Request for Proposals (RFP)

AGENCY: Delton Fire Commission

RFP NUMBER: 23-01

RFP TITLE: 3,000 Gallon Tanker

PURPOSE: The purpose of this document is to provide interested parties with information to enable them to prepare and submit a proposal for one (1) 3,000-gallon dry side tanker.

DEADLINE FOR
RFP SUBMISSIONS: December 14, 2023 12:00 P.M**.** Central Time

LATE, FAXED, E-MAILED, OR UNSIGNED PROPOSALS WILL BE REJECTED

SUBMIT REPLY TO THIS ADDRESS: **Delton Fire Department**
By Mail: P.O. Box 716
In Person: 45 Miller Dr
Lake Delton, WI 53940
Attn: Captain Kevin Foster

SPECIAL INSTRUCTIONS:

- **Submit one original and one copy of your technical proposal**
- **Submit one original and one copy of your cost proposal**
- **Submit one complete copy in Microsoft Word or PDF format**

DIRECT ALL INQUIRES TO: Captain Kevin Foster
Phone: (608) 254-8404
E-Mail: kfoster@lakedeltonfd.org

Date Issued: 11/07/2023

CONTRACT AWARD

Contract will be awarded to the most "responsible manufacturer", if proposal is in the best interest of the Delton Fire Department.

When analyzing the proposals and in recommending a successful manufacturer, superior design, completion time, workmanship, materials, operating costs, location of factory, past experience, length of incorporation and compliance to specifications will be taken into consideration.

The Delton Fire Department reserves the right to waive any formality in the proposals received if such waiver is in the best interest of the Delton Fire Department and, also, to accept any item in the RFP found to be of superior quality or otherwise preferred by the Delton Fire Department.

The terms "contractor", "vendor", "submitter", "consultant" and "manufacturer" are used interchangeably in this document and all refer to the company submitting the RFP.

FIRE APPARATUS SPECIFICATIONS

Sealed proposals are desired from reputable makers of automobile fire apparatus in accordance with these specifications and with the advertisement, a copy of which is attached, for the piece of apparatus listed as follows:

Fire Truck, fire pump, apparatus body, tank, and all other equipment in accordance with the following:

GENERAL REQUIREMENTS

Each RFP must be accompanied by the submitter's accurate written specifications covering the apparatus and equipment, which it is proposing to furnish and to which the apparatus furnished under the Contract must conform.

It is the intent of these specifications to cover the furnishing and delivery to the Delton Fire Department, complete apparatus equipped as specified. All specifications herein contained are considered as minimum threshold specifications. Some items have been specified by brand name or model number. These have been carefully selected because of their reliability, compatibility with present equipment, and local availability of parts.

In an effort to receive a complete and thoughtful proposal, vendors are encouraged to contact Captain Kevin Foster with questions. It is acknowledged that not every detail related to all aspects of the fire truck is addressed in this RFP. Submitters are urged to present a proposal that addresses all aspects required to construct and deliver a high quality and masterfully designed ground tanker. All references to specific parts using a brand name include equivalent parts by other brands so long as said equivalent parts are truly equivalent. All parts of the fire truck shall be new.

Exceptions taken in areas other than listed above must be listed on a separate page and marked "Exceptions to Specifications". Every exception taken shall be listed as to page number and

paragraph. Failure to provide the required exception list with the RFP will be cause for rejection of that proposal.

Such details and other construction features not specifically covered herein shall conform with all State and Federal requirements, and the NFPA 1901 "Standard for Automotive Fire Apparatus" in effect at the time the contract is signed.

Any test equipment required or expense incurred for the UL pump test shall be borne by the contractor supplying this equipment.

All questions regarding this Request for Proposal (RFP) shall be submitted via email to Captain Kevin Foster at kfoster@lakedeltonfd.org.

All questions shall be submitted on or before December 13, 2023, at 9:00 a.m.

Should any prospective consultant be in doubt as to the true meaning of any portion of this RFP, or should the consultant find any ambiguity, inconsistency, or omission therein, the consultant shall make a written request for an official interpretation or correction by the due date above to the email address provided.

Corrections, or additions to this RFP will be made only as an official addendum. Any addendum issued by the Delton Fire Department shall become part of the RFP and must be incorporated in the proposal where applicable.

RELIABILITY OF CONTRACTOR/VENDOR

Contractor shall furnish satisfactory evidence that they have the ability to construct the apparatus specified and shall state in the RFP the location of the factory where the apparatus is to be built, and also where future service work will be performed.

SUBMISSION OF PROPOSALS

Each proposal shall be submitted in the same exact sequence with the attached specifications for ease of checking compliance of bids with submitters specifications.

Each proposal shall be signed by an authorized representative of the manufacturing company being submitted.

All proposals are due and must be delivered to the Delton Fire Department, or before, Thursday December 14, 2023 at 12:00 (noon) (local time). Proposals submitted late or via oral, telephonic, telegraphic, electronic mail or facsimile will not be considered or accepted.

Proposals must be delivered to:
Delton Fire Department
By Mail: P.O. Box 716
In Person: 45 Miller Dr
Lake Delton, WI 53940
Attn: Capt. Kevin Foster

All proposals received on or before the due date will be turned over to the apparatus committee for review and possible action at a later date and time. No immediate decisions will be rendered.

The Department will not be liable to any vendor/contractor for any unforeseen circumstances, delivery, or postal delays. Postmarking on the due date will not substitute for receipt of the proposal. Vendors are responsible for submission of their proposal. Additional time will not be granted to a single vendor. However, additional time may be granted to all vendors at the discretion of the Department.

