single stage pump</b>	1	MTL
30-12-3500		<b>Mechanical seal for Hale QMID/QMAX/QTWO pumps</b>	1	MTL
30-15-0104		<b>Plumbing - Hale manifold pump SM SS E</b>	1	MTL
30-20-0500		Valves and controls - side mount panel	1	MTL
30-20-1002		<b>Akron valves specified</b>	1	MTL
30-20-1600		<b>Piping stainless steel - general</b>	1	MTL
30-20-1700	S	<b>1-1/2" thread specifications - NPSH</b>	1	MTL
30-20-1800	S	<b>2-1/2" thread specifications - CSA</b>	1	MTL
30-20-2000		<b>Piping hydrostatic test</b>	1	MTL
30-20-2500		<b>Anodes in suction and discharge piping</b> Install one anode on discharge side of pump, one anode on suction side of pump - do not use teflon tape or thread sealant. Paint flange silver and mask brass anode before painting for visibility.	1	MTL
30-21-5560		<b>Tank to Pump SS 3" w/ check valve manifold pump</b>	1	MTL
30-22-0520		<b>Tank Fill valve 2" SS</b>	1	MTL
30-31-4010	S	<b>Suction - 6" gated each side manifold pump</b> The side suction connection will be as short as possible to allow the installation of a customer supplied 6" female to 4" Storz adapter and still be able to close the rollup door. The fitting will require approximately 8" of space.	1	MTL
30-31-602A	U	<b>5" rear suction, SS, 6" NH male connection, Hale Electric valve</b> There will be a 5" rear suction with 6" NH male connection and stainless steel plumbing going through the tank.	1	
30-31-7200	S	<b>&gt; Hale master intake suction valve - electric control</b> <b>ENG. NOTE:</b> Required for top mount panels Show location in Shop Note  *** Suction to be gated are the left, right and rear suctions.	3	MTL
30-32-7530		<b>Suction - 2-1/2" left side SS, bleeder, Hale manifold pump</b>	1	MTL
30-32-8030		<b>Suction - 2-1/2" right side SS, bleeder, Hale manifold pump</b>	1	MTL
30-40-2020	S	<b>4" right discharge SS, bleeder, plumbed 3", Hale manifold pump</b> Received e-mail confirmation 09.17.2018 that the connection is 4" Storz with 4" end cap.	1	MTL
30-41-2020		<b>2-1/2" RS discharge SS, bleeder, Hale manifold pump</b>	1	MTL
30-41-2520		<b>2-1/2" LS discharge SS, bleeder, Hale manifold pump</b>	2	MTL
30-43-1520	S	<b>2-1/2" rear discharge SS, plumbed 2-1/2", bleeder</b> *** Left side in hose bed as shown on the proposal drawing as confirmed by e-mail on 09.17.2018.	1	MTL
30-44-1020	S	<b>&gt; 1-1/2" front trash line SS, plumbed 2", hosewell</b> <b>ENG. NOTE:</b> Requires extended front bumper, gravelshield  2 speedlay sections with 200' x 45mm hose capacity each. Each speed lay section shall include one (1) 1-1/2" NPSH	2	MTL

PART NO	S	DESCRIPTION	QTY	ID
		chrome swivel located on the top of the gravel shield of the extended front bumper, one each side with to permit the use of the hose from either side of the apparatus. One lay will be towards the front of the bumper and the second lay will be towards the rear of the bumper. Also reference 20-31-47AA.		
