THE CORPORATION OF THE MUNICIPALITY OF TEMAGAMI

BY-LAW NO. 17-1324

Being a by-law to authorize the Mayor and Clerk to execute a purchase agreement with Carrier Centers Inc. for an Initial Attack Fire Vehicle for the Temagami Fire Department.

WHEREAS under Section 8 of the Municipal Act, 2001, S.O. 2001, c. 25, as amended, the powers of a municipality shall be interpreted broadly to enable it to govern its affairs as it considers appropriate and to enhance the municipality's ability to respond to municipal issues;

AND WHEREAS under Section 9 of the Municipal Act, 2001, S.O. 2001, c. 25, as amended, a municipality has the capacity, rights, powers and privileges of a natural person for the purpose of exercising its authority under this or any other Act;

AND WHEREAS under Section 10 (1) of the Municipal Act, 2001, S.O. 2001, c. 25, as amended, a single-tier municipality may provide any service or thing that the municipality considers necessary or desirable for the public;

AND WHEREAS on the 12th day of January, 2017 the Council of the Corporation of the Municipality of Temagami passed Resolution 17-015 directing staff to initiate the purchase/ordering process with Carrier Centers Inc. to supply an Initial Attack Fire Vehicle, with an upset price of \$271,130.00 plus HST, for Council approval by by-law at a future council meeting;

NOW THEREFORE the Council of the Corporation of the Municipality of Temagami hereby enacts as follows:

- 1. That the Mayor and Clerk are hereby authorized and directed to execute the agreement attached hereto as Schedule "A" to this bylaw.
- 2. That the Temagami Fire Chief is hereby authorized to make minor modifications or corrections to Schedules "A" and "C" of the agreement that do not affect the price.
- 3. That the Clerk of the Municipality of Temagami is hereby authorized to make minor modifications or corrections of a grammatical or typographical nature to the by-law and schedule, after the passage of this by-law, where such modifications or corrections do not alter the intent of the by-law.
- 4. That this bylaw shall come into force and take effect upon final passing thereof.

BE TAKEN AS READ A FIRST time on this 2nd day of February 2017.

READ A SECOND AND THIRD time and finally passed this 2nd day of February 2017.

Henry Mayor Egundel Clerk Clerk

File 0IncomingDOther

PPP []

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Social Services



AGREEMENT FOR PURCHASE AND SALE QF GOQD\$

THIS AGREEMENT made this 2nd day of February, 2017

BETWEEN:

THE CORPORATION OF THE MUNICIPALITY OF TEMAGAMI

hereinafter referred to as "the Purchaser"

-and-

CARRIER TRUCK CENTER INC.

hereinafter referred to as "the Vendor"

IN CONSIDERATION of the respective covenants and agreements contained in this Agreement and for other good and valuable consideration (the receipt and sufficiency of which is mutually acknowledged), the parties covenant and agree as follows:

A. THE PURCHASE

1. Definitions

As used in this Agreement, unless their subject matter or context is inconsistent, the following terms shall have the following meanings:

- (a) "Equipment" means the equipment described in Schedule 'A' hereto;
- (b) "Delivery Date" means on or before the 2nd day of February, 2018.

2. Purchase and Sale

- (1) Purchase and sale. Subject to the terms and conditions of this Agreement, and in reliance on the representations, warranties and conditions set forth in this Agreement, the Vendor agrees to sell, assign, transfer and deliver the Equipment to the Purchaser.
- (2) Price. The Purchase Price for the Equipment shall be as set forth in Schedule "B".
- (3) *Payment.* The Purchaser shall pay and satisfy the prices on complete and satisfactory delivery of all Equipment.

AGREEMENT FOR PURCHASE AND SALE OF GOODS

THIS AGREEMENT made this 2nd day of February, 2017

BETWEEN:

THE CORPORATION OF THE MUNICIPALITY OF TEMAGAMI hereinafter referred to as "the Purchaser"

-and-

CARRIER TRUCK CENTER INC.

hereinafter referred to as "the Vendor"

IN CONSIDERATION of the respective covenants and agreements contained in this Agreement and for other good and valuable consideration (the receipt and sufficiency of which is mutually acknowledged), the parties covenant and agree as follows:

A. THE PURCHASE

1. Definitions

As used in this Agreement, unless their subject matter or context is inconsistent, the following terms shall have the following meanings:

- (a) "Equipment" means the equipment described in Schedule "A" hereto;
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2. Purchase and Sale

- (1) *Purchase and sale.* Subject to the terms and conditions of this Agreement, and in reliance on the representations, warranties and conditions set forth in this Agreement, the Vendor agrees to sell, assign, transfer and deliver the Equipment to the Purchaser.
- (2) Price. The Purchase Price for the Equipment shall be as set forth in Schedule "B".
- (3) *Payment.* The Purchaser shall pay and satisfy the prices on complete and satisfactory delivery of all Equipment.

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3. Representations and Warranties of the Vendor

The Vendor represents and warrants to the Purchaser that:

(a) the Vendor has all necessary corporate power, authority and capacity to enter into this Agreement and to perform its obligations under the Agreement;

(b) the execution and delivery of this Agreement and the consummation of the transaction contemplated under it have been duly authorized by all necessary corporate action on the part of the Vendor;

(c) this Agreement constitutes a valid and binding obligation of the Vendor enforceable against it in accordance with the terms of this Agreement, subject, however, to limitations with respect to enforcement imposed by law in connection with bankruptcy, insolvency or similar proceedings relating to creditor's rights generally and to the extent that equitable remedies such as specific performance and injunction are in the discretion of a court of competent jurisdiction;

(d) the Vendor is not a party to, bound or effected by or subject to any indenture, mortgage, lease, agreement, instrument, charter or by-law provision, statute, rule, regulation, judgment, order, writ, decree or law which, with or without the giving of notice of the lapse of time, or both, would be violated, contravened, breached by, or under which default would occur as a result of the execution, delivery and performance of this Agreement or the consummation of any of the transactions provided for in it;

(e) the Vendor is the absolute beneficial owner of the Equipment, with good and marketable title, free and clear or any liens, charges, encumbrances or rights of others (other than statutory liens for taxes, assessments and other governmental charges the payment for which is not yet due and owing) and is exclusively entitled to possess and dispose of the same;

(f) no person has any written or oral agreement, option, understanding or commitment, or any right of privilege capable of becoming an agreement for the purchase from the Vendor of any of the Equipment;

(g) there is no proceeding in progress or pending or threatened against, relating to or affecting the Vendor in connection with the Equipment which might be expected to have a materially adverse effect on the Equipment;

(h) the Vendor is not a non-resident of Canada for the purposes of the Income Tax Act, R.S.C. 1952, c. 148; and

(i)no consent, authorization or approval of, or exemption by, any governmental or public body or authority, or by any Person, whether pursuant to contract or otherwise, is required on connection with the execution, delivery and performance of this Agreement by the Vendor or of any of the instruments or agreements referred to, or the taking of any action contemplated.

All statements contained in any certificate or other instrument delivered by or on behalf of a party pursuant to or in connection with the transactions contemplated by this Agreement shall be deemed to be made by that party under this Agreement. All representations, warranties, covenants and agreements contained in this Agreement on the part of each of the parties shall survive the closing, and the execution and delivery of any bills of sale, instruments of conveyance, assignments or other instruments of transfer of title to any of the Equipment and the payment of the consideration therefore.

3. Representations and Warranties of the Vendor

The Vendor represents and warrants to the Purchaser that:

(a) the Vendor has all necessary corporate power, authority and capacity to enter into this Agreement and to perform its obligations under the Agreement;

(b) the execution and delivery of this Agreement and the consummation of the transaction contemplated under it have been duly authorized by all necessary corporate action on the part of the Vendor;

(c) this Agreement constitutes a valid and binding obligation of the Vendor enforceable against it in accordance with the terms of this Agreement, subject, however, to limitations with respect to enforcement imposed by law in connection with bankruptcy, insolvency or similar proceedings relating to creditor's rights generally and to the extent that equitable remedies such as specific performance and injunction are in the discretion of a court of competent jurisdiction;

(d) the Vendor is not a party to, bound or effected by or subject to any indenture, mortgage, lease, agreement, instrument, charter or by-law provision, statute, rule, regulation, judgment, order, writ, decree or law which, with or without the giving of notice of the lapse of time, or both, would be violated, contravened, breached by, or under which default would occur as a result of the execution, delivery and performance of this Agreement or the consummation of any of the transactions provided for in it;

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(f) no person has any written or oral agreement, option, understanding or commitment, or any right of privilege capable.of becoming an agreement for the purchase from the Vendor of any of the Equipment;

(g) there is no proceeding in progress or pending or threatened against, relating to or affecting the Vendor in connection with the Equipment which might be expected to have a materially adverse effect on the Equipment;

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(i)no consent, authorization or approval of, or exemption by, any governmental or public body or authority, or by any Person, whether pursuant to contract or otherwise, is required on connection with the execution, delivery and performance of this Agreement by the Vendor or of any of the instruments or agreements referred to, or the taking of any action contemplated.

All statements contained in any certificate or other instrument delivered by or on behalf of a party pursuant to or in connection with the transactions contemplated by this Agreement shall be deemed to be made by that party under this Agreement. All representations, warranties, covenants and agreements contained in this Agreement on the part of each of the parties shall survive the closing, and the execution and delivery of any bills of sale, instruments of conveyance, assignments or other instruments of transfer of title to any of the Equipment and the payment of the consideration therefore.

4. Conditions Precedent to Closing

The obligation of the Purchaser to complete the purchase of the Equipment under this Agreement shall be subject to the satisfaction of or compliance with, at or before delivery of the Equipment, each of the following conditions precedent (each of which is acknowledged to be the exclusive benefit of the Purchaser and may be waived by it in whole or in part):

(a)All of the written representations and warranties of the Vendor made in or pursuant to this Agreement, and any other agreement or certificate made or delivered, including, the representations and warranties made by the Vendor as set forth in paragraph 3, shall be true and correct in all material respects as at the Closing Time and with the same effect as if made at and as of the Closing Time;

(b) The Vendor shall have performed or complied with, in all respects, all of its obligations, covenants and agreements under this Agreement;

(c) All instruments of conveyance and other documentation relating to the same and purchase of the Equipment reasonably requested by the Purchaser including, without limitation, bills of sale, trade mark assignments, documentation relating to the due authorization and completion of sale and purchase and all actions and proceedings taken on or prior to the Closing in connection with the performance by the Vendor of its obligations under this Agreement, shall be satisfactory to the Purchaser and Purchaser's counsel and the Purchaser shall have received copies of all documentation or other evidence as it may reasonably request in order to establish the consummation of the transactions contemplated and the taking of all corporate proceedings in connection therewith in compliance with these conditions;

(d) All consents, approvals, orders and authorizations of any persons or governmental authorities in Canada or elsewhere (or registrations, declarations, filings or records with any authorities) including, without limitation, all registrations, recordings and filings with public authorities as may be required in connection with the transfer of ownership to the Purchaser of the assets shall have been obtained on or before the closing Time, provided that if, after using its best efforts, the Vendor shall have been unable to obtain any necessary consents, approvals, order and authorizations of any governmental authorities in Canada or elsewhere necessary for the completion of the transactions contemplated by this Agreement, and the Purchaser shall not waive that condition, this Agreement shall be null and void without liability between the parties; and

(e) The Vendor shall have complied with the provisions of the provincial bulk sales legislation.

