

SUBJECT: Authorization to purchase 2010 Pierce Velocity Pumper Refurbishment Services from Hughes Fire Equipment, Inc. for the amount of \$1,018,973.00.

AGENDA OF: August 19, 2025

ASSEMBLY ACTION:

Adopted without objection. 08/19/25 - EMW

AGENDA ACTION REQUESTED: Present to the Assembly for consideration.

Route To:	Signature
Purchasing Officer	X Dustin Silva 8/6/2025 Signed by: Dustin Silva
Emergency Services Director	X Ken Barkley 8/6/2025 Signed by: Ken Barkley
Finance Director	X Cheyenne Heindel 8/7/2025 Signed by: Cheyenne Heindel
Borough Attorney	X John Aschenbrenner 8/7/2025 Signed by: John Aschenbrenner
Borough Manager	X Michael Brown 8/7/2025 Signed by: Mike Brown
Borough Clerk	X Estelle Wiese for 8/7/2025 Signed by: Estelle Wiese

ATTACHMENT (S) : Fiscal Note Yes X No
 Cost Proposal (1p)
 Scope of Work (25p)

SUMMARY STATEMENT: The Central Mat-Su Fire Service Area has a requirement to refurbish the 2010 Pierce Velocity Pumper. Rescue-Engine 5-1 is 15 years old and needs a total refurbishment to extend its useful service life. Project will include delivery to and back from the rehabilitation center, a complete strip down of the truck, inspection, repair and or replacement of parts and components, upgraded lighting and new paint. Services purchased will support the Emergency Services Department in multiple assembly districts.

A cost proposal was requested, received and deemed acceptable from Hughes Fire Equipment, Inc. The final completion date for this project is October 26, 2026.

In accordance with MSB 3.08.170(B), Administration requests authority to modify the resulting contract completion date by 90 days for unforeseen circumstances.

The Emergency Services Department, Fire Division will be administering the contract.

RECOMMENDATION OF ADMINISTRATION: Approve the subject action memorandum.

MATANUSKA-SUSITNA BOROUGH

FISCAL NOTE

Agenda Date: August 19, 2025

SUBJECT: Award of bid number 26-030C to Hughes Fire Equipment, Inc., for the contract amount of \$1,018,973.00 for 2010 Velocity Pumper Refurbishment Services.

FISCAL ACTION (TO BE COMPLETED BY FINANCE)	FISCAL IMPACT YES NO
AMOUNT REQUESTED \$1,018,973.00	FUNDING SOURCE Fire Svc Capital Projects/Central Mat-su FSA
FROM ACCOUNT # 405.000.000 4xx.xxx/250.000.000 4xx.xxx	PROJECT# 45076-6600-6615
TO ACCOUNT :	PROJECT #
VERIFIED BY: X <u>L i e s e l Z a n t o</u> Signed by: Liesel W. Zanto	CERTIFIED BY:
DATE:	DATE:

EXPENDITURES/REVENUES:

(Thousands of Dollars)

OPERATING	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Personnel Services						
Travel						
Contractual						
Supplies						
Equipment		69.0				
Land/Structures						
Grants, Claims						
Miscellaneous						
TOTAL OPERATING		69.0				

CAPITAL		950.0				
---------	--	-------	--	--	--	--

REVENUE						
---------	--	--	--	--	--	--

FUNDING:

(Thousands of Dollars)

General Fund						
State/Federal Funds						
Other		1019.0				
TOTAL		1019.0				

POSITIONS:

Full-Time						
Part-Time						
Temporary						

ANALYSIS: (Attach a separate page if necessary)

PREPARED BY: _____ PHONE: _____

DEPARTMENT: _____ DATE: _____

8 / 7 / 2 0 2 5

X C h e y e n n e H e i n d e l

APPROVED BY: _____ DATE: _____

Signed by: Cheyenne Heindel



August 1, 2025
Matanuska-Susitna Borough, AK
One (1) 2010 Velocity Pumper Refurbishment BN23278
Build Location: Weyauwega, WI

Proposal Price	\$1,029,223.00
Less payment upon completion @ factory discount	(10,250.00)
Total including all pre-pay discounts	\$1,018,973.00

Terms:

Price Expiration: The above pricing is valid until September 29, 2025.