30-44-6520	S	<b>Piping for monitor SS, plumbed 3", bleeder</b> For the 80-99-05AA Akron 3440 DeckMaster electric monitor, 5177 electric nozzle and 3406 electric riser. To be even with top of body when in stowed position. Located ahead of the tank offset to the left side beside the Command Light.	1	MTL
30-51-0500		<b>Pump shift-Midship air</b> ***Includes "Pump Engaged" and "OK to Pump" indicator lights on chassis instrument panel ***Includes "Throttle Ready" indicator light on Pump operating panel	1	MTL
30-51-0700		Pump Gearbox mounted manual over ride for pump shift E	1	MTL
30-51-6700		<b>FRC Pump Boss Governor/Throttle engine display</b>	1	MTL
30-51-7000	S	<b>Suction side relief V/V, manifold pump</b> There will be suction side relief valves installed on the left, right and rear suctions.	3	MTL
30-51-7714	S	<b>Trident Air Primer 3 barrel 4 location</b> There will be a Trident air primer plumbed to the pump and outside of each gated suction (left, right and rear).	1	MTL
30-51-8100		<b>Heat exchanger included with chassis</b>	1	MTL
30-51-8500		<b>Pump cooler with control valve, check valve</b>	1	MTL
30-52-1000		Master drain V/V, 12 port	1	MTL
30-52-2000		<b>Drain valve for foam system header</b>	1	MTL
30-52-4310	S	<b>Foam System - Hypro FoamPro 2002 Dual System</b> The Foam Pro 2002 foam system shall be plumbed for pick up of foam from the 30 gallon foam cell and for pick up from external foam pails. The foam system shall be plumbed to designated discharges as determined during the pre-construction meeting. Discharges: both front trashlines (30-44-1020), rear 2.5" in hose bed (30-43-1520) and right side 2.5" (30-41-2020).  ***A drawing will be prepared of the proposed layout/plumbing of foam system and sent for approval***	1	MTL
30-52-6500	S	<b>FoamPro dual foam supply selector valve (manual)</b> Install the following labels under the selector valve. Under the "A tank", there will be a label that says "On Board" and under the "B Tank", there will be a label that states "External".	1	MTL
30-52-8100		<b>Electric foam fill pump with panel pickup</b>	1	MTL
30-52-9100		<b>Foam concentrate label at foam tank fill</b>	1	MTL
30-52-9200		<b>Foam System Instruction Plates</b>	1	MTL
30-52-9400		<b>NFPA Foam System certification test</b>	1	MTL
		<b>WATER AND FOAM TANKS</b>	1	MTL
40-11-2100	S	<b>Polypropylene water tank (Imperial gallons)</b>	1	MTL
40-11-2200		Water tank capacity certification (tank manufacturer)	1	MTL
40-11-4000	S	<b>Tank capacity 500 Imperial Gallons</b>	1	MTL
40-12-5000	S	<b>Foam cell - 30 Imperial gallon</b>	1	MTL
40-13-0100	S	<b>&gt; Through the tank tunnel - up to 1200 gallon tank</b> <b>ENG. NOTE:</b> Requires Ladder tube storage 60-40-90 or any other tube mounts necessary  There will be a tube in the water tank for the ladder tube and one for the rear suction 30-31-602A	1	MTL
40-21-0500		<b>3" tank to pump connection</b>	1	MTL
40-22-0500		<b>2" tank fill connection</b>	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
40-23-0500		1" water level gauge connection	1	MTL
40-23-1000		1" foam level gauge connection	1	MTL
40-30-0400		3" plug in sump box	1	MTL
40-30-1000		Water Fill Box front left corner	1	MTL
40-31-0400		Rear dump valve not requested E	1	MTL
40-31-6050		Rear fill not requested E	1	MTL
		<b>ELECTRICAL</b>	1	MTL
50-11-0400		Base electrical system - Spartan multiplex	1	MTL
50-11-0600		Warning Light Certification	1	MTL
50-11-0700		Low Voltage Electrical system test	1	MTL
50-11-0800		Low Voltage Electrical System Documents As required by ULC and NFPA standards	1	MTL
50-11-6110		Whelen light bar included with chassis	1	MTL
50-11-6616	U	Rear LED Traffic Advisor warning lights - flush mount - TAM83 SOPT #823	1	
50-11-8001		> Rear beacons not required E ENG. NOTE: Confirm that necessary lighting for ULC/NFPA is present	1	MTL
50-12-8000		Additional body side intersection light not required Distance between front and rear side intersection light does not exceed 25'	1	MTL
50-12-8521		Front flashers, intersection lights included with chassis, Whelen 600	1	MTL
50-12-8620	S	Rear LED flashers (pr)-Whelen red LED 900 with integral flasher	1	MTL
50-12-8810	S	Body side inter lts (pr)-Whelen red LED 600 with integral flasher	1	MTL