Each of the parties shall take all actions as are within its power to control, and use its best efforts to cause other actions to be taken which are not within their power to control, so as to further comply with any conditions set forth in paragraph (1) which are for the benefit of any other party.

In the event that the Vendor or the Purchaser fails to comply with any condition precedent to closing set out in paragraph 4 (a) or (b) required to be complied with at or before the Closing Time and the Purchaser or the Vendor, as the case may be, does not waive that condition, this Agreement shall terminate.

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B. THE WARRANTY OBLIGATIONS OF THE VENDOR

5. Warranty

The Vendor expressly warrants that the Equipment covered by this agreement will conform to the specifications furnished by the Purchaser and will be merchantable, of good material and workmanship and free of defect and that the warranties attached as Schedule "D" shall apply to, the Equipment. In addition, the Vendor acknowledges that the Vendor knows of the Purchasers intended use and expressly warrants that the Equipment covered by this agreement which has been selected, designed, manufactured or assembled by the Vendor will be fit and sufficient for the particular purpose intended by the Purchaser. The Vendor further warrants the Equipment as detailed in Schedule "A" hereto.

6. Ownership

After purchase, all right, title and interest in and to the Equipment remains in Temagami and nothing in this agreement is to be taken as transferring to the Vendor any proprietary interest.

7. Insurance

The Vendor agrees to secure general liability coverage for the benefit of Temagami up to limits of \$5,000,000.00 that includes the Equipment when in the possession of the Vendor for warranty work, service or otherwise, all insurance premiums to be at the expense of the Vendor.

8. Notification

When the Equipment is in the possession of the Vendor for warranty work, service or otherwise, the Vendor is required to notify Temagami as soon as practicable, of any accident or circumstance involving damage or injury to the Equipment and to provide Temagami with particulars of it, the identity of any witnesses, and to furnish Temagami with information as might reasonably be requested to enable Temagami to be fully acquainted with the circumstances of the incident.

C. GENERAL

9. Non-transferability

The Vendor shall not assign the agreement without the consent of Temagami first being obtained in writing.

10. Disputes

Billing inquiries and disputes must be brought to the other party's attention within sixty (60) days of the invoice date. Failure to do so shall constitute acceptance of the accuracy of the entire contents of the invoice, and no further right to challenge the accuracy of any portion of such invoice will accrue.

14. Endurement

This Agreement shall endure to the benefit of and be binding on the parties and their respective successors and permitted assigns.

15. Further Assurances

The parties shall with reasonable diligence do all things and provide all reasonable assurances as may be required to consummate the transactions contemplated by this Agreement, and each party shall provide further documents or instruments required by any other party as may be reasonably necessary or desirable to effect the purpose of this Agreement and to carry out its provisions, whether before or after.

16. Entire Agreement

This Agreement, including the schedules attached hereto, constitute the entire agreement between the parties and except as stated in it and in the instruments and documents to be executed and delivered, contains all the representations or warranties among the parties of any kind. This Agreement may not be amended or modified in any respect except by written instrument signed by both parties.

17. Non-Merger

The representations, warranties, covenants and agreements contained in this Agreement or in any instrument, document or written statement delivered pursuant to this Agreement shall survive and not merge on closing.

18. Applicable Law

This Agreement shall be interpreted in accordance with the laws of the Province of Ontario.

IN WITNESS WHEREOF the parties hereto have set their corporate seals under the hands of their duly authorized officers.

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DATED at Temagami this	February, 2017.	
THE CORPORATION O	F THE MUNICIPALITY OF TEMAGAMI	
Per: Alle	ELunno00	
Mayor Lori Hunter	Municipal Clerk Elaine Gunnel	

CARRIER TRUCK CENTER IN DATED at Breatto day of VeXoruc 2017.

11. Confidentiality

(1) The Vendor shall maintain the confidentiality of all confidential information it may come into possession of by virtue of the supply, repair or maintenance of any or all equipment and shall not copy or use any such confidential information. The foregoing shall not apply to information which is or becomes publicly known otherwise than by reason or a breach of the Agreement by Temagami or has been independently developed outside the scope of the Agreement. Where the Vendor is required by law to disclose confidential information and to obtain an undertaking from the recipient to maintain the confidentiality thereof.

(2) Unless Temagami consents in writing or disclosure is made pursuant to a legal requirement, all information held by the Vendor regarding Temagami, other than Temagami's name, address, listed telephone number, domain name or "IP" number is confidential and may not be disclosed by the Vendor to anyone other than Temagami.

12. Time

Time shall be of the essence. The equipment must be delivered on or before the date set out on section 1 (b) of this agreement.

A deduction of \$200.00 per day **may** be made for each day over and above the quoted delivery date. The liquidated damages for delay will also apply if the unit is delivered and rejected until the unit is returned meeting specifications.

13. Notices

Any notice or other writing required or permitted to be given under this Agreement or for the purposes of it to any party, shall be sufficiently given if delivered personally, or if sent by prepaid registered mail or if transmitted by facsimile or other form of recorded communication to that party:

(a) in the case of a notice to the Purchaser at:

7 Lakeshore Drive, Temagami, Ontario. POH 2H0 Attention: Patrick Cormier, C.A.O., <u>cao@temaqami.ca</u> (705) 569-3421

and;

(b) in the case of a notice to the Vendor at: 6 Edmondson Street, Brantford, Ontario. N3R 7J3 Attention: Rod Harris, <u>rodharris@carriercenters ca</u> 1-866-896-3588 ext 6

or at any other address as the party to whom the writing is to be given shall have last notified the other party. Any notice delivered to the party to whom it is addressed as provided shall be deemed to have been given and received on the day it is delivered at that address. Provided that if that day is not a business day then the notice shall be deemed to have been given and received on the first business day next following that day. Any notice mailed shall be deemed to have been given and received on the third business day next following the date of its mailing. Any notice transmitted by facsimile or other form of recorded communication shall be deemed given and received on the first business day after its transmission.

SCHEDULE "A' (Equipment to be supplied)

Description and specifications of the Initial Attack Fire Apparatus to be supplied, taken from the successful bidders bid form, adjusted to reflect the actual equipment being purchased by Temagami will be attached hereto.

SCHEDULE "B" (Prices)

The Schedule of Prices from the successful bidders bid form, adjusted to reflect the actual equipment to be purchased by Temagami will be attached hereto.

SCHEDULE "C" (APPROVED DRAWINGS)

SCHEDULE "D" (Warranty)

The warranties, taken from the successful bidders bid form, will be attached hereto.

Municipality of Temagami

2017 Initial Attack Fire Apparatus Purchase Agreement

Schedule A

Description and specifications

of

Equipment to be supplied



EXCEPTIONS:

Page 11, Section 4.7 Metalfab's product liability insurance is five million

Vehicle Data Recorder is not available on the Ford Chassis and cannot be added. Additional seat belt sensor display other than OEM provision is not included.

GENERAL INFORMATION:

Introduction:

Metalfab Ltd. is located in Centreville, N.B., on the U.S. border halfway between Fredericton and Edmundston. The company was incorporated in 1967 as a Job Shop and Machine Shop to serve local farmers and industry in the Upper St. John River Valley. The main products during the first few years were playground equipment, truck bodies, side dumping hoppers for bulk lime and fertilizer, and custom fabrications. Although Metalfab fabricated a Fire Department tanker occasionally, it was not until 1977 that the manufacturing of Fire Apparatus became a significant part of the work done. Currently, in excess of 90% of sales are Fire Apparatus or related equipment with over 1100 units in service in Atlantic Canada, Ontario, and the New England states.

Standards:

In 1982, Metalfab obtained the Underwriters' Laboratories of Canada listing as a manufacturer of Fire Department Pumpers. In 1994, Metalfab obtained Underwriters' Laboratories Inc. listing to NFPA 1901 Standard for Automotive Fire Apparatus.

Metalfab is certified by the Canadian Welding Bureau to CSA W47.2 (Certification of Companies for Fusion Welding of Aluminum). Metalfab's Quality system is registered to ISO 9001 for the manufacture of Custom Emergency Vehicles (Fire Truck Bodies) by QMI-SAI Canada Limited.

Product:

Metalfab Fire Trucks are primarily extruded aluminum, and tanks are primarily polypropylene. We custom design each unit to meet customer specifications and offer many years of experience in features such as foam systems, warning and scene lighting, etc.

Quality, Service, and Product Improvement are an integral part of Metalfab's day to day operation. Each unit is tested and thoroughly inspected before shipment to the customer. Full time service personnel can provide routine maintenance on Fire Trucks as well as major repairs and training.

One (1) Certification for Fusion Welding of Aluminum 00-20-3500

Welding shall only be undertaken by a company Certified by the Canadian Welding Bureau to the requirements of CSA Standard W47.2-M1987, Certification of Companies for Fusion Welding of Aluminum.

The company shall employ full-time one or more welding supervisors responsible to the company for the supervision of welding. Each supervisor shall have five years of fabricating experience pertinent to the company's type of operation (Division 3).

The Canadian Welding Bureau is accredited by the Standards Council of Canada as a Certification Organization for the administration of CSA Standard W47.2.

One (1) Quality System registered to ISO 9001:2008

ETEON-0002



00-20-4000

Metalfab's Quality System is registered to ISO 9001 by QMI-SAI Canada Limited. ISO 9001, titled Quality Systems - Model for Quality Assurance in Production and Installation, is awarded to companies meeting and maintaining a strict series of quality-assurance guidelines. Receiving ISO 9001 certification means that a company has committed itself to maintaining a consistent level of quality across all areas of operation, from customer service and training to equipment calibration and maintenance. This certification is difficult to obtain and represents an organization's dedication to providing its customers with the best products and services possible.

One (1) 00-20-4500

Fire Apparatus Manufacturers' Association Membership

Metalfab is a member in good standing of the Fire Apparatus Manufacturers' Association.

FAMA is a non-profit trade association. Its overall goal is to improve business conditions and to advance and protect the interests of the fire and emergency services industry through the use of effective open communication. To accomplish this, FAMA members work closely with national and international organizations within the fire service and fire industry. Members assist in the development of safety and performance standards, programs and objectives for improving fire apparatus and equipment as well as fostering the highest possible industry standards.

FAMA also supports realistic and attainable standards in industry-related legislation and regulations. By networking within and outside the industry, FAMA has established an excellent working relationship with many government agencies. Members speak at seminars across the nation and have provided information at congressional and government hearings to support improved regulations related to the fire service and the safety of fire fighters.