COST LIABILITY

The Department assumes no responsibility or liability for costs incurred by the vendor/contractor prior to the award of a contract for the provision of the Tanker. By submitting a proposal, contractor agrees to bear all costs incurred or related to the preparation, submission, and selection process for the proposal.

RESERVATION OF RIGHTS

1. The Department reserves the right in its sole and absolute discretion to accept or reject any or all proposals, or alternative proposals, in whole or in part, with or without cause.

2. The Department reserves the right to waive, or not waive, informalities or irregularities in terms or conditions of any proposal if determined by the Department to be in its best interest.

3. The Department reserves the right to request additional information from any or all consultants.

4. The Department reserves the right to reject any proposal that it determines to be unresponsive and deficient in any of the information requested within RFP.

5. The Department reserves the right to determine whether the scope of the project will be entirely as described in the RFP, a portion of the scope, or a revised scope be implemented.

6. The Department reserves the right to select one or more contractors to perform services.

7. The Department reserves the right to retain all proposals submitted and to use any ideas in a proposal regardless of whether that proposal is selected. Submission of a proposal indicates acceptance by the contractor of the conditions contained in this RFP, unless clearly and specificaly noted in the proposal submitted.

8. The Department reserves the right to disqualify proposals that fail to respond to any requirements outlined in the RFP, or failure to enclose copies of the required documents outlined within RFP.

INSURANCE REQUIREMENTS

Each submitter must submit with their proposal a Certificate of Insurance listing the proposed manufacturer's product liability insurance coverage. Submitted Certificate shall name the apparatus manufacturer, insurance company, policy number, and effective dates of the insurance policy.

The manufacturer shall maintain full insurance coverage on the purchaser's cab and chassis from time of first possession by the manufacturer until the apparatus is delivered and accepted by the purchaser. The Delton Fire Commission reserves the right to require proof of insurance from the manufacturer's insurance carrier prior to entering into a contract for the apparatus.

The contractor shall procure and maintain at all times such insurance policies, as will protect itself and the Department from all claims for bodily injuries, death or property damage which may arise under this contract; whether the act(s) or omission(s) giving rise to the claim were made by the contractor, any subcontractor or anyone employed by them directly or indirectly.

To the fullest extent permitted by law, contractor shall indemnify, defend and hold the Department, its officers, employees and agents harmless from all suits, claims, judgments and expenses, including attorney's fees, resulting or alleged to result, from any acts or omissions by contractor or its employees and agents occurring in the performance of or breach in this Agreement, except to the extent that any suit, claim, judgment or expense are finally judicially determined to have resulted from the Department's negligence or willful misconduct or its failure to comply with any of its material obligations set forth in this Agreement.

DRAWINGS

A CAD produced line drawing of the exact apparatus being proposed must be furnished with the RFP. Since the blueprint drawing is required of all submitters, any proposal submitted without a drawing as specified will be considered non-responsive. Drawing must include the left side with chassis cab, right, and rear views of the vehicle. Drawing must be a large size "D", (24" x 36") and shall be a drawing of the exact apparatus as proposed, not a drawing of another similar unit. All submitted drawings will become a part of the proposal.

REJECTION OF PROPOSALS

The right is reserved to reject any or all proposals or to accept such proposal as is in the best interest of the Department.

All RFP requirements and specifications as written are considered minimum, threshold specifications. RFP's will be rejected which substitute less-substantial materials and/or methods of body construction than those specified.

The Department is not, in any way, obligated to accept the lowest RFP.

COMPLETION DATE

Submitters shall indicate in their proposals; the number of working days for delivery of the completed apparatus, from the date of proposal acceptance by the Manufacturer.

CARRYING CAPACITY

The GAWR and GCWR or 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 miscellaneous equipment.

The height of the fully loaded vehicle's center of gravity shall not exceed the chassis manufacturer's maximum limit.

WARRANTY

All warranties shall be disclosed and provided to the fire department.

THIS PAGE IS RESERVED AND INTENTIONALLY LEFT BLANK

DESIGN REQUIREMENTS

Specified design features of the apparatus have been carefully selected because of their safety, integrity and consistency with existing apparatus. It is expected that all submitters will adhere to the compartmentation layout, etc., since these features can be produced by all fire apparatus manufacturers.

All aspects of the vehicle shall be properly engineered with priority given to firefighter safety, ease of operation, and maintenance of the apparatus. The vehicle shall be free from hazardous protrusions, angles, or sharp corners that might injure a firefighter or equipment.

All water, air, fuel, hydraulic, and/or oil lines on the chassis and apparatus shall be properly located and securely tie wrapped to prevent scuffing or abrasion. Durable type grommets or loom material shall be used to protect the lines wherever a line passes through the apparatus body or frame rail sections.

All grease fittings, bleeders, filler plugs, drains, and check points shall be located so as to be easily accessible. No special tools shall be required to access these components for normal service or maintenance of the vehicle.

All parts and components on the vehicle shall be positioned for ease of inspection, and recognition of wear or failure. Easily removable access or cover plates shall be provided for all items requiring periodic service or adjustment. Access panels shall be of the hinged or quick disconnect design, allowing ease of access.

Design of the apparatus shall be such that no disassembly of the body or any of its parts is required for normal maintenance.

All components of the chassis and apparatus shall be protected against rain, snow or other adverse weather conditions.