50-12-8820	S	Body side inter lts (pr)-Whelen red LED 900 with integral flasher	2	MTL
50-21-5110		Compartment lighting - LED tube lights in each compartment (flush doors) E	1	MTL
50-21-5500	S	Door Ajar warning light Bilingual Warning label in cab to read: "Do Not Move Apparatus when Light is on"	1	MTL
50-21-83AA	U	Lighting for rear step/platform - LED lumabar H20 Switched with park brake SOPT #307b - Truck specific	1	
50-21-8600		LED clearance lts and reflectors	1	MTL
50-21-8800		LED intermediate turn signal/clearance/reflector length >30'	1	MTL
50-22-0750	S	Whelen 64 LED CAST 4V tail/brake-turn-backup-warning module (pr)	1	MTL
50-31-6015	U	Whelen 9SC0ENZR LED Scene lights (pr) - Left side Switched in cab (Vista) Managed to shed SOPT #39c The lights will only be active when the park brake is applied.	1	
50-31-6016	U	Whelen 9SC0ENZR LED Scene lights (pr) - Rear Switched in cab (Vista) and interlocked with the reverse gear of the transmission. Not managed to shed - needed for rear lighting to meet ULC SOPT #39c	1	
50-31-6017	U	Whelen 9SC0ENZR LED Scene lights (pr) - Right side Switched in cab (Vista) Managed to shed SOPT #39c The lights will only be active when the park brake is applied.	1	
50-31-6505		Ground lighting included with chassis E Switched with the respective door and Vista	1	MTL
50-31-6570	S	Ground lighting (LED Lumabar) - side mount body Switched with Park brake.	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
50-99-05AA	U	<b>Hose bed cover lights - LED strip lighting</b> The lights shall be activated when the aluminum cover is raised. SOPT #209	1	
50-99-06AA	U	<b>Command Light KL415D-W2</b> There will be a Command Light KL415D-W2 tower installed ahead of the hose bed. It shall have four (4) 150W Whelen DC-PFH2 LED light heads and the complete unit will be 12-volts. The remote control will be mounted on the left side wall of the L1 compartment.	1	
50-99-10AA	U	<b>1500 Watt Inverter with outlet</b> A 1500 watt inverter (p/n 1031847) shall be provided in the chassis cab. The inverter shall operate from 12 volts DC and provide a 120 VAC output. A standard duplex receptacle shall be wired to the inverter to provide AC power to required devices. Location of the Inverter shall be within 10' of the chassis batteries in the pump house storage area with the outlet in the Upper LS side wall of the storage compartment 20-99-10AA. The remote ON/OFF control will be installed beside the outlet in the storage compartment 20-99-10AA. Note - the inverter will be installed after the ULC test. SOPT #405 - Truck specific	1	
		<b>BODY</b>		
60-10-1400		<b>Single axle extruded aluminum body</b> • The rear of the apparatus shall be a flat back style with square beavertails to provide an extended rear L3 and R3 compartment. • The rear step shall be located between the beavertails	1	MTL
			1	MTL
60-10-4600	S	<b>Painted fender surround</b> The fender area around the rear chassis wheel will be painted job color.	1	MTL
60-10-4700		Integral aluminum fender trim	1	MTL
60-10-5400		> Diamondback pumphouse steps <b>ENG. NOTE:</b> Maximum height of step is 24" from ground	1	MTL
60-10-5440	S	> <b>Diamondback 12" inset rear step</b> <b>ENG. NOTE:</b> Maximum height of rear step is 24" from ground  Rear "inset" rear step as shown on the proposal drawing	1	MTL
60-10-6500		<b>Bolt on extruded aluminum rub rail E</b>	1	MTL
60-10-6599	U	<b>Reflective installed in rub rail - white only</b> There will be reflective white stripe installed in the rub rail (60-10-6500)	1	
60-11-0300		> <b>Front left side compartments full height E</b> <b>ENG. NOTE:</b> Specify critical dimensions in shop note	1	MTL
60-11-0700		> <b>Front right side compartments full height E</b> <b>ENG. NOTE:</b> Specify critical dimensions in shop note	1	MTL
60-11-1000		> <b>Rear left side compartments full height E</b> <b>ENG. NOTE:</b> Specify critical dimensions in shop note	1	MTL
60-11-1400		> <b>Rear right side compartments full height E</b> <b>ENG. NOTE:</b> Specify critical dimensions in shop note	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
60-11-2000		> <b>High side compartment (over 18") each</b> <b>ENG. NOTE:</b> Specify critical dimensions in shop note Specify type of door Specify flip up or drop down Specify which side of body	2	MTL