While FAMA does not directly determine any standards, members serve on many committees of the National Fire Protection Association, or (NFPA), and actively participate in the development of NFPA standards that apply to fire apparatus and equipment. By working with the NFPA, FAMA members assist in the research and development of performance-based minimum standards related to the manufacture of fire apparatus and equipment. Throughout its history, FAMA has supported the research required for the development of safer, better products.



SPECIFICATIONS;

In the event of a disagreement between this proposal and the tender document, the tender document will prevail. Exceptions to this will occur when a "List of Deviations" is submitted.

It is the INTENT of these specifications to describe, in detail, the minimum requirements for a first class, CUSTOM BUILT, FIRE-FIGHTING UNIT. All parts not specifically mentioned which are necessary in order to provide a complete custom motor propelled truck shall be furnished by the bidder and shall conform in strength and quality of workmanship to that usually provided by the engineering practice indicated in these specifications.

Vehicle is designed to operate up to 20007600 metres above sea level and at grades up to 6%.

One (1) ULC S515-13 Compliance 10-11-1100

The apparatus shall be constructed to ULC S515-04 requirements and the unit shall also meet Department of Transportation regulations.

The unit shall also meet Canadian Motor Vehicle Safety Standards.

One (1) ULC Testing - Initial Attack with Pump

10-11-1500

This unit shall be tested by Underwriters' Laboratories of Canada at our Plant in order to ensure compliance with applicable standards. The tests include:

a pump capacity test, to check pump output from draft as well as a tank flow test

- a Drafting test, to ensure that the unit can flow water from draft in 30 seconds
- a Vacuum test, to ensure that there are no vacuum leaks
- a Relief Valve test, to ensure proper operation of the relief valve
- a weight test, to ensure that the vehicle is not overweight on either axle or in total
- a road test, to check acceleration and braking

After this test, a plate shall be installed showing the pump capacity and RPM, as well as the test date, unit serial number, and no load governed speed of the engine. CMVSS certification and safety mark are also installed.

One (1) Maximum length - 29' (348")

One (1) Maximum height - 9' 6" (114") 10-11-2200

One(1) Maximum width including mirrors 9' (108") 10-11-2288

One (1) Overall length is less than 30' 10-11-2300

ETEON-0002



Municipality of Temagami Initial Attack Fire Apparatus

One(1)	General Construction	
10-11-2500	The GVWR of the chassis shall be adequate to carry the fully equipped apparatus including full water and other tanks, the specified hose load, unequipped personnel weight, ground ladders, and a miscellaneous equipment allowance in accordance with specified standards.	I
One (1)	Preconstruction Meeting - by Carrier	
10-11-2600	A Preconstruction meeting shall be held to verify the specifications and drawings.	
One (1)	Manuals - two copies	
10-11-3000	At the time of delivery, two (2) copies of complete operation and service manuals will be provided covering the completed apparatus (body and equipment) as delivered and accepted, including the pump, wiring diagrams, lubrication charts, and fire fighting equipment delivered with the apparatus. Chassis manuals are those supplied by the chassis manufacturer.	
One (1)	Delivery - FOB Fire Department - by Carrier	
10-11-3600	The successful bidder shall, at his expense, deliver the apparatus to the Fire Department. A factory trained and authorized delivery instructor shall then remain with the apparatus to provide operational orientation to Fire Department personnel. Proper operational instruction of personnel is essential to ensure that the purchaser and user are aware of, and instructed in, the proper operation, care and maintenance of the apparatus delivered.	
	New apparatus orientation will be provided on the day following delivery. The delivery and orientation date shall be coordinated with the Fire Chief at a mutually convenient time. It shall be the responsibility of the Fire Department to insure that sufficient fire department personnel are in attendance to receive new vehicle orientation.	-
One (1) 10-11-4300	Payment Terms - Due on Delivery	
	Payment for the chassis, body and equipment is due on delivery of the completed apparatus. An invoice shall be issued prior to delivery to allow for preparation of payment.	
One (1) 10-20-1250	Hose bed capacity - standard Mini Pumper	
	The hose bed on this vehicle is designed for the standard ULC/NFPA hose storage requirement: Minimum 10 cubic feet for 2-1/2" hose, minimum 5' long Minimum 2 areas 3.5 cubic feet each for minimum 1-1/2" preconnected hose	
	The hose load expected on this vehicle is:	
	300' of 2-1/2" double jacket hose 400' of 1-1/2" double jacket hose	
One(1) 10-20-2400	Equipment carrying capacity exceeding ULC/NFPA requirements	
ETEON-0002	01/23/	'17



CHASSIS INFORMATION

One(1)	Chassis supplied by Metalfab - Ford F-550
20-11-1000	The chassis for the vehicle is provided by Metalfab.
One(1) 20-11-1600	Chassis Motor Vehicle Inspection by Carrier
One(1) 20-21-0500	Fluid capacity plate
	A permanent plate shall be affixed in the driver's compartment specifying the quantity and type of the following fluids used in the vehicle as applicable:
	Engine Coolant Transmission Fluid
	Pump Transmission Lubrication Fluid Pump Primer Fluid
	Drive Axle Lubrication Fluid Air conditioning refrigerant Air conditioning lubricant
	Power steering fluid
	Air compressor system lubricant
	Front tire cold pressure
	Rear tire cold pressure
One (1) 20-21-0600	Pumping test plate
	A plate shall be provided at the pump operator's panel that gives the rated discharges and pressures together with the speed of the engine as determined by the certification test, the position of the parallel/series pump as used, and the governed speed of the engine.
One (1) 20-21-1000	Maximum riders sign - 2 persons
	An accident prevention sign shall be affixed in the cab stating the maximum number of personnel the vehicle is designed to carry per NFPA standards. The sign shall be located in an area visible to the driver.
One(1)	Seat belt warning labels - 2 door chassis
20-21-1500	Signs that state "Occupants must be seated and belted when apparatus is in motion" shall be provided. They shall be visible from each seated position.
One (1) 20-21-1520	Helmet warning label - do not wear helmet
20-21-1520	Signs that state "Do Not Wear Helmet While Seated" shall be provided. They shall be visible from each seated position.
One(1)	Tire Pressure Indicators - Single Axle
20-21-1000	Each tire valve stem is equipped with a visual indicator of pressure in the specific tire.
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One(1)	Apparatus Information Label
20-21-1000	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"
One (1)	Non removable key
20-21-2000	The ignition key shall be made nonremovable from the cab interior by installation of a chain which attaches the key to the cab dash.
One (1)	Rear step warning label
20-21-3300	An accident prevention sign shall be located at the rear step area of the vehicle. It shall warn personnel that standing on the step while the vehicle is in motion is prohibited.
One (1)	Front mudflaps
20-21-3000	Heavy duty mudflaps shall be installed behind the front wheels to guard against road wash and debris.
One (1) 20-21-4000	Rear mudflaps - Metalfab Logo
20-21-4000	Heavy duty mudflaps shall be installed behind the rear wheels to guard against road wash and debris.
One(1) 20-21-4500	Transportation Safety Kit
20 21 4000	A Transportation Safety Kit consisting of a basic First Aid kit, a set of reflective safety triangles, and a 2- 1/2 pound fire extinguisher.
One(1) 20-31-0200	Fuel fill label -Ultra Low Sulfur Diesel only
20-31-0200	A label indicating "Ultra Low Sulfur Diesel Only" is installed at each chassis fuel tank fill connection.
One (1) 20-31-1900	Chassis cab painted red by Ford
20 01 1000	The chassis for this vehicle is not repainted, the body will be painted to match the colour of the chassis.
One (1) 20-31-7500	Console in cab
20-31-7300	A console is installed between the cab seats with the siren, switches, pump shift, and door ajar warning light. A storage area with hinged cover is also provided, Exterior finish is gray Zolatone.
One(1) 20-31-7588	Remove Center Section of front cab seat for room for console



One (1)	Transmission programming - Allison WT				
20-41-1100	The electronic control for the transmission is programmed to meet ULC and NFPA standards.				
One (1)	Extend exhaust pipe - RS front of rear wheels E				
20-41-1300	The exhaust pipe is extended to exit ahead of the rear wheels on the right side in compliance with the chassis manufacturer's specifications for current emissions.				
One (1) 20-41-1801	Battery boost terminals not required - batteries accessible				
One (1) 20-41-25AA	Dual Fuel fill / DEF fill guard with door				
One (1) 20-41-5000	Rear Tow bar / hitch				
	The apparatus body shall be fitted with a rear tow bar / hitch receiver combination. The tow bar assembly shall be attached to the chassis frame.				
One (1) 20-51-0500	Master disconnect switch - manual				
20 01 0000	A 2 pole master load disconnect switch will be provided to isolate the batteries from the electrical loads.				
One(1) 20-51-2600	Back up alarm				
	A back up alarm shall be installed at the rear of the unit, wired to operate when the transmission is in Reverse.				
Two (2) 20-51-6200	120 volt 20 A shore line connection in chassis cab				
20 01 0200	A 120 volt 5-20R duplex receptacle is installed in the chassis cab as outlined in the Shop Note, wired to the 120 volt inlet.				
One (1) 20-51-6500	Kussmaul Autocharge 1000 battery conditioner w/battery saver				
	A Kussmaul Autocharge 1000 15 A/12 VDC battery charger is installed in the chassis cab unless otherwise specified in the Shop Note. A 3 amp battery saver power supply is provided to accommodate parasitic loads such as radio and battery chargers. This unit draws 3.5 A/120 VAC maximum.				
One (1) 20-51-7100	Electric System Manager				
	The apparatus shall be equipped with a Classi Electrical System Manager (ESM) for performing electrical load management. The ESM shall be capable of controlling up to (7) loads according to the voltages which are present.				
	The ESM shall monitor both main and isolated battery banks and indicate low voltage independently when voltage drops below 11.8 volts for more than 2 minutes. The ESM will sequence loads on and off at exact intervals when the master switch is toggled. The ESM will shed loads when voltage drops below corresponding shed point for 30 seconds. An output shall activate to indicate over-voltage when battery voltage is over 14.5 volts. A fast idle output shall activate when voltage drops below 12.3 volts for more than 1 minute and the appropriate interlocks are in place.				