ACCEPTANCE TESTS AND REQUIREMENTS

Manufacturer's pump test and Certification tests shall be conducted by the manufacturer in accordance with requirements of NFPA 1901. Certificate of testing shall be furnished to the purchaser.

NOTE

Responsibility for the apparatus and all equipment shall remain with the contractor until the apparatus and equipment is delivered to the Delton Fire Department.

APPARATUS DESIGN

ENGINEERING BLUEPRINTS

The manufacturer shall provide construction drawings for approval prior to actual construction of the vehicle.

PRE-CONSTRUCTION CONFERENCE AT THE DELTON FIRE DEPARTMENT

A pre-construction conference shall be conducted at the Delton Fire Department, at which time all final designs and equipment mounting locations will be approved or disapproved, prior to any sheet metal being cut. A factory-trained dealer shall be present during the pre-construction conference to answer any design questions relating to the layout of the apparatus

INSPECTION TRIPS

Inspection trips for Delton Fire Department personnel (up to 4 personnel) shall be made to the facility during the course of construction of the apparatus. Typical inspections are mid-point and final. Successful bidder shall consult with the Delton Fire Department truck build committee chairperson or Assistant Fire Chief as to the proper timing of the inspection trips.

DEMONSTRATION

Delton Fire Department personnel shall be properly instructed as to the proper use of the entire apparatus including, but not limited to, chassis, fire pump system, the apparatus and all equipment.

The initial demonstration will take place in conjunction with the final inspection of the completed vehicle.

COMPLETE PRINTED MANUAL

The manufacturer shall provide with the vehicle upon delivery, one (1) complete owner's manual. This manual shall be in a notebook type binder, with reference tabs for each section of the vehicle. A USB drive with all of the printed material in an electronic format (PDF required; other file types may be included) shall also be provided.

Within each section shall be:

- Individual component manufacturer instruction and parts manuals
- Warranty forms for the body
- Warranty forms for all major components
- Warranty instructions and format to be used in compliance with warranty obligations
- Wiring diagrams
- Installation instruction and drawings for major parts
- Visual graphics and electronic photos for the installation of major parts

- Necessary normal routine service forms, publications, and components of the body portion of the apparatus
- Technical publications for training and instruction on major body components
- Warning and safety related notices for personnel protection
- Cab and chassis manuals on parts, service and maintenance shall be provided

DELIVERY DATE:

Provide a delivery date of the apparatus to the department. Preference points will be given to the manufacturer with the timeliest completion.

ANGLE OF APPROACH/DEPARTURE

The angle of approach/departure shall be at least the minimum as recommended by NFPA.

VEHICLE STABILITY

The apparatus shall meet one of the requirements, as stated by NFPA for vehicle stability.

WEIGHT AND BALANCE REVIEW

Included with the proposal and delivery of the apparatus will be a complete weight analysis of the apparatus. The apparatus shall meet DOT and NFPA weight guidelines.

ELECTROLYSIS CORROSION CONTROL

All dissimilar metals, fasteners, bracket will include appropriate barrier protection.

LOW VOLTAGE ELECTRICAL SPECIFICATIONS

The electrical system specified for this apparatus will be designed with all panels, electrical connections, and electrical components to be of the latest Federal DOT standards and NFPA recommendations.

ELECTRICAL DRAWINGS

Each separate electrical function will include a complete set of drawings specific to that apparatus and that electrical function.

LOW VOLTAGE ELECTRICAL SPECIFICATIONS

The electrical system specified for this apparatus will be designed with all panels, electrical connections, wiring harnesses, and electrical components to be the latest Federal DOT standards and NFPA recommendations.

OVERALL LENGTH

The maximum overall length is 33 feet. Priorities are to keep the apparatus height and length as small as possible.

OVERALL HEIGHT

The height of the body shall be equal to or less than the height of the emergency light bar on the cab. Priorities are to keep the apparatus height and length as small as possible.

CHASSIS

The proposed chassis must be properly rated for the weight of the apparatus. To include two (2) personnel, loose equipment, permanently installed equipment, and 3,000 gallons of water. The preferred chassis are:

- Freightliner M2 112; or
- Western Star 47x; or
- International HV

CAB

The cab shall be a two door commercial chassis.

ENGINE

The chassis engine shall be a 450 HP Cummins L9. If another engine is quoted, explain the reason why.

TOP SPEED

Top speed shall be set to 72 mph. All components from the engine to rear axle shall be appropriately designed for that speed.

TRANSMISSION

The transmission shall be an Allison 3000 EVS with PTO provision.

BRAKES

Brakes shall be drum and be appropriately sized for the apparatus.

AUXILIARY ENGINE BRAKE

One (1) auxiliary engine compression brake with VG turbo shall be installed to assist in slowing and controlling the vehicle as required by NFPA 1901. An on-off control switch and a high-medium-low selector switch shall be mounted in the cab accessible to the driver.

When the on-off switch is in the “on” position, the engine brake shall be automatically applied whenever the accelerator is in the idle position and the automatic transmission is in the lock-up mode. If the accelerator is depressed or if the on-off switch is placed in the “off” position, the engine brake shall immediately release and allow the engine to return to its normal function.

FAST-IDLE SYSTEM

A fast-idle system shall be provided and controlled by a switch accessible by the driver. The system shall increase engine idle speed to a preset RPM for increased alternator output.

MULTIPLEX WIRING

The truck shall be equipped with a multiplex wiring system.

REAR AXLE DIFFERENTIAL CONTROL

The rear axle shall include a driver controlled differential lock. This shall allow the main differential to be locked and unlocked. There shall be a rocker switch to control the differential lock in the cab.