60-11-3100		<b>No rear compartment E</b>	1	MTL
60-11-4500	S	<b>Flush mount aluminum door - single with "D" handle</b> Flip up doors for compartments each side over rear wheels. The doors must open 90-degrees to allow Gear Grid tool boards to open and not hit the doors. There will be a loop installed 1/3 of the way inside the door to allow the door to be pulled down and closed.	2	MTL
60-11-4510	S	<b>Flush mount aluminum door - double with "D" handle</b> Left front, left rear, right front and right rear compartments. The handle will be accessible from the middle point of the door.	4	MTL
60-11-5530		<b>Rollup door - to enclose pump panel</b> Natural aluminum finish Includes magnetic door switch, LED tube lights, rubber bumpers to prevent pinch point	2	MTL
60-31-4100		Extruded aluminum handrails Minimum 2" clearance from handrail to any surface	1	MTL
60-31-5500	S	<b>Steps at rear of body (folding) w/LED lights</b> Maximum height between steps is 18" Lights in steps are switched with park brake	1	MTL
60-31-6500	S	<b>Compartment matting- black plastic interlocking tile</b>	1	MTL
60-31-8003	U	<b>SCBA cylinder storage tubes (double) in rear fenders (ea)</b> SOPT #1023	4	
60-31-8210	S	> <b>Sliding vertical tool board - open / close latch</b> <b>ENG. NOTE:</b> Specify location  There will be a pull out tool board installed in the R1 compartment as tight to the left side wall as possible. It will have an open/close latch to lock the tool board in either location.	1	MTL
60-31-8400	S	<b>Fixed vertical partition</b> There will be a vertical partition installed in the R1 compartment 16" from the left side wall. There will two (2) adjustable shelves 60-31-9600 attached towards the right side of the compartment.	1	MTL
60-31-8800	S	> <b>Sliding tray (ea) - 600 pound capacity</b> <b>ENG. NOTE:</b> Specify location  ***Hardware requires 3-1/2" of compartment height Reflective stripe is applied on the exposed edge for visibility when the compartment door is open Located at floor level in the following compartments: Tray # 1 - Left side front compartment Tray # 2 - Left side rear compartment Tray # 3 - Right side rear compartment	3	MTL
60-31-9600	S	> <b>Adjustable shelf (ea)</b> <b>ENG. NOTE:</b> Specify location  Reflective stripe is applied on the exposed edge for visibility when the compartment door is open Location and depth of shelves were approved at pre-construction meeting of	4	MTL



PART NO	S	DESCRIPTION	QTY	ID
		09.19.2018 Shelf # 1 - Located in upper portion of L1 compartment and it will be 10" deep Shelf # 2 - Located in upper portion of L1 compartment and it will be 10" deep Shelf # 3 - Located in R1 compartment ahead of vertical partition 60-31-8400 Shelf # 4 - Located in R1 compartment ahead of vertical partition 60-31-8400 Note - the shelves in L1 compartment must be adjustable the same height as the tool board 60-91-0800 in front of these shelves.		
60-32-3550	S	<b>Two adjustable hose divider (each)</b> Two adjustable hose bed dividers will be supplied and installed. Hand hold required in end	1	MTL
60-32-7500		<b>Hose bed - aluminum</b> The main hose bed shall carry a minimum of; 180 m (600 feet) of 65 mm, (2-1/2") hose 180 m (600 feet) of 45 mm, (1-3/4")hose 240 m (800 feet) of 100mm, (4") hose.	1	MTL
60-33-0100	S	<b>Paint exterior - Imron Elite and CLEARCOAT</b> *** Paint code and colour Red to match cab	1	MTL
60-33-0200		Undercoat vehicle with KROWN rust protection	1	MTL
60-33-0600		<b>Chassis wheels not painted</b>	1	MTL
60-33-1000		Paint pump and plumbing job colour	1	MTL
60-33-1600		<b>Special paint compartment interior - gray zolatone E</b> The compartment interiors are finished with a gray textured paint for chip resistance. Shelves, trays, unistruts and hardware are left natural aluminum.	1	MTL
60-33-2300	S	<b>Lettering - per Customer's requirements</b> The required lettering shall consist of imitation gold leaf reflective vinyl letters with black outline; Approximately 6" high; "INNISFIL FIRE RESCUE " each side body upper Approximately 3" high; "INNISFIL FIRE RESCUE " each side cab door A town crest will be supplied to the manufacturer for installation. See Appendix A of the RFP for picture of lettering and reflective stripe  ***Customer to sign off Lettering arrangement prior to installation***	1	MTL