Future Changes: Various state or federal regulatory agencies (e.g. NFPA, DOT, EPA) may require changes to the Specifications and in any such event any resulting cost increases incurred to comply will be added to the Purchase Price to be paid by the Customer and documented on a Change Order.

Delivery: Based on Pierce's current delivery schedule the apparatus would be ready for delivery from factory within 12 to 14 months after contract execution or purchase order. Delivery is subject to change pending Pierce's delivery schedule at time of order. This time does not include any possible delays that may be caused by national disasters or pandemic.

Payment Terms:

- a. If pre-payment discount options are elected, the following terms will apply:
 - i. **Payment Upon Completion at Factory Discount:** If elected, final payment is due prior to apparatus leaving the factory for delivery. If payment is not processed upon receipt of invoice the discount total will be required in addition to the invoice amount.
 - b. **If pre-payment discount options are not elected standard payment terms will apply:** Final payment will be due 30 days after the apparatus leaves the factory for delivery. If payment is not made at that time a late fee will be applicable.
 - c. Payments made for apparatus using a credit card will be applicable to a credit card convenience fee.

Change Orders: Changes processed after order placement will be processed per the following structure; deductions will be based on the option price at time of order placement, additions will be based on current pricing levels at time of change request.

Performance Bond: A performance bond is not included in the above pricing.

Transportation: Transportation of the apparatus to and from the factory is included in the above pricing.

Inspection Trips: One (1) factory inspection trip for two (2) customer representatives is included in the above pricing. The inspection trip will be scheduled at a time mutually agreed upon between the manufacture's representative and the customer, during the window provided by the manufacturer. Airfare, lodging and meals while at the factory are included. In the event the customer is unable to travel to the factory or the factory is unable to accept customers due to the restrictions caused by a national disaster or pandemic then the Dealership reserves the right to use forms of electronic media to accomplish the intention of the inspection trip. Every effort will be made to make the digital media as thorough as possible to satisfy the expectations of the of the customer. If the customer elects to forgo an inspection trip \$3,150.00 per traveler (per trip) will be deducted from the final invoice.

Cancellation: Cancellation requests after order submission may be subject to cancellation fees.

Acceptance of Proposal:

- a. If the customer wishes to purchase the proposed apparatus Hughes Fire Equipment will provide the Customer its form of Purchase Agreement for the Customer's review and signature.
- b. If the Customer desires to use its standard form of purchase order as the Purchase Agreement, the purchase order is subject to review for any required revisions prior to acceptance.
 - i. Purchase orders must be addressed to Hughes Fire Equipment, Inc., 910 Shelley Street, Springfield, Oregon 97477.
 - ii. Purchase order must reference "One (1) 2010 Velocity Pumper Refurbishment BN23278 dated 08/01/2025."
 - iii. Purchase order must include the following verbiage if a performance bond is elected, "Due to global supply chain constraints, any delivery date contained herein is a good faith estimate as of the date of this order/contract, and merely an approximation based on current information. Delivery updates will be made available, and a final firm delivery date will be provided as soon as possible."
 - iv. Purchase orders must be signed and dated by authorized personnel.

By signing below you agree to purchase the above apparatus.

Customer Signature: _____

Date: _____

PO # (if applicable): _____

Central Mat-Su Fire Department

Wasilla, AK

Proposal for Frame rail replacement of:

**One (1) – 2010 Pierce Velocity Pumper
“23278”**

Date: August 1, 2025

Estimate Expires in 60 days

Prepared by: Jarid McKeever



PIERCE MANUFACTURING, INC.

MIDWEST REGIONAL SERVICE CENTER

816 COMMERCIAL AVENUE * WEYAUWEGA, WI 54983 * (920) 867-2142

Pierce Manufacturing, Inc. is pleased to submit to the **Central Mat-Su Fire Department** a proposal for the upgrades of your **2010 Pierce Velocity Pumper: Vin# 4P1CJ01A9AA010868**. The following paragraphs will describe in detail the apparatus additions and modifications proposed.