TIRES

Michelin X Works Z 20 ply radial front tires.

Michelin X Works Z 16 ply radial rear tires

FRONT WHEELS

The front wheels shall be 22.50-inch aluminum Alcoa wheels with Dura-Black finish.

REAR WHEELS

The rear wheels shall be 22.50-inch aluminum Alcoa wheels with Dura-Black finish.

HUB AND LUG NUT COVERS

The apparatus shall have chrome or stainless-steel hub and lug nut covers on the front and tandem rear axles – supplied separately.

CLIMATE CONTROL

The cab shall contain heater and air conditioning units to provide climate control to the cab.

CAB INSULATION

The cab shall be lined with insulation to act as a noise barrier and assist in temperature control.

REARVIEW MIRRORS

Mirrors shall be black in color. The mirrors shall be mounted on the driver and officer doors of the cab.

The mirrors shall be heated and power adjustable. The mirror control switches shall be located within easy reach of the driver.

SEATS

The driver seat shall have air suspension with multiple-way adjustment.

The officer seat shall be equipped with multiple-way adjustment

CAB DOOR WINDOWS

Full power windows shall be provided for the cab doors. Driver shall have easy access the controls for both the driver and passenger windows.

HEADLIGHTS

If it is an option the cab shall be equipped with LED high and low beam head lamps.

CAB USB CHARGING PORT

A dual USB charging port for cell phones, portable chargers, and similar devices shall be installed in the cab.

MASTER BATTERY SYSTEM SWITCH

The battery system shall be supplied with the chassis. One (1) battery disconnect switch shall be located in a conveniently accessible location to the driver of the apparatus. The switch shall disconnect the 12-volt power supply from the battery system.

BATTERY CHARGER WITH DISPLAY

One (1) Kussmaul battery conditioner with auto eject shall be installed. The charger unit shall be mounted in a clean dry area and will be accessible for service and/or maintenance. It shall be of adequate size and capacity to handle all probable uses.

One (1) Kussmaul voltage display shall be supplied with the charger.

SHORELINE POWER

The shore power plug shall be auto-ejecting and conveniently located near the drivers' door on the exterior of the apparatus. The cover shall be red.

120-VOLT POWER RECEPTICALS

There shall be 120-volt power receptacles furnished in the cab. The power receptacle shall be connected to the shoreline power for charging of future equipment.

AIR SHORELINE

One (1) Kussmaul automatic air eject shall be provided for connection to an external air source to maintain the pressure in the chassis air brake system. Inlet shall be located near the shore power plug and be auto-ejecting. The cover shall be black

AIR HORNS

Two (2) stutter tone chrome-plated air horns shall be mounted above the front fenders. An air protection valve shall be provided in the air horn piping that will not allow the chassis air brake system to drop below 90 PSI.

One (1) roof mounted pull cord shall be installed to activate the air horn system. The pull cord shall be installed within easy reach of the officer.

One (1) rocker switch shall be installed on the driver's switch panel to allow control of either the electric horn or the air horn from the steering wheel horn button.

DATA & WARNING LABELS

A highly visible label indicating the overall height, length, and weight of the vehicle shall be installed in the cab area.

12 VOLT POWER SOURCE

One (1) 12-volt power and ground connection shall be provided on the apparatus for the installation of one, mobile two-way radio. This source shall be wired with constant power. The location shall be determined by the customer.

One (1) 12-volt power source shall be run through the chassis master battery switch and shall be deactivated when the master switch is in the "OFF" position. The location shall be determined by the customer.

RADIO ANTENNA BASE

One (1) radio antenna base shall be supplied and installed on the apparatus, the antenna coax terminating in the cab. The location shall be determined by the customer.

MOBILE RADIOS

One (1) mobile radio will be provided by the customer to the manufacturer for installation. The radio head shall be installed and operational. The location shall be determined by the customer.

Mobile radio model is: Kenwood VM5000 series with remote head.

FIRECOM SYSTEM

One (1) FireCom intercom system must be provided by the manufacturer. The system must consist of a wireless headset located between the driver and officer seat and be capable of hooking into the mobile radio. All necessary wiring, interface cables, base station, and hooks shall be included.

BACK-UP ALARM

One (1) automatic electric back-up alarm shall be wired to the back-up light circuit, and mounted under the rear of the apparatus body.

REAR FACING CAMERA & DIGITAL MONITOR

One (1) camera with one (1) digital monitor shall be installed to provide rear facing view from the apparatus. The camera and monitor shall activate automatically when vehicle is placed into reverse driving mode. The camera and monitor shall be able to be manually activated by the driver. The monitor shall be installed in the cab in such a location as to be easily viewable by the driver.

HAND LIGHTS

Portable hand lights will be supplied and installed by the customer prior to the vehicle being placed into service.

MARKER LIGHTS

LED marker lights shall be installed on the vehicle in conformance to the Department of Transportation requirements.

TAIL LIGHTS

One (1) pair of Whelen M6 tail/brake lights shall be provided.

TURN SIGNALS

One (1) pair of Whelen M6 LED turn signals with populated sequential chevron arrow shall be provided.

BACKUP LIGHTS

One (1) pair of Whelen M6 LED Backup lights shall be installed on the rear of the apparatus body.

GROUND LIGHTS

There shall be ground lighting in compliance with NFPA. Ground lights shall be H20 high output LED light strips. All lights shall use the same model – (under cab, doors, chassis, body, tailboard, etc.) Lighting shall be wired into the parking brake.