60-33-3200	S	<b>Reflective stripe - 1" - 4" white</b> 50% of perimeter each side and 25% of perimeter front A one inch (1") high white Scotchlite stripe will be provided on the chassis and apparatus body. A four inch (4") high white Scotchlite stripe will be provided on the chassis and apparatus body, 1" below the 1" stripe. The stripes will angle up through the L1 / R1 door and continue rearward. See Appendix A of the RFP for picture of lettering and reflective stripe	1	MTL
60-33-3310	S	<b>Reflective stripe - red and yellow chevron at rear (printed scotchlite)</b> Minimum 50% of rear vertical surface	1	MTL
60-33-4700		<b>No crosslay preconnects on vehicle E</b>	1	MTL
60-33-5000	S	<b>Aluminum cover over hose bed with end tarps - black</b> Door ajar switches required. Rear flaps with Velcro straps will be provided on the rear of the cover to tie around the rear footman loops. The covers will cover the hose bed including the coffin compartments 60-91-09AA but not the walkway 60-99-35AA.	1	MTL
60-40-9001	S	<b>&gt; Tube mount for ladders, through tank</b> ENG. NOTE: Specify location, ladders to be installed in this tube, complete dimensions of ladders if	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
		user supplied		
		To house the 24' two section extension ladder 80-14-0500, the 14' roof ladder 80-14-5500, the 10' attic ladder 80-14-8500 and two pike poles 80-13-25AA and 80-13-2510. The door will be vertically hinged with a "D" handle and door ajar switch is required. The tube will be capped if the ladders protrude into the pump house.		
60-40-901A	U	<b>Tube mount for suction hoses under water tank</b> There will be a special subframe built to allow the suction hoses to be carried in a tube under the water tank. This will create a tube to house the two (2) 6" x 10' suction hoses 80-11-5000. There will be a vertically hinged door and there will be a door ajar switch.	1	
60-41-1015	S	<b>Pike Pole tube integral with 60-40-9001 ladder tube</b> There will be pike pole storage integral with the 60-40-9001 ladder tube.	2	MTL
60-41-1500	S	<b>Attic ladder tube integral with 60-40-9001 ladder tube</b> There will be attic ladder storage integral with the 60-40-9001 ladder tube.	1	MTL
60-91-0800	U	<b>Swing out tool board with PAC board on one side</b> There will be a swing out tool board installed in the upper portion of the L1 compartment. The front face of the swing out will have PAC board up to 12" from the edge so tools won't be mounted where they could damage the door sills. The height of the PAC board will be approximately 31" high.	1	
60-91-0900	U	<b>Coffin compartment - forward (pair)</b> There will be a pair of coffin compartment with cover, LED interior lighting, door ajar switch and interlocking tiles installed between the hose bed and the pump house. They will be installed on each outer edge of the body.	1	
60-91-09AA	U	<b>Coffin compartment - rearward (pair)</b> There will be a pair of coffin compartment under the hose bed cover (60-33-5000) with LED interior lighting and interlocking tiles. They will be installed on each outer edge of the hose bed.	1	
60-99-10AA	U	<b>Standard pull out tray - adjustable in height and open/close latches</b> There will be 400lbs sliding trays installed in the following locations: 1. L3 compartment 2. L3 compartment 3. R3 compartment 4. R3 compartment	4	
60-99-35AA	U	<b>Walkway in hose bed w/ LED lights</b> There will be a walkway in the hose bed with LED lights that activate with the park brake. There will be a fixed divider on each side of the walkway to support the hose bed cover 60-33-5000.	1	
		<b>INSTRUMENTATION</b>		
70-11-0000		<b>Warning Label on Pump Operator's Panel</b>	1	MTL
70-11-0501	S	<b>Side mount instrument panel with rollup door LS and RS</b> No gauge or visual display can be higher than 84" above the operator's standing position Midpoint of any control cannot be higher than 72" above the operator's standing position	1	MTL