QUALIFICATIONS

PIERCE MANUFACTURING was incorporated in 1917. Since then we have been building bodies with one philosophy, "**BUILD THE FINEST**". Our skilled craftsmen take pride in their work, which is reflected, in the final product. We have been building fire apparatus since the early "forties" giving Pierce Manufacturing over 50 years of experience in the fire apparatus market. Our plant is located in Appleton, Wisconsin with over 474,000 total square feet of floor space situated on approximately 93 acres of land. A multi-million dollar inventory of parts is available to keep your unit in service long after it has left the factory.

The Pierce Refurbishment Center has achieved the very same reputation for fire apparatus repair and refurbishing. Located just 30 miles west of Appleton in Weyauwega, Wisconsin, the Pierce Refurbishment Center facility is dedicated exclusively to the refurbishing and repairs of all makes and models of fire apparatus and emergency vehicles. Pierce Manufacturing has produced fire apparatus for over 55 years and has been refurbishing apparatus for more than 35 years.

The 40,000 square foot Refurbishment Center has 16 well-equipped bays staffed by 52 certified, highly skilled mechanics. Fabrication and refinishing is done at the main manufacturing facilities to assure our customers the same fine quality that new Pierce apparatus is famous for.

ISO COMPLIANCE

The manufacturer will operate a Quality Management System under the requirements of ISO 9001. These standards sponsored by the "International Organization for Standardization (ISO)" specify the quality systems that will be established by the manufacturer for design, manufacture, installation and service. A copy of the certificate of compliance will be included with the bid.

SINGLE SOURCE MANUFACTURER

Pierce Manufacturing is a single source apparatus manufacturer. The definition of single source is a manufacturer that designs and manufactures their products using an integrated approach, including the chassis, cab and body being fabricated and assembled on the bidder's premises. The warranties relative to the chassis and body design (excluding component warranties such as engine, transmission, axles, pump, etc.) will be from a single source manufacturer and not split between manufacturer (i.e. body and chassis).

WARRANTY

A separate warranty page detailing the warranty coverage will be provided with the proposal.

WELDING REQUIREMENTS

Pierce Manufacturing follows American Welding Society D1.1-96 standards for structural steel welding. All aluminum welding will be done to American Welding Society and ANSI D1.2-96 requirements for structural welding of aluminum. Flux core arc welding will use alloy rods, type

7000, American Welding Society standards A5.20-E70T1.

PAYMENT TERMS

Payment is to be made to Pierce Manufacturing, in full, within 30 days after completion and final acceptance.

SHIPPING PRECAUTIONS

The following shipping precautions must be completed before transportation of the fire department's apparatus to Pierce Manufacturing for refurbishment or repair. ***Failure to complete the listed items below may result in additional costs to the fire department.***

1. All water tanks, foam tanks, pumps, all inlets and discharge plumbing, all drains, and any other plumbing are to be completely drained prior to being driven or flat-bedded.
2. Strip down all loose equipment unless arranged with Pierce prior to shipping in order to make the repair process easier and to eliminate the potential for lost equipment while the unit is being refurbished or repaired.
3. All loose or potentially loose items should be taped or strapped to ensure they do not come loose during transit.

INCOMING EMERGENCY PARKING BRAKE TEST

The following inspection will be performed by a qualified Pierce technician to ensure this apparatus is safe to drive and perform work on. Should any defects be found that are not already addressed in the proposed work, an itemized list of the defects, along with the costs to repair any additional items, will be provided to the fire department for review. ***Repair of any defects will be "open", pending approval and additional costs. No additional work will be performed without prior approval from the fire department.***

INCOMING BATTERY LOAD TEST

All truck starting system batteries and battery cables will be visually inspected for cracks, acid leaks, corrosion and overall condition. Along with the visual inspection a load test will be performed to verify the batteries cold cranking amps, voltage and shorted cells. Should any defects be found that are not already addressed in the proposed work, an itemized list of the defects, along with the costs to repair any additional items, will be provided to the fire department for review. ***Repair of any defects will be "open", pending approval and additional costs. No additional work will be performed without prior approval from the fire department.***

INCOMING VEHICLE INSPECTION

The following inspections will be performed. A detailed inspection report will be forward to the fire department for disposition. Additional repairs will be open: subject to inspection.