DECK LIGHTS

The deck lights shall be LED and installed in the hose bed. Lighting shall be wired into the parking brake.

SCENE LIGHT

Six (6) Whelen M9 V Series warning and scene super LED (M9V2R) lights shall be surface mounted with black flanges.

One (1) FRC CLA100-A49 brow mounted light bar with marker lights and black housing.

SCENE LIGHT LOCATION

- Front – (CLA100-A49) Mount in between cab roof and lightbar
- Drivers Side – (M9V2R) Front and Back of the body near the top
- Officer Side - (M9V2R) Front and Back of the body near the top
- Rear – (M9V2R) Left and Right side near the top

SCENE LIGHT SWITCHING

Scene Lights shall be controlled with Four (4) separate switches labeled as follows:

- "FRONT SCENE" – operates the front brow light
- "DRIVERS SCENE" – operates the two (2) driver side scene lights
- "OFFICER SCENE" – Operates the two (2) officer side scene lights
- "REAR SCENE" – Operates the two (2) rear lights. Rear scene lights shall activate while apparatus is in reverse.

DOOR OPEN LIGHT

One (1) red flashing, warning light shall be provided and installed in the driver's compartment to indicate an open passenger or apparatus compartment door. The warning light shall also activate when folding equipment racks are not in a stowed position.

SIREN CONTROL

One (1) Whelen 295SLSA6 siren controller must be installed. The rear arrow will be controlled by this siren control as well. Mounting location to be determined by customer.

ELECTRIC SIREN SPEAKER

One (1) recessed 100 – watt speaker shall be installed which performs at least to the minimum specifications for electronic sirens on fire trucks in the NFPA. One (1) stainless steel grille shall be provided and installed over the speaker. The speaker shall be installed flush mount in the front bumper.

FEDERAL MECHANICAL SIREN

One (1) Federal Signal Q2B mechanical siren shall be partially recess mounted into the front bumper. The grille will be outside the bumper.

Two (2) foot switches shall be provided on the driver's and officer's side of the cab floor to activate the Federal Signal Q2B siren. Location to be determined by the customer.

One (1) momentary siren brake switch for the Federal Signal Q2B siren shall be provided on the switch panel.

EMERGENCY LIGHTS

Emergency lighting must meet NFPA standards. Preferred lighting is:

- Whelen M9V2R combination warning and scene lights:
    - Drivers Side – Front and Back of the body near the top
    - Officer Side - Front and Back of the body near the top

- Rear – Left and Right side near the top

- Whelen Ultra Freedom IV 60” light bar
  - (2) red Linear Super LED corner modules
  - (2) red Linear Super LED endcap lights
  - (4) red Linear Super LED lights
  - (2) white Linear Super LED lights w/clear lenses

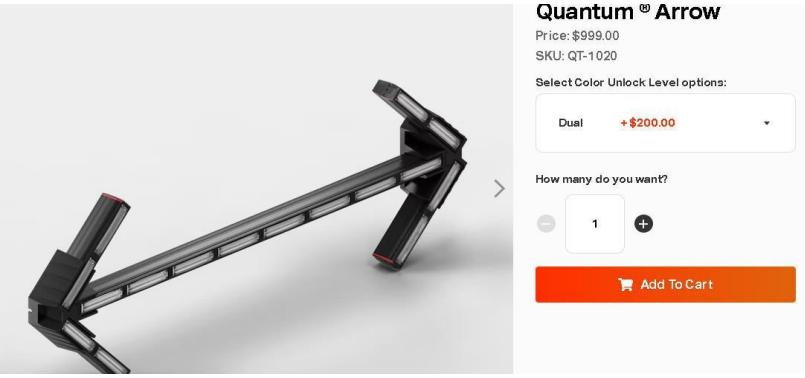
- Lower emergency lights shall be Whelen M6 – RED w/ black flanges
- Body mounted emergency lights shall be red in color and placed in accordance with NFPA requirements.

EMERGENCY LIGHT ACTIVATION

A rocker style internally lighted switch shall be provided and wired through a heavy-duty relay to activate power to the emergency lights. The emergency lights shall be activated by a single “MASTER SWITCH” on the electrical console. Emergency lights shall also be controlled by individual switches.

ARROWBOARD

One (1) Feniex Quantum Arrow dual color red/amber. Dim: 1.3” H x 15" W x 42.46" L Arrow shall be controlled by the siren controller. The customer can explain the operation and light programming.



TOW HOOKS

Two (2) tow eyes shall be installed below the front bumper and be bolted directly to the frame.

Two (2) tow eyes shall be installed to the rear of the apparatus, properly attached the frame.

FRONT BUMPER EXTENSION

The front bumper shall be extended 18" and shall be designed to support the bumper and other equipment to be installed.

One (1) recessed fire hose well compartment shall be installed in the center of the front bumper extension sized roughly 70” side-to-side x 12” Front to back and 13” deep to house 2 ½” and 1 ¾” hose line.

One (1) divider shall be provided to separate the 1 ¾” and 2 ½” hose. The divider should run side-to-side.

One (1) raised cover shall be installed with gas shocks capable of holding the cover open. The officer side of the cover shall have openings to allow hose to be preconnected from the hose well to the front bumper discharge. The openings shall have a rubber style flashing to prevent water from entering the hose well.

Water drain holes shall be located in the bottom of the hose well in all four corners.