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One (1)	Low Voltage Alarm in cab - ESM remote panel in rocker switch panel			
20-51-7300	A low voltage alarm is installed in the chassis cab rocker switch panel, connected to the Electric System Manager.			
One (1) 20-51-7500	Super Auto eject for 120 v - 20 A with sealed enclosure			
	A Kussmaul Super Auto Eject shore line inlet is installed in place of the standard 110 volt shore line connection.			
One (1)	Engine compartment lights (pair)			
20-51-6500	Incandescent work lights are installed in the engine compartment.			
One (1)	Rear View Camera system			
20-52-400	A Rearview Systems Model STM-5600 camera with 5.6" colour LCD monitor in the chassis cab is installed to allow the driver to see the blind spot behind the vehicle from the chassis driver's seat.			
One (1)	Shoreline outlet			
20-99-05AA	A 120 volt 5-20R duplex receptacle shall be installed in the L1 compartment as outlined in the Shop Note, The outlet will be connected to the shoreline power connection.			
One (1) 20-99-15AA	Air intake ember separator			
PUMP and PL	UMBING			
PUMP and PL	JMBING Hale DSD midship pump - 1050 IGPM			
PUMP and PL One (1) 30-11-3800	UMBING Hale DSD midship pump - 1050 IGPM Pump Assembly 1. The pump shall be of a size and design to mount on the chassis rails of commercial and custom truck chassis, and have the capacity of 1050 Imperial gallons per minute NFPA 1901 rated performance.			
PUMP and PL One (1) 30-11-3800	UMBING Hale DSD midship pump - 1050 IGPM Pump Assembly 1. The pump shall be of a size and design to mount on the chassis rails of commercial and custom truck chassis, and have the capacity of 1050 Imperial gallons per minute NFPA 1901 rated performance. 2. The entire pump shall be cast, manufactured and tested at the pump manufacturer's factory.			
PUMP and PL One (1) 30-11-3800	 JMBING Hale DSD midship pump - 1050 IGPM Pump Assembly The pump shall be of a size and design to mount on the chassis rails of commercial and custom truck chassis, and have the capacity of 1050 Imperial gallons per minute NFPA 1901 rated performance. The entire pump shall be cast, manufactured and tested at the pump manufacturer's factory. The pump shall be driven by a drive line from the truck transmission. The engine shall provide sufficient horsepower and RPM to enable pump to meet and exceed its rated performance. 			
PUMP and PL One (1) 30-11-3800	 JUMBING Hale DSD midship pump - 1050 IGPM Pump Assembly The pump shall be of a size and design to mount on the chassis rails of commercial and custom truck chassis, and have the capacity of 1050 Imperial gallons per minute NFPA 1901 rated performance. The entire pump shall be cast, manufactured and tested at the pump manufacturer's factory. The pump shall be driven by a drive line from the truck transmission. The engine shall provide sufficient horsepower and RPM to enable pump to meet and exceed its rated performance. The entire pump, both suction and discharge passages, shall be hydrostatically tested to a pressure of 600 PSI (41.3 BAR). The pump shall be fully tested at the pump manufacturer's factory to the performance spots as outlined by the latest NFPA Standard 1901. Pump shall be free from objectionable pulsation and vibration. 			
PUMP and PL One (1) 30-11-3800	 JMBING Hale DSD midship pump - 1050 IGPM Pump Assembly The pump shall be of a size and design to mount on the chassis rails of commercial and custom truck chassis, and have the capacity of 1050 Imperial gallons per minute NFPA 1901 rated performance. The entire pump shall be cast, manufactured and tested at the pump manufacturer's factory. The pump shall be driven by a drive line from the truck transmission. The engine shall provide sufficient horsepower and RPM to enable pump to meet and exceed its rated performance. The entire pump, both suction and discharge passages, shall be hydrostatically tested to a pressure of 600 PSI (41.3 BAR). The pump shall be fully tested at the pump manufacturer's factory to the performance spots as outlined by the latest NFPA Standard 1901. Pump shall be free from objectionable pulsation and vibration. The pump body and related parts shall be of fine grain alloy cast iron, with a minimum tensile strength of 30,000 PSI (2069 BAR). All moving parts in contact with water shall be of high quality bronze or stainless steel. Pump utilizing castings made of lower tensile strength cast iron not acceptable. 			
PUMP and PL One (1) 30-11-3800	 JMBING Hale DSD midship pump - 1050 IGPM Pump Assembly The pump shall be of a size and design to mount on the chassis rails of commercial and custom truck chassis, and have the capacity of 1050 Imperial gallons per minute NFPA 1901 rated performance. The entire pump shall be cast, manufactured and tested at the pump manufacturer's factory. The pump shall be driven by a drive line from the truck transmission. The engine shall provide sufficient horsepower and RPM to enable pump to meet and exceed its rated performance. The entire pump, both suction and discharge passages, shall be hydrostatically tested to a pressure of 600 PSI (41.3 BAR). The pump shall be fully tested at the pump manufacturer's factory to the performance spots as outlined by the latest NFPA Standard 1901. Pump shall be free from objectionable pulsation and vibration. The pump body and related parts shall be of fine grain alloy cast iron, with a minimum tensile strength of 30,000 PSI (2069 BAR). All moving parts in contact with water shall be of high quality bronze or stainless steel. Pump utilizing castings made of lower tensile strength cast iron not acceptable. Pump body shall be vertically split, on a single plane, for easy removal of impeller assembly, including clearance rings. 			

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7. 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.

8. The pump shaft shall have only one mechanical seal. The mechanical seal shall be spring loaded, maintenance free and self-adjusting. (No exceptions.)

9. Pump impeller shall be hard, fine grain bronze of the mixed flow design; accurately machined, handground 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.

10. Impeller clearance rings shall be bronze, easily renewable without replacing impellers or pump volute body.

11. The pump shaft shall be heat-treated, electric furnace, corrosion resistant, stainless steel. Pump shaft must be sealed with double lip oil seal to keep road dirt and water out of gearbox.

Gearbox

1. The gearbox shall be cast, manufactured and tested at the pump manufacturer's factory. (No exceptions.)

2. Pump gearbox shall be of sufficient size to withstand up to 16,000 lbs. ft. of torque of the engine in road operating condition. The gearbox shall be designed of ample capacity for lubrication reserve and to maintain the proper operating temperature.

3. The gearbox drive shafts shall be of heat-treated chromium steel and at least 2 3/4 inches in diameter, on both the input and output drive shafts. They shall withstand the full torque of the engine in both road and pump operating conditions.

4. All gears, both drive and pump, shall be of highest quality electric furnace chrome nickel steel. Bores shall be ground to size and teeth integrated, crown-shaved and hardened, to give an extremely accurate gear for long life, smooth, quiet running and higher load carrying capability. An accurately cut spur design shall be provided to eliminate all possible end thrust. (No exceptions.)

5. The pump ratio shall be selected by the apparatus manufacturer to give maximum performance with the engine and transmission selected.

6. If gearbox is equipped with a power shift, the shifting mechanism shall be a heat treated, hard anodized aluminum power cylinder, with stainless steel shaft. An in-cab control for rapid shift shall be provided that locks in Road or Pump.

7. For automatic transmissions, three green warning lights shall be provided to indicate to the operator when the pump has completed the shift from Road to Pump position. Two green lights to be located in the truck driving compartment and one green light on pump operator's panel adjacent to the throttle control. For manual transmissions, one green warning light will be provided for the driving compartment. All lights to have appropriate identification/instruction plates.

One (1) Plumbing - non manifold pump SM SS 30-15-0304

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One (1) Valves and controls - side mount panel

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30-20-0500	
	All 1" or larger in-line valves will be full flow, drop-out type valves. All In-line valves will be controlled by chrome plated locking T handles with rods designed to permit easy operation and minimal distortion when opening or closing a valve.
	All 2-1/2" valves for discharges located on the right and left side pump panels will be operated using lever type controls or by chrome plated locking "T" handles located on the pump operators panel unless otherwise specified.
	All 3" and larger discharge valves will be designed to slow the opening and closing of the valve to comply with applicable ULC and NFPA standards.
One (1) 30-20-1002	Akron valves specified
00 20 1002	Suction and discharge valves to be AKRON brand.
One (1) 30-20-1620	Piping stainless steel - MG, DSD pumps
	All piping will be heavy duty stainless steel type and piping components in contact with water will be non corrosive materials. Where vibration or chassis flexing may damage or loosen piping, all plumbing exiting the pump enclosure area will be equipped with victaulic or rubber couplings as necessary. Wherever threaded joints are used, the sealing compound will be of the non-hardening type to ensure ease of removal for repair or replacement of couplings. All piping will be subjected to hydrostatic test consisting of pressurizing the entire pump and valves, including suction lines. Following the pressure test, a vacuum test will be applied to the entire pump and valves. This test consists of developing 24 inches of vacuum and holding that vacuum for 10 minutes while not losing in excess of 10 inches of vacuum.
One (1) 30-20-1700	1-1/2" thread specifications - NPSH
One (1) 30-20-1800	2-1/2" thread specifications - CSA
One (1) 30-20-2000	Piping hydrostatic test
30-20-2000	The pump and plumbing shall be hydrostatically tested to a pressure of 250 psi. The Tank Fill and Tank to Pump valves shall be closed; all other inlets and outlets shall be open and capped. This pressure shall be maintained for 3 minutes.
One (1)	Anodes in suction and discharge piping -AP/MG/DSD
50-20-2310	Two anodes are installed, one in the suction side of the pump and one in the discharge side of the pump to protect the pump and piping from galvanic corrosion.
One (1) 30-21-5520	Tank to Pump SS 3" w/ check valve non manifold pump
00 21 0020	A 3" quarter turn valve with check valve to prevent accidental pressurization of the water tank through the pump connection is installed in the supply line from the tank to the pump.
One(1) 30-22-0520	Tank Fill valve 2" SS
<u>00-22-0020</u>	
	A 2" quarter turn valve is installed in the supply line from the pump to the tank.