70-11-1500	S	<b>Stainless steel instrument panels</b> No gauge or visual display can be higher than 84" above the operator's standing position Midpoint of any control cannot be higher than 72" above the operator's standing position The department to approve the panel layout prior to the build.	1	MTL

PART NO	S	DESCRIPTION	QTY	ID
70-11-2200	U	<b>Storage trays in panel step / running boards.</b> There will be storage trays mounted in the panel step / running board area on both sides of the pump panel. The tray will be the same depth as the heat pan so it is not the lowest item on the truck, will be as big as possible and will have interlocking tiles at the bottom along with drain holes.	2	
70-11-5100	S	<b>Storage (Dunnage) area top of pump house</b>	1	MTL
70-11-52AA	U	<b>Hinged cover over dunnage area over pump</b> LED lighting, door ajar switch required, plastic interlocking tile installed on floor, drainage to bottom of pump house level SOPT #610	1	
70-11-5500	S	<b>Right side pump access door</b> No opening dimension less than 18" AS LARGE AS PRACTICAL	1	MTL
70-11-7500		<b>Heat pan-aluminum</b>	1	MTL
70-11-8000		<b>Heater in pump compartment</b>	2	MTL
70-11-8200	U	<b>Rubber seal around suction and discharge opening on panel</b> SOPT #483	1	
70-20-0500	S	<b>4-1/2" compound gauge - dual face 0-400</b> To be within 8" of each other - edge to edge	2	MTL
70-20-1500	S	<b>2-1/2" pressure gauge - dual face 0-400</b> Gauge to be no more than 6" from edge of the gauge to the center of the control.	8	MTL
70-20-2500	S	<b>Primer control</b> There will be a primer handle for the pump	1	MTL
70-20-2501	S	<b>Additional Primer control</b> There will be a primer handle for the left side, right side and rear suctions. They will be clearly identified for the location they are pre-priming.	3	MTL
70-20-3200		<b>FRC Pump Boss Governor Control</b> Throttle can be no lower than 42" and no higher than 72" from operator's standing position.	1	MTL
70-20-3510		<b>Electric water level gauge on pump panel and at rear, Class One</b>	1	MTL
70-20-6500		Test gauge panel Mount below the compound gauges for proper draining	1	MTL
70-20-7500		<b>Heat exchanger control valve</b>	1	MTL
70-20-7600		<b>Pump cooler control valve</b>	1	MTL
70-21-1500		<b>Electric Foam Level gauge</b> Include access to and room for sender in front of body and back of pump house	1	MTL
70-99-05AA	U	<b>Innovative controls tags, colored bezels, controls and gauges</b> The color coded tags, colored bezels, controls and gauges will be from Innovative Controls.	1	
<b>ACCESSORIES</b>			1	MTL
80-11-5000		6" x 10' lightweight suction hose (ea)	2	MTL
80-12-2500		6" barrel strainer	1	MTL
80-13-0500		Rubber mallet	1	MTL
80-13-2510		<b>Pike pole, fiberglass handle - 6' long</b>	1	MTL
80-13-25AA	U	<b>Pike pole, fiberglass handle - 8' long</b> SOPT #1217	1	
80-14-0500		<b>24' 2 section extension ladder PEL 24</b>	1	MTL
80-14-5500		<b>14' aluminum roof ladder PRL-14</b>	1	MTL
80-14-8500		<b>10' aluminum folding attic ladder FL-10</b>	1	MTL
80-19-0500		<b>Large folding wheel chock - aluminum (ea) not mounted</b>	2	MTL
80-19-06AA	U	<b>Yellow poly boxes to house wheel chocks</b> Chocks shall be stored in the L1 (left side front) compartment in a yellow poly box sized to fit the chocks specifically.	1	

PART NO	S	DESCRIPTION	QTY	ID
80-99-05AA	U	<b>Akron 3440 DeckMaster, 5177 Electric nozzle &amp; 3406 Electric Riser</b> The monitor will be an Akron 3440 DeckMaster Electric monitor with a 5177 Electric Nozzle and 3406 electric riser installed on the 30-44-6520 monitor plumbing. The remote control will be installed on the left side wall of the L1 compartment.	1	
80-99-10AA	U	<b>Sigtronics intercom with headsets. Jacks at each seating position and P Panel</b> Sigtronics intercom with headsets. Jacks provided to each seat and the pump operator panel. 6 - standard SE-8 headsets 1 - UL-67S Intercom 1 - Y-ADP- Radio make to be Motorola XPR 4550 1- Jack for pump operators panel is for headset SE-8	1	
80-99-15AA	U	<b>Adjustable dividers on pull out tray</b> There will five (5) adjustable dividers on the pull out tray 60-31-8800 located in the L1 compartment to house the following customer supplied components: 1 length of 25' 4" hose 1 length of 50' 2.5" hose 1 length of 50' 2.5" hose 1 6" low level strainer on its side	1	