SINGLE STAGE WATER PUMP

One (1) 1000 GPM PTO single stage fire pump shall be provided and installed. The pump shall meet NFPA 1901 requirements.

PUMP DRIVE

Fire pump shall be powered by an engine-driven PTO.

PUMP SEAL

The pump shall have a high quality, self-adjusting, maintenance free mechanical seal.

PTO PUMP SHIFT SPECIFICATIONS

An orange locking rocker switch for PTO pump engagement shall be installed in the cab driver's area. The pump shift system shall permit "pump and roll" operations, as well as stationary pumping operations.

The following indicator lights shall be included with pump shift.

1. A light shall indicate pump PTO has successfully been engaged.

2. A light shall indicate the PTO is engaged and parking brake is activated. Pump control is through the pressure governor.

3. A light shall indicate the PTO is engaged and parking brake is released. Pump control is through the driver's throttle pedal.

4. Pump shift and interlocks shall comply with applicable sections of the NFPA standards.

5. An instruction label and nameplate shall be provided to indicate proper pump engagement instructions.

IN-CAB PUMP AND ROLL DISCHARGE PRESSURE GAUGE

One (1) 2-1/2" diameter discharge pressure gauges (0-400 PSI) shall be provided. The gauge shall be located in the cab for use during pump and roll operations.

TRIDENT AIR PRIMER

A Trident air-operated priming system shall be installed.

The primer control shall have a manually operated, panel mounted “push to prime” air valve; which will direct air pressure from the air brake storage tank to the primer body.

PRESSURE GOVERNOR AND ENGINE-PUMP MONITORING

One (1) PumpBoss series PBA401 pressure governor and monitoring display kit shall be installed.

PUMP ANODES

Fire pump alloy anodes shall be installed to reduce corrosion. The anode shall be a bolt-in or screw-in type and easily replaceable.

FIRE PUMP MASTER DRAIN

The fire pump system shall be piped to a single master pump drain assembly.

ADDITIONAL LOW POINT DRAINS

The plumbing system shall be equipped with additional low point manually operated drain valves to allow total draining of the fire pump plumbing system. These valves shall be accessible from the side of the vehicle and labeled.

TANK TO PUMP LINE

One (1) 4" water tank to fire pump line shall be provided with a full flow 4” valve and 4" piping. The tank to pump line shall be equipped with a check valve to prevent pressurization of the water tank.

The line shall be flow tested during the fire pump testing and shall meet applicable requirements of NFPA standards.

The tank to pump valve shall be controlled at the pump operator's panel with a 4” handwheel gear operated valve

TANK FILL LINE

One (1) 3” fire pump to water tank refill shall be provided. The valve shall be a full flow 3” quarter turn ball valve and 3” piping.

The tank fill valve shall be controlled at the pump operator's panel with a manual push/pull type valve.

INTAKE RELIEF/DUMP VALVE

One (1) 2-1/2" intake relief/dump valve preset at 150 psi shall be permanently installed on the suction side of the fire pump. The valve shall have an adjustment range of 75 psi to 250 psi, and shall be designed to automatically self-restore to a non-relieving position when excessive pressure is no longer present.

CHASSIS ENGINE HEAT EXCHANGER COOLING SYSTEM

The apparatus shall be equipped with a heat exchanger for supplementary chassis engine cooling during fire pump operations.

2-1/2" DISCHARGE- FRONT BUMPER

One (1) 2-1/2" discharge shall be installed on the front bumper. The discharge shall rise out of the front bumper on the officer’s side near the corner. There shall be a 90° chrome swivel outlet with 2-1/2” male threads.

One (1) 2 ½” female X (2) 2 ½” male gated wye valve shall be connected to the front bumper discharge.

The front bumper discharge valve shall be controlled at the pump operator's panel with a manual push/pull type valve.

2-1/2" DISCHARGE - OFFICER SIDE PUMP PANEL

One (1) 2-1/2" discharge shall be installed on the officer side pump panel area and shall be controlled by a quarter turn ball valve.

The 2 ½” valve shall be controlled at the pump operator's panel with a manual push/pull type valve.

4" DISCHARGE- DRIVER SIDE CABINET

One (1) 4" discharge shall be installed inside the driver side forward most cabinet and shall be controlled by a valve.

The 4” valve shall be controlled at the pump operator's panel with a manual gear-operated handwheel valve.

SIDE MOUNT PUMP ENCLOSURE

All pump suction and discharge controls are to be mounted on the officer side pump panel, to permit operation of the pump from a central location.

The following controls and equipment, as specified in the specifications, shall be provided on the pump panel or within the pump enclosure:

- Primer control.
- Pump and plumbing area service lights.
- Pressure control device and throttle control.
- Fire pump and engine instruments.
- Pump intakes and discharge controls.
- Master intake and discharge gauges.
- Tank fill control.
- Tank suction control.
- Water tank level gauge.
- Pump panel lights.

PUMP OPERATORS PANEL

The pump operators' panel shall be located on the officer side in the most forward cabinet on the body. The panel shall be placed behind the cabinet roll-up door. The intentions are to keep the pump and panel as low and forward as possible to allow the water tank to go over the top of the pump without losing water capacity.

REMOVABLE ACCESS PANELS

The pump panel shall have removable access panels to allow for maintenance and servicing of the pump.

MASTER GAUGE ASSEMBLY

One (1) master pressure gauge, liquid filled, 0- 400 PSI and one (1) master vacuum gauge liquid filled -30 – 400 PSI shall be installed.

TEST TAPS

Test taps for pump intake and pump pressure shall be provided on the pump panel and be properly labeled.