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One(1)	Suction - 6" not gated each side SS non manifold pump 6" header
30-31-4020	Two 6" (not gated) -1 each side; equipped with long handle chrome caps. Inlets will have removable strainers.
One (1)	Suction - 2-1/2" left side SS, bleeder, non manifold pump
30-32-7550	2-1/2" left side; quarter turn ball valve with chrome plated female swivel connection, bleeder valve, includes chrome plug and chain. This valve is controlled by a lever control or a locking pull control at the valve.
One(1)	Suction - 2-1/2" right side SS, bleeder, non manifold pump
30-32-8050	2-1/2" right side; quarter turn ball valve with chrome plated female swivel connection, bleeder valve, includes chrome plug and chain. This valve is controlled by a lever control or locking pull control at the valve.
One(1)	4" right discharge, plumbed 3", non manifold pump
30-40-2006	4" right side; plumbed with 3" discharge valve, includes slow close device, 30 degree 3" x 4" Storz adapter, bleeder valve, and blind cap.
Two (2)	2-1/2" LS discharge SS, bleeder, non manifold pump
30-41-2540	2-1/2" left side; plumbed with 2-1/2" discharge valve, includes 30 degree chrome plated droop snoot, bleeder valve, and rocker lug chrome cap with chain.
Two (2)	1-1/2" crosslay (each) SS, 2" valve, bleeder
30-44-0320	1-1/2" preconnect in transverse hose bed above the pump panel. Equipped with swivel to allow use from either side of the unit, plumbed with 2" valve to allow the use of 1-3/4" discharge hose. The transverse hose bed is equipped with stainless steel rollers on each end for easier hose removal. Bleeder valve provided on pump panel.
One (1) 30-44-3520	2-1/2" crosslay (each) SS, 2" valve, bleeder
	One (2) 2-1/2" preconnect in transverse hose bed above the pump panel. Equipped with swivel to allow use from either side of the unit, plumbed with 2 1/2" valve to allow the use of 2 $\frac{1}{2}$ " discharge hose. The transverse hose bed is equipped with stainless steel rollers on each end for easier hose removal. Bleeder valve provided on pump panel.
One(1) 30-51-0888	Manual pump shift for miship pump
One (1)	Class One "TPG Plus" Governor/Throttle
30-51-6640	This apparatus shall be equipped with a Class 1 Total Pressure Governor Plus engine/pump governor/throttle system that is connected directly to the engine Electronic Control Module (ECM) via J1939. The TPG is to operate as a pressure sensor (regulating) governor eliminating any need for a relief
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	valve on the discharge side of the pump. Battery volta pressure, and engine RPM are also displayed on the	ge, engine/transmission temperature, engine TPG along with audible alarms.	e oil
	The TPG Plus also acts as a Master Pump Discharge	and Intake Gauge.	
	A special preset feature shall permit a predetermined RPM will be displayed on the message display of the operator.	pressure or RPM to be set. The preset press TPG. The preset shall be easily adjustable b	sure or y the
One(1)	Suction side relief V/V, manifold pump		
30-51-7000	A pre-set, spring-loaded 2-1/2" adjustable relief valve incoming pressure. The valve shall be adjustable from shall attach directly to the pump suction manifold. The the pump operator and shall terminate with a 2-1/2" m Do not cap". Shut-off valves or other means to disable permitted. Caps will not be installed in this line.	shall be installed to protect against excessive n 75 to 250 PSI, shall be preset at 125 PSI, a e outlet shall be piped away from, but within s hale adapter labelled "Intake pressure relief c e the operation of the relief system shall not l	e and sight of outlet - be
One (1)	Primer Hale oil less ESP with lubrication reservoir		
30-51-7700	The priming pump shall be a positive displacement ro the requirements of NFPA 1901. The pump body sha aluminum for wear and corrosion resistance. The pump shall be capable of producing 24 in (610 m The electric motor shall be a 12 VDC or 24 VDC total no more than 300 AMPS at 12 VDC and 150 AMPS at	tary vane electric motor driven pump conform Il be manufactured of heat treated anodized Im) Hg. Vacuum at 2000 ft (51 m) above sea Iy enclosed unit. While priming, the motor sh at 24 VDC	ning to level. all draw
	The priming pump shall be operated by a single contra	ol mounted on the pump operator panel.	
One (1)	Heat exchanger	E	
30-51-8000	The chassis radiator hose shall be equipped with a hi exchanger, which uses pump flow to reduce engine h system shall be controlled by a 1/4-tum valve on the the engine cooler line.	gh-efficiency tube bundle type closed circuit leat without contaminating engine coolant. Th pump operator's panel. A drain shall be furnis	heat ne shed in
One(1)	Pump cooler with control valve, check valve		
30-51-8500	A 3/8" bypass line with check valve is installed for pu pump panel.	mp cooling. This is controlled by a valve on t	he
One(1)	Master drain V/V, 12 port		
30-52-1000	A master drain valve will be provided. The valve will be connected in such a manner as to allow complete wa apparatus body away from the pump operator.	be located on the left side pump panel and ter drainage. Water will be drained below the	9
One(1)	Drain valve for foam system header		
30-52-2000	A drain valve is provided to relieve pressure in the for reduce the chance of foam infiltration in the pump.	am system header beyond the check valve a	nd
One (1)	Foam System - Hypro FoamPro 1600		
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30-52-4010

The Foam System shall be an electronic powered plunger type, fully automatic, variable speed, direct injection, discharge side foam proportioning system. The foam system shall be capable of injecting Class "A" or Class "B" foam from 0.1% to 1% based on the direct measurement of water flows and remain consistent within the specified flows and pressures.

The System shall be equipped with a control module, suitable for installation on the pump panel with a single ON/OFF switch and a Manual Dial foam percentage control. Incorporated within the motor driver shall be a microprocessor that receives input from the system flowmeter, while also monitoring foam concentrate pump output, comparing values to ensure that the operator preset proportional amounts of foam concentrate is injected into the discharge side of the water pump.

The control module shall enable the pump operator to:

Activate the foam proportioning system using an ON/OFF toggle switch. Select proportioning rates from O. 1% to 1%.

The system shall have the ability for continuous fire fighting operation while refilling the foam concentrate tank.

One(1) Foam concentrate label at foam tank fill 30-52-9100

A label is applied next to the foam fill area specifying the type of foam concentrate to be used, any restrictions on the type of foam concentrate that can be used, and "Warning: Do Not Mix Brands and Types of Foam"

One (1) Foam System Instruction Plates 30-52-9200

An instruction plate is installed at the operator's position including a piping schematic of the system and basic operating instructions

An additional plate is installed at the operators position which provides the following specifications: -Foam Classification type (Class A; Class B; Class A and B)

-Types of foam concentrate compatible with the system design (see operating manual) -Maximum/ minimum water flows (gpm)

-Maximum/minimum operating pressures

One (1) 30-52-9400

) NFPA Foam System certification test

Certification by manufacturer required stating the following (NFPA 21.11.1): -Foam system, as installed, complies with the foam equipment manufacturers installation recommendations

-Foam system has been calibrated and tested to meet the foam equipment manufacturers and the purchasers performance requirements

-The accuracy of the foam proportioning system meets the requirements of 21.10 (-0/+40% for ratios less than 1%; -0/+30% or one percentage point, whichever is less, for ratios of 1% and greater)

One (1) WATER AND FOAM TANKS

40-00-0000

One (1) Poly water tank (Imperial gallons) 40-11-2100

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The tank shall have the capacity specified within this proposal complete with a Lifetime Warranty.

CONSTRUCTION:

The tank shall be constructed of 1/2" thick non-corrosive stress relieved Copolymer Polypropylene thermoplastic.

The booster tank shall be so designed to be completely independent of the unit body and compartments and shall be of specified configuration.

All transverse swash partitions shall be manufactured of 3/8" thick Copolymer Polypropylene minimum and shall extend to just under the cover. The longitudinal swash partitions shall be constructed of 3/8" Copolymer Polypropylene and extend from the floor of the tank through the cover. In cases where the overall height of the tank exceeds 40 inches reinforcement shall be installed on the tank bottom to allow for more positive welding and provide greater strength.

All swash partitions shall be designed in such a manner as to reducing the water surge to a minimum for greater vehicle stability while still providing maximum air and water flow throughout the tank. All swash partitions interlock with one another and shall be welded to the walls of the tank as well as to each other. All joints and seams shall be nitrogen welded and shall undergo a high frequency voltage testing during fabrication of the tank.

TANK COVER:

Standard tank cover shall be fabricated of 1/2" Copolymer Polypropylene in three pieces recessed 3/8" from the top of the tank. All covers shall be welded to both the outer walls and longitudinal partitions for maximum integrity. Copolymer Polypropylene solid stock shall be installed through each cover and shall serve as both the anchorage location for lifting eyes and reinforcing the rigidity of the cover under fast filling conditions.

FILL TOWER:

The tank shall have be equipped with a manual fill tower combined with vent and 1/4" Polypropylene removable screen. The Fill tower shall be constructed of 1/2" Copolymer Polypropylene with minimum dimension of 8"x 8" and shall have a hinged type cover. Inside the fill tower approximately half way from the top shall be fastened a vent overflow pipe. The vent overflow pipe shall be minimum 4" ID schedule 40 Polypropylene designed to run through the water tank and discharge behind the rear axle at a location specified by the purchaser to better maximize vehicle traction. The fill tower shall be located in the front left comer of the tank unless otherwise specified by the purchaser in Special Provisions.

SUMP BOX:

The tank shall have one (1) sump and shall be constructed of 1/2" Copolymer Polypropylene and location shall be specified by the purchaser.

On tanks that require a front suction, a 3" NPT schedule 40 Polypropylene pipe shall be installed with a dip tube from the front of the tank to the tank sump box. The sump shall have a 3" NPT threaded outlet on the bottom and shall be used as a combination clean out and drain. An antiswirl plate shall be located on all tanks approximately 2" above the sump.

INLET/OUTLET:

There will be one (1) standard tank-to-pump suction line with a minimum of 3" NPT coupling and one (1) standard tank fill with 2" NPT coupling unless specified otherwise in special provisions. All tank fill couplings shall be equipped with a flow deflector to break up the stream of water entering the tank, and be capable of withstanding sustained fill rates of up to 3750 LPM. All optional fittings, flanges, and pass through sleeves must be specified in Special Provisions and shall meet all NFPA and/or ULC guidelines in effect at the time of manufacture.

MOUNTING

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The ULTRA-TANK shall rest on the body cross members and may require additional support so as not to allow for more than 520 square inches of unsupported area under the area of the tank floor, and in cases where overall height of the tank exceeds 38 inches, the unsupported area of the tank floor shall be reduced to not more than 390 square inches. Additionally the tank must have support to the contour of the tank floor and outside perimeter to prevent tank from shifting side to side and from front to rear. Where square tubing and/or channel subframes are incorporated in the manufacturer's body structure, corner angles shall be installed having a minimum of 4" x 4" x 1/4" x 6" in height for the purpose of capturing and preventing shifting of the tank. The tank must be completely isolated from the supporting crossmembers with the use of rubber strips with a minimum thickness and width dimension of 1/4" x 2" and a minimum Rockwell Hardness of 60 durometer. In installations where tank hold downs are not incorporated in the construction of the body, a restraint system shall be installed using angle having the minimum dimension of 3" x 3" x 1/4" with a total length of 6" to 14" long bolted to the side of the body of the vehicle halfway from the front and rear of the tank and extended down to rest on the top outside edge of the tank and shall be isoltated from the tank using a hard rubber pad with 1/4" minimum thickness affixed to the underside of the angle. Mounting block and hose bed floor designs shall be fabricated so that the floor slat supports extend from side wall to side wall and shall not be permitted to drop off the edge of the tank or come in contact with the covers where a puncture could occur. Hose floor whall have a loading capacity of 200 pounds per square foot, and whenever possible shall be evenly distributed. The tank shall be completely removable without dismantling or disturbing the apparatus body structure.

One (1) Water tank capacity certification (tank manufacturer) 40-11-2200

A certificate specifying the capacity of the water tank is provided by the water tank manufacturer.

One (1) Tank capacity - 300 Imp requested - 40-11-3500

Water tank capacity of 300 Imperial Gallons.

One (1) Foam cell - 20 Imperial gallon 40-12-4500

A 20 Imperial gallon foam cell is incorporated into the tank.

One (1) 4" tank to pump connection 40-21-1000

One (1) 2" tank fill connection 40-22-0500

One (1) 1" water level gauge connection 40-23-0500

One (1) 1" foam level gauge connection 40-23-1000

One (1) 3" plug in sump box 40-30-0400

A 3" plug is installed in the tank sump box cleanout.