- **Incoming Electrical inspection**
- **Incoming Chassis Inspection and Road test**
- **Incoming Pump Test**
- **Incoming Body Inspection**

Should any defects be found that are not already addressed in the proposed work, an itemized list of the defects, along with the costs to repair any additional items, will be provided to the fire department for review. *Repair of any defects will be “open”, pending approval and additional costs. No additional work will be performed without prior approval from the fire department.*

SCOPE of WORK

Frame rail replacement/ Upgrades.

FRAME RAIL CORROSION – GALVANIZED FRAME REPLACEMENT

DISASSEMBLY

- Remove the hosebed dividers and grating.
- Disconnect the plumbing and remove the water tank.
- Disassemble the body components, unstring electrical harnesses, and remove the body from the frame.
- Disconnect and remove the cab from the frame.
- Disassemble the plumbing components, unstring electrical harnesses, and drive shafts from pump house.
- Remove the pump house from the frame.
- Remove the radiator, engine, and transmission.
- Remove the front axle, suspension, and steering gear assembly.
- Remove the rear axle and suspension.

STEAM CLEANING

The entire vehicle components will be steam cleaned to remove all oils, fluids and grease after disassembly.

REPLACEMENT OF THE FOLLOWING COMPONENTS

- Replace the frame rails, frame extensions with new **GALVANIZED** frame and extensions.
- Replace the crossmembers with new **GALVANIZED** crossmembers.
- Replace the body mounting substructure with new **GALVANIZED** substructure.
- Replace the rear tailboard/platform support and towbar assembly with new **GALVANIZED** tailboard/platform support and towbar.
- Replace the running board supports with new **GALVANIZED** supports.
- Replace the water tank cradle with a new **GALVANIZED** cradle.
- Replace the battery boxes with new stainless-steel boxes.
- Replace battery hold downs.
- Replace the rubber rear axle stops and mounting brackets.

CUMMINS ISL ENGINE OVERHAUL

The engine will be removed from the chassis, overhauled, and reinstalled with the following new components:

- Replace cylinder kits
- Replace cylinder head
- Replace water pump
- Replace lube pump
- Replace oil pressure reg and spring
- Replace turbocharger
- Replace rod and main bearings
- Replace coolant thermostat
- Replace oil and filters
- Replace coolant

TRANSMISSION OVERHAUL ALLISON 3000 SERIES

The Allison 3000 series automatic transmission will be removed from the chassis, overhauled, Dyno tested and reinstalled with the following new components:

- Replace Seal and Gasket Set
- Replace all Clutch Friction Plates
- Replace Backing Plates as required
- Replace all Bushings and Bearings
- Replace Solenoids, Sensors, Pressure Switches
- Replace oil and filter

AIR SYSTEM

- Replace the air tanks and mounting brackets.
- Replace the PPV valves.
- Replace the double check valve.
- Replace the R-14 relay valve.
- Replace the R-12 relay valve.
- Replace valve mounting brackets.
- Replace the brake canisters.
- Replace the rubber hoses at the brake canisters.

FUEL TANK

- Replace the fuel tank with new tank.
- Replace the fuel tank mounting straps with new s/s straps, replace the fuel fill hose, the vent hose, and hose clamps.
- Replace the fuel tank sending unit.

RADIATOR

A new radiator with hardware kit, and seal kit will be installed

CHARGE AIR COOLER

A new charge air cooler and silicon hoses will be provided

FUEL COOLER

A new fuel cooler will be provided

TRANSMISSION OIL COOLER

A new transmission oil cooler will be provided

COOLANT LINES

New silicon coolant hose will be used for all engine coolant lines.

Hose clamps will be stainless steel "constant torque type" to prevent coolant leakage. They will expand and contract according to coolant system temperature thereby keeping a constant clamping pressure on the hose.

All new shutoff valves will be installed

BELTS

All engine belts will be replaced with new.