WATER LEVEL DISPLAY

One (1) Water tank level display shall be installed on the operator's pump panel

One (1) Water tank level display shall be installed in the cab that is easily distinguishable at a glance.

EXTERIOR WATER LEVEL LIGHTS

Three (3) Whelen Strip-Lite Plus XL (PSTAK2) series "tank light model" (or equivalent) shall be installed. Two shall be surface mounted on the driver's and officer's side of the body near the front-top corner and one on the rear to indicate the water level in the tank.

WATER TANK - 3000 GALLON

The apparatus shall be equipped with a 3000-gallon (2498 Imperial Gallons, 11356 Liters) T-shaped poly water tank with an appropriately sized fill tower.

The intention is to make the water tank low and wide to achieve a lower center-of-gravity.

DIRECT TANK FILL

There shall be two direct tank fills on the rear of the body. One large diameter and one 2 ½":

One (1) 4.0" diameter direct tank fill inlet shall be provided on the rear of the body (officer side). The inlet shall have a 4.0" diameter, manual, slow-close gear operated valve. The fill line shall have an in-tank slow fill safety protection system to protect the tank during filling in high flow conditions.

- One (1) 25° or 30° elbow shall be included on this inlet.
- One (1) 4” to 5” Storz adapter with manual locks.
- One (1) standard 5” Storz cap.
- One (1) additional adapter/cap: 5" Storz to 2 ½” swivel female with male chrome cap.

One (1) 2½" diameter direct tank fill inlet shall be provided on the rear of the body (drivers side). The inlet shall have a 2½” diameter ¼ turn ball valve.

- One (1) 25° or 30° elbow shall be included on this inlet.
- One (1) standard male 2 ½” cap

QUICK DUMP - REAR

One (1) 10" square quick dump shall be provided and externally mounted. The location shall be at the center-rear of the apparatus.

One (1) manual operated lever control shall be used to open and close the rear dump valve.

One (1) swivel dump chute shall have the ability to dump water from the driver’s side, the officer’s side, the rear, and any point in between.

When the extension is in the down and extended position, it should be at least 67” long. There shall be no less than 33” of clearance from level ground to the bottom of the dump to ensure that there is enough clearance for the swivel dump to offload into all portable drop tanks.

The dump shall meet NFPA requirements for water delivery on three sides of the vehicle.

HOSE BED

The hose bed shall cover the top of the entire tank. The hose bed shall be properly reinforced to allow for equipment mounts and foot traffic.

The floor shall be constructed of aluminum nonslip planking/grating.

No hose bed cover shall be supplied as no hose will be stored in the hose bed.

Two (2) full-length adjustable hose bed dividers shall be installed for future equipment and hose storage.

FRAME/SUBFRAME

The apparatus frame/subframe shall be constructed of metals that will not allow future rust, corrosion, or failure. Manufacturer will provide explanation of their process and how these issues are prevented.

TANDEM AXLE WHEEL AREA

The wheel well area shall fully protect the body from road debris and salt. To aid in cleaning, a wheel well liner shall be provided with a finished, smooth surface to prevent corrosion.

FENDERETTES

A polished aluminum or stainless-steel fenderette shall be furnished at each rear wheel well opening.

COMPARTMENTS

There shall be compartment(s) located on the driver's side forward of the rear wheels and the officer side forward of the rear wheels. There will be one (1) large or two (2) smaller compartments (depending on final length of the body).

Compartments shall be aluminum with lightly oscillated finish.

COMPARTMENT LIGHTING

Compartment shall be furnished with LED strip lights to provide sufficient lighting inside each cabinet.

ROLL UP DOOR CONSTRUCTION

The compartment doors shall be unpainted and of roll-up style.

REAR STEP PLATFORM

The rear step platform shall protrude approximately 24" from the rear of the truck. The outer corners shall be mitered at a 45° angle approximately 12" from the corners. The rear step shall be heavy-duty and be roughly 4" - 5" from bottom to top surface.

REAR HOSE TRAY

Mounted to the top of the rear step platform, shall be a hose tray designed to store 35 feet of 5" hose with a preconnected gated hydrant adapter. The hose will be preconnected to the 5" Storz direct tank fill.

GROUND LADDER STORAGE IN HOSE BED

One (1) ground ladder, that will be supplied by the customer, will be stored in the hose bed. This area shall house one 35-foot, three-section, Duo Safety extension ladder. The ladder storage system shall be equipped with angles on the sides and a stop at front of the ladder bed.

One (1) Roller system shall be mounted to the rear edge of the storage space to assist with the loading and deploying of the ladder.

One (1) quick access securing device shall be installed on the end of the ladder to secure it from sliding out of the hose bed.

ROLL OUT/TILT DOWN PORTA-TANK STORAGE

One (1) manually controlled, roll out/ tilt down porta-tank storage rack shall be installed. The customer will supply a portable 3,500-gallon water tank. See attached photo for an example roll out/ tilt down portable water dump tank tray. See customer for more information.

The storage system will be controlled with a handle that will allow for single-person deployment while standing on the ground.

There shall be a latch to keep the tray in the stowed position.

The storage tray shall be installed near the officer side of the hose bed.

PORTABLE FOLDING TANK

The customer will be supplying a 3,500-gallon portable folding tank.

The collapsed tank dimensions are roughly: 183” L x 29” W x 12” H

REAR FOLDING STEPS

Six (6) folding steps shall be installed on the rear of the apparatus. There shall be three folding steps on each the right and left sides. Steps allow personnel to access to the hose bed. Steps shall meet NFPA requirements and have appropriate LED step lighting.