One(1) ELECTRICAL 50-00-0000

30-00-000

One (1) Base electrical system

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50-11-0500

All electrical circuit feeder wiring supplied and installed by the apparatus manufacturer shall be stranded alloy copper conductors of a gauge rated to carry 125% of the maximum current for which the circuit is protected. Insulation shall be in accordance with SAE J1128, type SXL, and wired to SAE J1292, for such loading at the potential employed. Voltage drops in all wiring from the power source to the using device shall not exceed 10%. Overall covering of conductors shall be 280 degrees F. minimum flame retardant loom or braid. All connections shall be made with lugs or terminals mechanically secured to the conductors. Wiring shall be thoroughly secured in place and suitable protected against heat, oil and physical damage. All body wiring is colour coded and marked every 3" as to function. All circuits are protected by autoreset circuit breakers. The power distribution panel is located in the pump compartment or behind the back wall of the front side compartment depending on the muffler location. Circuits are provided with properly rated low voltage overcurrent protective breakers. Such circuit breakers are readily accessible and protected against excessive heat, physical damage and water spray. Switches, relays, terminals and connectors have a direct current rating of 125% of maximum current for which the circuit is protected. All wiring is done to NFPA standards and SAE standards and comply with CMVSS regulations.

One (1) Warning Light Certification

Certification from the warning light manufacturer is provided to confirm that the lighting system meets current NFPA 1901 standards.

- One (1) Low Voltage Electrical system test 50-11-0700
- One (1) Low Voltage Electrical System Documents
- One (1) Rocker switch panel with master warning switch
- 50-11-0900

50-11-0800

50-11-0600

A rocker switch panel is installed with a Master switch to control all emergency lighting to comply with applicable standards.

- One (1) Federal PA300 100 watt siren
- 50-11-1400

50-11-1620

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- A 100 watt siren shall be mounted in the cab with the following functions supported:
 - yelp, wail, and Priority tone
 - PA operation, microphone included
 - manual operation of siren
- -capability of broadcasting radio transmissions through the siren speaker
- One (1) Siren speaker, 100 watt, in front bumper
 - A 100 watt speaker is mounted in the front bumper.
- One (1) Siren to be accessible to driver and officer 50-11-2600
- One (1) Whelen FN60QLED LED light bar NFPA
- 50-11-6100 This unit shall be equipped with a full width Whelen LED light bar mounted on the cab, which shall be reinforced to carry the weight. This light shall be controlled from the cab.

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One (1) 50-11-6600	Rear LED Traffic Advisor warning lights - surface mount
30-11-0000	An 8 lamp amber LED flashing directional light is installed under the rear hose bed with control head in cab. This system is used for traffic control and additional visibility when vehicle is parked on highway.
One(1) 50-12-8520	Front LED flashers (pr)-Whelen red LED 600 with integral flasher
	This unit shall be equipped with flashing red LED lights at the front of the vehicle
One (1)	Rear LED flashers (pr)-Whelen red LED 600 with integral flasher
50-12-0010	This unit shall be equipped with flashing red LED lights at the rear of the vehicle
One(1)	Front side inter Its (pr) - Whelen red LED 500 with integral flasher
50-12-67 10	This unit shall be equipped with flashing red LED lights in the side of the hood (intersection lights).
Two (2)	Body side inter Its (pr)-Whelen red LED 600 with integral flasher
30-12-0010	This unit shall be equipped with flashing red LED lights in the side of the rear fender wells (intersection lights).
Two (2) 50-21-25AA	Whelen telescoping Spot/Flood 12 volt PFS2P1 W/86930WBC pole
One(1)	Compartment lighting - LED tube lights in each compartment (rollup doors)
30-21-3100	Vertical tube type compartment lights will be provided in each enclosed compartment, and will be controlled automatically when compartment door is opened.
One (1)	Door Ajar warning light
50-21-5500	Warning Light is installed to indicate when a compartment or chassis door is open.
One(1)	Step lights for body steps - 4" LED
50-21-0001	Step lights are installed to light all body work surfaces, steps, and walkways.
One (1) 50-21-8200	Step lights for chassis steps - LED
00 21 0200	Step lights are installed to light all chassis entry steps.
One(1) 50-21-8600	LED clearance Its and reflectors
	LED clearance and marker, and a license plate light, along with reflectors will be mounted in accordance with federal regulations.
One (1) 50-22-0750	Whelen 64 LED CAST 4V tail/brake-turn-backup-warning module (pr)

ETEON-0002



One (1)

Hose bed lighting - LED on front partition

Municipality of Temagami Initial Attack Fire Apparatus Detailed Specifications for Contract

A module including a red tail/brake LED light, an amber LED turn signal, a clear LED back up light, and an LED warning light in a chrome housing is installed at the rear of the unit on each side.

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60-10-1000	The body of this unit is designed to ensure correct load distribution on the chassis and is constructed of custom aluminum extrusions with 3/16" alloy aluminum plate used for sides, compartments, and exterior panels. The body panels are interlocked with these extrusions, then MIG or TIG welded for high strength and rigidity. The body is fabricated on a subframe of min. 3" x 3" x 1/4" aluminum square tubing, and is
One(1)	Mini Pumper extruded aluminum body
One (1) 60-00-0000	BODY
51-31-4500	The line voltage system on this unit is tested per NFPA 1901 using a dielectric strength tester. It is tested at 900 volts for one minute.
One (1)	A breaker panel with circuit breakers and devices is installed as outlined in the Shop Note. The line voltage system is installed to NFPA standards, and a dielectric voltage withstand test is performed as outlined in NFPA 1901. Dielectric strength test for line voltage system
One(1) 51-31-3000	120 volt wiring
30-99-03AA	Two (2) Whelen 600 LED scene lights shall be installed on the rear of the apparatus body, one each side as high as possible. The lights shall be switched from the chassis console and labelled as " rear scene The lights may be optionally controlled to come on with Reverse gear.
Two (2) 50-99-0544	Rear Scene Lights - Whelen 600 LED
50-35-0560	A VHF antenna is supplied and installed on the roof of the vehicle or as outlined in the shop note.
One (1)	VHF antenna with base - commercial chassis
50-55-0500	The Municipality shall provide the make and model of the mobile two way radio to be installed. The apparatus manufacturer shall provide suitable electrical power in the console area to allow for connection to the customer installed radio. The apparatus manufacturer shall provide a cutout opening in the console face to receive the specified radio.
One(1) 50-35-0500	Provisions for the installation of customer supplied mobile radio
50-51-0020	Lighting is installed under the pump panel and rear steps, operable when the ground light switch is turned on.
One(1)	Ground lighting (4" LED) - side mount body
00-01-0000	Lighting is installed under chassis steps, operable when the cab door is opened and when the ground light switch is turned on.
One (1)	Ground lighting (4" LED) - 2 door chassis
50-31-65AA	



		-		
	attached to the frame of the truck by a spring loa reduce flexing in the tank and body.	ded mounting system and	d UMHW plastic sills which	
	Full fender liners are installed.			
	The compartments are constructed with interlock extrusions provides a stronger compartment, and Each compartment is equipped with vents in the of the "Sweep out" design for ease of cleaning.	king extrusions, then MIG d allows a compartment ir back and drain holes in t	or TIG welded. The use of Iterior with no visible welds. ne floor. All compartments are	Э
	DRIP MOLDING: Compartment tops over all side compartments w water runoff.	ill have a flange formed o	ut to provide protection again	ıst
One (1)	Aluminum tread plate fender surround - single ax	kle		
60-10-4500	The vertical trim around each rear wheel is alum	inum tread plate.		
One(1)	Integral aluminum fender trim			
00-10-4700	Extruded aluminum trim is installed around each	rear wheel and is an inte	gral part of the body.	
One(1)	Diamondback pumphouse steps			
00-10-3400	The running boards will be made of open strut al reinforced with a heavy duty support structure. R design.	uminum with non slip sur Running boards will not for	ace. Each step will be rigidly m any part of compartment	
One(1)	Diamondback 10" rear step			
60-10-5450	The rear step will be 10 inches deep, made of op reinforced.	pen strut aluminum with n	on slip surface, and rigidly	
One (1)	Bolt on extruded aluminum rub rail	Е		
00-10-0300	A bolt on extruded aluminum rub rail extends 1-1 aluminum channel with a grip type top edge and	/8" beyond the body on e is separated from the body	ach side. It is an extruded ly by nylon washers.	
One(1)	Front left side compartments full height	E		
60-11-0300	Compartments are installed on the left side of the wheels as noted in the shop note.	e unit ahead of the rear w	heels to a height above the re	ear
One (1)	Front right side compartments full height	E		
00-11-0700	Compartments are installed on the right side of the rear wheels as noted in the shop note.	he unit ahead of the rear	wheels to a height above the	
One(1) 60-11-1000	Rear left side compartments full height	E		
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	Compartments are installed on the left side of the unit behind the rear wheels to a height above th wheels as noted in the shop note.	e rear
One (1) 60-11-1400	Rear right side compartments full height E	
	Compartments are installed on the right side of the unit behind the rear wheels to a height above wheels as noted in the shop note.	the rear
Two (2) 60-11-2000	High side compartment (over 18") each	
	Full height compartments are installed above the rear wheels on the side of the body.	
One (1) 60-11-3200	Full Height Rear compartment	
	A full height compartment is installed at the rear of the unit above the rear step.	
Two (2) 60-11-5500	Rollup door - standard height	
	The door for this compartment is a roll up shutter, custom fitted to the compartment door opening. is natural aluminum	. Finish
One (1)	Rollup door - full height	
60-11-5520	The door for this compartment is a roll up shutter, custom fitted to the compartment door opening is natural aluminum.	. Finish
One (1) 60-11-5520	Rollup door - full height	
	The door for this compartment is a roll up shutter, custom fitted to the compartment door opening is natural aluminum.	. Finish
One(1) 60-11-5520	Rollup door - full height	
	The door for this compartment is a roll up shutter, custom fitted to the compartment door opening is natural aluminum.	. Finish
One (1) 60-11-5520	Rollup door - full height	
	The door for this compartment is a roll up shutter, custom fitted to the compartment door opening is natural aluminum.	. Finish
One (1)	Rollup door - full height	
60-11-5520	The door for this compartment is a roll up shutter, custom fitted to the compartment door opening is natural aluminum.	. Finish
One(1)	Extruded aluminum handrails	
ou-31-4100	All railing will be 1-1/4" outer diameter, extruded aluminum non slip rib type tubing. Two (2) vertice will be mounted on the rear of the body, one (1) each side. One (1) handrail will be installed below level of the hosebed.	al rails w the
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One(1) 60-31-5500	Steps at rear of body (folding)
	Folding steps will be provided at the rear of the apparatus, mounted to allow access to the body hosebed area with a maximum of 18" height between each step.
One(1) 60-31-5600	Steps and grab handles at front of body next to pump panel
	Folding steps will be installed on the front surface of the side compartments. Handrails are also installed at the front of the unit as necessary.
One(1) 60-31-6500	Compartment matting-Turtle tile
	Turtle Tile compartment floor matting will be installed in each enclosed compartment.
Two (2) 60-31-8000	BA bottle compt (ea)-fender well
	BA cylinder storage compartments will be installed in the rear fender wells as outlined in the shop note. These consist of a cast aluminum access door and a plastic storage tube to prevent damage to the cylinder.
Three (3) 60-31-81AA	Strap to secure SCBA Cylinder in tube
One (1) 60-31-8200	Toolboard
	One (1) full height pull out aluminum toolboard shall be installed in the L1 compartment in a designated location. The divider shall be a solid single panel of aluminum fitted a locking mechanism to store the toolboard in the fully open or fully closed position.
One(1) 60-31-8400	Fixed vertical divider
	One (1) full height fixed vertical divider shall be installed in the L1 compartment in a designated location. The divider shall be fitted with vertical tracking to receive adjustable shelving in the adjacent compartment area.
Two (2) 60-31-8800	Sliding tray (ea) - 600 pound capacity
	Two (2) Sliding tray(s) equipped with 600 pound capacity sliding hardware and latch to hold in the closed position shall be installed in compartment L1 and compartment B1.
One(1) 60-31-8810	Sliding tray (ea) - Adjustable tilt down
	One (1) adjustable tilt down tray with latch to hold in the closed position and open position shall be installed in compartment L2.
Nine (9)	Adjustable shelf (ea)
60-31-9600	Adjustable shelf or shelves equipped with aluminum unistruts are installed as directed by the Fire Department.
One(1) 60-32-3550	Two adjustable hose divider (each)
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Fully adjustable full length 1/4" aluminum hose bed partition(s) will be provided directly on top of the booster tank. Partition(s) will be removable for access to the booster tank.

One (1) Hose bed - aluminum 60-32-7500

Flooring to be aluminum channels and shall be properly spaced for ventilation. The flooring will be smooth and free from sharp edges to avoid hose damage. Floor will be removable for access to booster tank.

- One(1) Paint exterior Imron Elite 60-33-0000
 - All compartment doors, removable components, flush mounted lights, drip moldings, accessories and other equipment shall be mounted on the body prior to painting, then removed for final finishing to assure paint has been applied to surfaces under all equipment and components. All exterior surfaces of the body except tread plate and polished stainless steel are painted to prevent corrosion. The body is buffed, primed with acid etching primer, epoxy primed, and painted with 3 full coats of DUPONT ELITEpolyurethane enamel.
- One(1) Undercoat vehicle with KROWN rust protection 60-33-0200
 - Entire cab and body is treated with KROWN rust protection.
- One(1) Paint chassis wheels job colour with silver trim 60-33-0500

The chassis tires are masked and the wheels are painted the same colour as the body. A silver highlight stripe is painted around the rim next to the tire.

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- One(1) Paint pump and plumbing job colour 60-33-1000
- The pump and plumbing area are painted to match the body colour.
- One (1) Buffed finish compartment interior
- 60-33-1500 The interior of the aluminum compartments is buffed to remove scratches and provide a finished surface.
- One(1) Lettering 80 letters up to 3" tall 3 colour
- 60-33-2200 Lettering consisting of up to 80 letters of a size up to 3" tall shall be applied according to Fire Department requirements. The lettering shall be vinyl in the colour specified by the Fire Department and shall consist of one colour letter with two colours of shadow.

One(1) Reflective stripe - 4" white

- 60-33-3000 A four inch high white Scotchlite stripe will be provided. The stripe will be applied on a minimum of 50 percent of each side of the unit, 50 percent on the rear of the unit (unless a chevron is provided) and 25 percent on the front of the unit.
- One (1) Reflective stripe red and yellow chevron at rear

60-33-3310



An NFPA compliant reflective chevron is applied to cover at least 50% of the rear facing vertical surface of the vehicle. This consists of alternating red and yellow reflective stripes 6" wide in a chevron pattern sloping down and away from the centerline of the vehicle at an angle of 45 degrees.

One(1) 60-33-3500

Tarp over hose bed - red

A hosebed cover will be provided and secured to top body flanges by quarter turn snaps at front of hosebed and velcro on each side edge of the cover. A weighted flap will be furnished at the front of the cover, and velcro straps will be provided on the rear of the cover to tie around the rear handrail. Color to be red.

One(1) Reflective stripe - inside entry doors 60-33-3600

A minimum of 96 square inches of white reflective Scotchlite vinyl will be provided on the inside of each entry door to the vehicle.

One (1) Aluminum cover over crosslays - with end tarps (red)

A hinged aluminum crosslay hosebed cover will be provided over the three (3) crosslays. Small tarps with velcro straps to enclose each end shall be provided.

Two (2) 6" Hard suction hose storage - hose bed

60-40-4500

60-33-4600

Two (2)6" suction hose storage tubes shall be mounted on the main hosebed. The tubes shall be installed horizontally on the left side of the apparatus body. The top of the tubes shall act as a hosebed floor and a non adjustable divider shall act as the tubes sides extending full height in the hosebed.

One(1) Tube mount for ladders, with rear door 60-40-9000

A rear access slideway is installed for the ladder, including a rear door with lift and turn latch.

One(1) INSTRUMENTATION

70-00-0000

One (1) Warning Label on Pump Operator's Panel 70-11-0000

A warning label will be installed on the Pump Operator's Panel stating: WARNING: Death or serious injury might occur if proper operating procedures are not followed. The pump operator,

as well as individuals connecting supply or discharge hoses to the apparatus, must be familiar with the operator's manual, water hydraulics hazards, and component limitations.

One(1) Side mount instrument panel 70-11-0500

The pump operator's control panel will be located on the left side of the apparatus. Both side pump panels will be completely removable and designed for easy access and servicing.

One (1) Stainless steel instrument panels

70-11-1500 The instrument and pump panels on this unit are fabricated from 14 gauge 304 stainless steel with brushed finish.

One (1) 70-11-3200	Colour coded tags
	Identification plates will be provided for all gauges, controls, connections, switches, inlets and outlets. Plates will be engraved in color coded polymer material for durability and accurate identification of controls.
One(1) 70-11-40AA	Stainless steel panel hoods with Weldon LED lights - RS
One(1) 70-11-41AA	Stainless steel panel hoods with Weldon LED lights - LS
One (1) 70-11-5500	Right side tread plate pump access door
	An access door to the pump compartment is installed on the right side of the pump house.
One (1) 70-11-75AA	Heat pan - Aluminum with neoprene rubber seal
Two (2)	Heater in pump compartment
70-11-0000	A 30,000 BTU hot water heater is installed in the pump compartment with fan controls at the pump panel.
Two (2)	4-1/2" compound gauge - dual face 0-600
70-20-0500	Dual face (kPa and PSI) compound gauges, 4-1/2" diameter, are installed on the pump operator's panel, one plumbed to the suction side of the pump and one to the discharge side of the pump.
Six (6)	2-1/2" pressure gauge - dual face 0-600
70-20-1500	Dual face (kPa and PSI) pressure gauges, 2-1/2" diameter, are installed on the pump operator's panel, one plumbed to each discharge.
One (1) 70-20-2500	Primer control
	A control is mounted on the pump panel to operate the primer pump.
One (1) 70-20-3100	Class One Governor Control
	A Class One Governor control is installed on the pump operator's panel to control pump pressure and engine speed.
One(1)	Electric water level gauge on pump panel, Class One
70-20-3500	A water level gauge is installed on the pump panel with four indicator lights showing quarter, half, three quarter and full tank levels. The sender has no moving parts.
One(1) 70-20-6500	Test gauge panel
	Connections for pump vacuum and pressure are installed on the pump panel for use when testing the pump.
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One (1) 70-20-7500	Heat exchanger control valve
	A quarter turn valve to allow flow of water through the engine heat exchanger is mounted on the pump panel.
One(1) 70-20-7600	Pump cooler control valve
	A quarter turn valve to allow flow of water through the pump cooler is mounted on the pump panel.
One (1) 70-21-1500	Electric Foam Level gauge on pump panel, Class One
	A foam level gauge is installed on the pump panel with four indicator lights showing quarter, half, three quarter and full tank levels for the foam tank. The sender has no moving parts.
One (1) 70-21-5500	Panel readout for Battery Conditioner
	A readout for the battery conditioner is installed on the pump panel
One (1) 70-99-10AA	Winterization
	Flexible rubber seals shall be installed around all intake and discharge openings on right and left pump Panel.
One (1)	ACCESSORIES
80-11-0000	The following accessories and mounting brackets will be installed on this unit:
Two (2)	6" x 10' lightweight suction hose (ea)
80-11-5000	6" X 10' lightweight PVC suction hose with threaded pyrolite fittings
One(1) 80-12-2500	6" barrel strainer
	6" barrel strainer, threaded pyrolite
Two (2) 80-13-1000	Hose wrenches (double) with holder
	Hose wrenches (2 for rocker lug connections) with panel mount bracket
One(1) 80-13-2500	Pike pole, fibreglass handle -8' long
One (1) 80-13-2510	Pike pole, fibreglass handle - 6' long
One (1) 80-14-0510	24' 3 section extension ladder PEL3 24
	24' 3 section aluminum extension ladder, Alco Lite PEL3-24 series
One (1) 80-14-5000	12' aluminum roof ladder PRL-12
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12' aluminum roof ladder, Alco Lite PRL-12 series

One (1) 10' aluminum folding attic ladder FL-10 80-14-8500

10' aluminum folding attic ladder, Alco Lite FL-10 series

Four (4) SCBA bracket with strap - compt mount 80-18-0500

SCBA mounting bracket with retaining strap - compartment mount only

Two (2) Large folding wheel chock - aluminum (ea) not mounted 80-19-0500

Cast aluminum wheel chock approved for use on tires up to 44" diameter.