REAR STEP HANDLRAILS

Handrails shall be located appropriately by each set of steps.

The handrails shall be mounted above the rear tail lights and extend to the top of the body.

APPARATUS RUB RAILS

Full body length polished aluminum or stainless-steel rub rails shall be installed on the lower portion of the body sides.

PAINT

The preferred primary/lower paint color shall match the same red as the current Engine 2. The secondary/upper paint color shall match the black on current Engine 2. Confirm the paint colors with the customer prior to paint. For reference the current paint codes are:

Red – PPG FBCH 929643
Black – PPG 9000

Example of desired two-color paint scheme:

TOUCH UP PAINT

Touch-up paint shall be furnished with the completed truck at final delivery.

INTERIOR COMPARTMENT FINISH

Interior compartment finish shall be unpainted aluminum with a lightly oscillated finish.

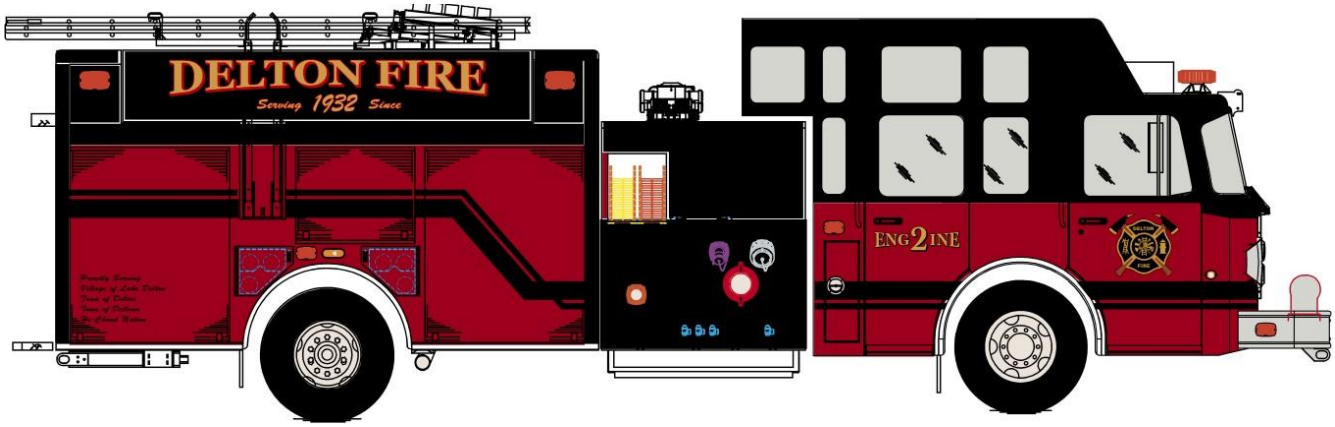
UNDERCOATING

The entire underside of the apparatus body and chassis shall have undercoating applied to it. Surfaces shall be cleaned and properly prepared for application of a sprayed on automotive type undercoating.

REFLECTIVE STRIPING AND LETTERING

The graphics shall be designed to closely match striping and lettering schemes in use by the Delton Fire Department on current apparatus Engine 2. The graphics must be professionally installed.

Lettering and Maltese Cross shall use Simulated Engine Turn Gold where needed. Match Engine 2.



REAR CHEVRON

There shall be chevron installed on the rear of the apparatus. The chevron must be highly reflective "Diamond Grade" and the colors must alternate between fluorescent lime and red.

FRONT BUMPER CHEVRON

There shall be chevron installed on the face of the front bumper. The chevron must be high quality reflective and the colors must alternate between black and red.

LOOSE EQUIPMENT

Two (2) standard non-collapsible wheel chocks shall be furnished and placed in a cabinet.

Two (2) 6" x 10' hard suction hoses

NFPA STORAGE

The SCBAs, and helmets will be stored in body compartments.

ALTERNATES:

We ask that you submit proposals for the main RFP, but we are also interested in alternates. The committee will complete a cost-benefit analysis on the following alternates and they will be considered.

WATER TANK ALTERNATE #1

The manufacturer has an option to supply an alternate proposal with a stainless-steel elliptical tank.

Note: For the elliptical tank, the porta tank will be mounted above the compartments on the Officer side and the 35' ladder and hard suction mounted on the driver side above the compartments.

The portable tank carrier shall be a manual tip down portable tank carrier mounted on the officer side. The carrier shall be enclosed.

The ladder and hard suction carrier shall be a manual tip down style similar to the portable tank carrier but does not need to be enclosed. This shall be mounted on the driver's side.

It is understood that this change may affect the length and height.

Please note any other changes that must be made to the specifications in this document for this alteration.

WATER TANK ALTERNATE #2

The manufacturer also has an option to supply an alternate proposal with a wet-side tanker instead of a dry-side.

If the manufacturer is proposing a wet-side tanker, the body may be constructed of metal, polypropylene, or a combination of both. Manufacturer shall clearly explain which aspects of the body are polypropylene and which are metal.

Please note any other changes that must be made to the specifications in this document for the alteration.

PUMP ALTERNATE

The committee is also considering a 500 GPM pump. We are requesting that the manufacture also submits proposals with the 500 GPM pump in place of the 1000 GPM pump.

We understand that this change may also result in some minor plumbing alterations. Explain what those changes are.

Please note any other changes that must be made to the specifications in this document for the alteration.