Two (2) Horizontal bracket for folding wheel chock (ea) 80-19-0600

ETEON-0002

TEMAGAMI - Ford Chassis Specifications

2017 Ford F550 4x4 Chassis, 2 Door, 205" Wheelbase

Interior Features

- Seats Front, Vinyl 40/20/40 split bench seat with recline, armrest, cupholders, storage and driver manual lumbar
- Interior color medium earth grey
- Air Conditioning Manual Temperature Control
- AM/FM Stereo, 4 Speakers
- Dash-top tray
- Dome Lamp door-activated instrument panel switch operated with delay
- Floor Covering black vinyl
- Grab handles driver and front passenger
- Headliner colour coordinated cloth
- Instrumentation with tachometer and Message Centre including odometer, trip odometer, distance-to-empty, average fuel consumption, engine hour meter and warning messages
- Instrument Cluster 2.3" Productivity Screen
- Map lights dual
- Powerpoint 12v, two instrument panel mounted
- Powerpoint auxiliary, 1 in media bin
- Steering Wheel Black Molded Polyurethane
- Storage secondary glove box
- Visors with passenger-side mirror
- Tilt/telescoping steering wheel
- 1) pfitter Switches (6)
- Windshield wipers interval control

Safety

- Airbags front seat front with passenger side deactivation switch (Regular Cab and SuperCab only)
- Airbags front seat side
- Airbags Safety Canopy' System with roll-fold side-curtain airbags
- Belt-Minder*, chime and flashing warning light on instrument cluster if belts not buckled
- Child tethers
- Seat Belts colour coordinated with height adjustment (front outboard seating positions only)
- SOS Post Crash Alert System
- Tire Pressure Monitoring System (excludes spare)
- SecuriLock' Anti-Theft Ignition
- MyKey*
- Autolamp (Auto On/Off Headlamps) with Rainlamp Wiper Activated Headlamps

Exterior Features

- Bumper, front black painted steel with black lower air dam
- Door Handles black
- Quad Dual-Beam Halogen Headlamps
- Grille Black bar-style
- Mirrors Manual Telescoping Trailer Tow with Manual Glass
- LED Roof Clearance Lights
- Tow hooks (2) front, black
- Splash Guards
- Glass solar tinted
- Window rear, fixed

Power and Handling

- Engine 6.7L 3-valve SOHC EFI V8 Diesel engine
- TorqShift* 6-speed SelectShift* Automatic Transmission
- Upgraded Diesel Engine-Exhaust Braking (Diesel Engine)
- DEF Tank Level Gauge (Diesel Engine)
- Alternators Dual, Extra Heavy Duty 377-amp total (diesel engine only)
- Engine block heater
- Fuel Tank -151 Litre aft-axle (F-350 SRW, F-350 DRW/F-450/F-550)
- Axle Mono-beam front axle with coil spring suspension (F-350 4X4, F-450 and F-550)
- Brakes 4-wheel power disc brakes with Anti-lock Brake System (ABS); Hydro-boost (DRW)
- Hill Start Assist
- AdvanceTrac* with Roll Stability Control™ (RSC*) SRW
- Trailer Sway Control (SRW)
- Stationary Elevated Idle Control (SEIC)
- Shock absorbers heavy duty gas
- Stabilizer bar front
- Steering power
- Steering damper
- 4.88 LTD Slip
- Transfer Case electronic shift on the fly
- Live Drive Power Takeoff Provision with Mobile and Stationary PTO Modes
- Wheels -19.5" Argent Painted Steel (DRW)
- 225/70RX19.5G BSW A/S (6) Traction Tires

Optional Items

- Color to be Ford Race Red
- Ford Preferred Equip Package 660A
- Ford XL Trim Package
- Payload Plus Upgrade
- 19,500 lbs GVWR Package
- Ambulance Prep Package
- Sync System

Municipality of Temagami

2017 Initial Attack Fire Apparatus Purchase Agreement

Schedule B

Price

incelfe.

100

10 × 0.1 1 /0 × 10.1

January 25,2017

Municipality of Temagami 7 Lakeshore Drive P.O. Box 220 Temagami, Ontario POH 2H0

RE; TFD-RFP-001-2016 Supply and Delivery - Initial Attack Fire Apparatus

Dear Chief Sanderson

Thank you for your continued interest in obtaining a Quick Attack pumper from Carrier/Metalfab. Further to our ongoing discussions, attached please find a revised set of Detailed Specifications that will form part of our agreement to supply the specified apparatus.

In conjunction with these changes, we wish to confirm the our revised proposal price for this apparatus will now be \$ 268,837.00 plus applicable HST. This amount will be due on delivery, we do not require a deposit with the order, chassis payment on delivery or progress payments. The anticipated delivery of the completed apparatus is approximately 12 months from the receipt of this order. This may be subject to improvement once the chassis delivery date is provided by Ford Canada. We have little control over this important initial stage.

I trust this will address your contractual requirements. A copy of Council resolution stating Carrier Centers and the contract price or, a purchase order issued by the Municipality, shall suffice to initiate the truck in the build schedule. At a future date 1 will attend your office with a preconstruction package and drawing for your approval. We will review all of the details of the truck configuration to insure that we have captured the necessary details to allow the factory to commence fabrication of your new vehicle.

Regards

KOH

Rod Harris Fire Apparatus Sales Specialist 1-866-896-3588 ext 5

 Carrier Centers is

 TRUCKS AND TRAILERS
 LEASE AND RENTAL
 EMERGENCY VEHICLES

 REFRIGERATION
 EQUIPMENT
 MOTORCYCLES
 BODY SHOP
 FLEET ASSIST

Municipality of Temagami

2017 Initial Attack Fire Apparatus Purchase Agreement

Schedule C

Approved Drawings

Municipality of Temagami

2017 Initial Attack Fire Apparatus Purchase Agreement

Schedule D

Warranty

WARRANTIES

One (1) Standard Body Warranty 00-20-1500

(NOTE: Separate Warranty on Tank and Pump attached if applicable) METALFAB LTD. (METALFAB) WARRANTS TO THE ORIGINAL PURCHASER (PURCHASER) THAT METALFAB WILL, AT ITS ELECTION, EITHER REPLACE OR REPAIR ANY PART OF THE NEW EQUIPMENT SOLD TO THE PURCHASER HEREUNDER A) WHICH WILL WITHIN ONE (1) YEAR AFTER DELIVERY TO THE PURCHASER BE RETURNED AT

THE PURCHASER'S EXPENSE, WITH TRANSPORTATION CHARGES PREPAID, TO METALFAB'S FACTORY; AND

B)WHICH IS DETERMINED BY METALFAB TO BE DEFECTIVE IN MATERIAL AND WORKMANSHIP; AND

C) WHICH HAS BEEN GIVEN NO ABNORMAL USE AND HAS RECEIVED PROPER MAINTENANCE. WARRANTY ON BODY PANEL PERFORATION DUE TO CORROSION IS AS ABOVE, EXCEPT FOR A TERM OF TEN (10) YEARS AFTER DELIVERY, FOR BOTH ALUMINUM AND STEEL BODIES.

EXCLUSIONS FROM WARRANTY

1. Metalfab incurs no liability under this warranty or otherwise for parts, accessories or components not manufactured by it, but purchased for assembly into the Equipment, but Metalfab will assign to the Purchaser whatever warranty rights are extended by the supplier of such part, accessory or component.

2. Metalfab incurs no liability under this warranty or otherwise, for Equipment which has been abused, altered or improperly maintained, or for Equipment which has been returned for inspection or repair more than ten (10) days after defect complained of has been or should have been discovered by the Purchaser, or Equipment which is operated after the defect has been discovered.

3. Metalfab incurs no liability for alteration or repairs unless the Purchaser first receives Metalfab's written consent or approval. Metalfab will not be responsible for work or repairs made or done by others.

4. Metalfab incurs no liability for design alterations, parts, accessories or components which are not standard but are specified by the Purchaser for incorporation into the equipment.

INTERPRETATION

Metalfab shall not be liable for transportation charges either in shipment to or by it and shall not be liable for loss of use, or consequential damage of any kind in connection with the sales, alteration, repair or replacement of any equipment or part thereof. Liability under this warranty is limited to replacement or repair and in any event shall not exceed the purchase price paid. This warranty is not transferrable by the Purchaser. Metalfab reserves the right to make changes in design or add any improvements to the Equipment at any time without incurring any obligation to install or modify same on other equipment previously supplied.

There are no other warranties, conditions or representations, expressed or implied, except the above.

EFFECTIVE JANUARY 1, 1997 - SUPERSEDES ALL PREVIOUS WARRANTIES

One (1) Plumbing

00-20-1510

All stainless steel pipe and manufactured items for the plumbing system shall be warranted for 10 years against defects in manufacture. All purchased parts for the plumbing system shall be warranted by the manufacturer of said part. The duration of the warranty between products shall vary but shall be a minimum of 1 year.

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One (1) Metalfab Limited Ten (10) Year Paint and Corrosion Warranty 00-20-1550

Paint and corrosion warranty shall be provided for a period often (10) years after delivery to the original purchaser. The apparatus manufacturer warrants to the original purchaser that the body is free of blistering, peeling, corrosion, or and other adhesion defect caused by defective manufacturing methods or paint material selection for exterior surfaces on the body of the vehicle. This limited warranty will apply only if the vehicle is properly maintained and used in service which is normal for the particular vehicle. Normal service means service which does not subject the vehicle to stresses or impacts greater than normally resulting from the careful use of the vehicle or chassis. If the purchaser discovers a defect or non conformity, the purchaser must notify the manufacturer in wiring within 30 days of the date of discovery. This limited warranty is not transferable by the first user and is applicable to the vehicle in the following percentage costs of warranty repairs, if any:

Top Coat durability and appearance gloss, colour retention and cracking:0-72 months100%73-96 months50%97-120 months 25%

Integrity of Coating System adhesion, blistering/bubbling:0-36 months100%37-84 months50%85-120 months 25%

Corrosion dissimilar metal and crevice:0-36 months100%37-48 months50%49-72 months25%73-120 months10%

This limited warranty applies only to the exterior body paint. Paint on the vehicles body interior is warranted only under the manufacturers standard body warranty.

One (1) Hale Pump Warranty - 5 years 00-20-1700

Hale's 5 year warranty covers parts and labor for the first two years, and parts only for years 3 to 5.

One (1) Water Tank Lifetime Warranty

00-20-1800

The water tank manufacturer warrants that the manufacturing of polypropylene booster tanks to be free of defects in material and workmanship, under normal use and service (vehicle must be actively used in fire suppression) for the lifetime service of the vehicle in which it was originally installed.

This warranty is effective only if the booster tank is installed in accordance with the manufacturers recommendations. This warranty will not cover tanks that have been altered, or if the serial number has been defaced or removed. The manufacturer will not cover any third party repairs or alterations. Any of these actions may void the warranty.

Should any problem arise during the service life of the vehicle, the manufacturer shall be notified and a representative will be sent to inspect the tank. Upon inspections, if the tank is found to be defective in either workmanship or material, the manufacturer, at its own election, shall repair or replace.

ETEON-0002

THERE ARE NO WARRANTIES, EXPRESSED OR IMPLIED, WHICH EXTEND BEYOND THE DESCRIPTION OF THE FACE HEREOF. THERE IS NO EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR PARTICULAR PURPOSE ADDITIONALLY, THIS WARRANTY IS IN LIEU OF ALL OTHER OBLIGATIONS OR LIABILITIES ON THE PART THE MANUFACTURER.

This warranty contains the entire warranty. It is the sole warranty and price agreement of the representation, whether oral or written, are either merged herein or expressly cancelled. The manufacturer neither assumes, nor authorizes any person supposing to act on its behalf, to change, nor assume for it, any warranty or liability concerning its product.

IN NO EVENT WILL THE TANK MANUFACTURER BE LIABLE FOR AN AMOUNT IN EXCESS OF THE PRESENT RETAIL PURCHASE PRICE OF THE BOOSTER TANK, FOR ANY LOSS OR DAMAGE, WHETHER DIRECT OR INDIRECT, INCIDENTAL, CONSEQUENTIAL, OR OTHERWISE ARISING OUT OF FAILURE OF ITS PRODUCT.

A copy of the Manufacturer warranty shall be provided with the completed apparatus.

One (1) Manufacturers Warranties 00-20-1800

Other individual warranties will apply to various components that are installed on the apparatus. Copies of manufacturer's warranties shall be included in the delivery documents.

ETEON-0002