CAB LIFT SYSTEM

The cab lift system will be overhauled to include

- New pump
- New lift cylinders
- New switch
- New lift cylinder hoses
- New hydraulic cab latches

PAINT AXLES AND SUSPENSIONS BLACK

- Remove corrosion, power wash, and paint (black) the front axle, suspension, and steering gear box. Reinstall using new hardware.

REINSTALLATION

- Reinstall the radiator, engine, transmission.
- Reinstall the cab.
- Reinstall the pump house.
- Reinstall the body.
- Reinstall the water tank.
- Reinstall the grating and dividers.

TAK-4 FRONT, SUSPENSION

The follow TAK-4 front suspension components will be replaced.

- Upper Control arms and ball joints
- Lower Control arms and ball joints
- Tie rods.
- Shock Absorbers
- Torsion bars
- Master, slave steering gears and hose
- TAK-4 torsion bars

REAR SUSPENSION

The rear suspension will be Standens, semi-elliptical, 3.00" wide x 52.50" long, with a ground rating of 33,500 lb. The spring hangers will be castings.

The two (2) top leaves will wrap the forward spring hanger pin, and the rear of the spring will be a slipper style end that will ride in a rear slipper hanger.

A steel encased rubber bushing will be used in the spring eye. The steel encased rubber bushing will be maintenance free and require no lubrication.

IF NEW AXLE IS PROVIDED

REAR AXLE

The rear axle will be a Meritor™, Model RS-30-185, with a capacity of 33,080 lb

PLUMBING

PUC REBUILD

A refurbished center section will be installed.

The new center section will include the following:

- Pump impeller housing with intake components
- Pump impeller
- Gearbox/transmission

The refurbished pump center section will have a 3 year or 1800-hour (whichever occurs first) parts and labor warranty.

VACUUM AND PRESSURE GAUGES

The pump vacuum and pressure gauges will be liquid filled and manufactured by Class 1 Incorporated ©.#.

The gauges will be a minimum of 3.50" in diameter and will have white faces with black lettering, with a pressure range of 30.00"-0-600

PRESSURE GAUGES

The individual "line" pressure gauges for the discharges will be Class 1 interlube filled.

They will be 2.50" in diameter and have white faces with black lettering.

Gauges will have a pressure range of 0-400#.

GAUGES, ENGINE

Remove and replace engine display gauges, oil, voltage, water temp and Tack that are located on the driver side pump panel.

VALVE OVERHAUL

All discharge, tank fill, tank to pump and auxiliary inlet valves will be removed from the adjacent piping to facilitate cleaning and allow bench rebuilding. The valve seals and ball will be removed and carefully inspected for wear or abnormal operation. New seals and O-rings will be installed per manufacturer's recommendation, including a new stainless-steel ball. The valves will be reinstalled and dynamically tested for internal and external leakage.

RELIEF VALVE OVERHAUL

The relief valve will be removed and replaced with new

OUTLET BLEEDER VALVE

A 0.75" bleeder valve will be provided for each outlet 1.50" or larger. Automatic drain valves are acceptable with some outlets if deemed appropriate with the application.

The handles will be chrome plated and provide a visual indication of valve position. The swing handle will provide an ergonomic position for operating the valve without twisting the wrist and provides excellent leverage.

INLET BLEEDER VALVE

A 0.75" bleeder valve will be provided for each side gated inlet.

The valves will be located behind the panel with a "T" swing style handle control extended to the outside of the panel.

The handles will be chrome plated and provide a visual indication of valve position. The swing handle will provide an ergonomic position for operating the valve without twisting the wrist and provides excellent leverage.

MASTER DRAIN

The pump master drain valve will be replaced with new and reinstalled on the pump.

PRESSURE GOVERNOR

The current pressure governor system is obsolete and will be replaced with a new updated system to include the following:

- Pressure governor control
- Tank level transducer
- Pressure sensor
- Pump control module
- Command zone module
- Electrical harness
- Pressure governor transducer cable

PRIMING PUMP

A new Hale oil-less primer pump will be provided.

WATER LEVEL GAUGE

A new FRC tank vision water level gauge will be provided. The new gauge will be installed in the current location

FOAM LEVEL GAUGE

A new FRC tank vision foam level gauge will be provided. The new gauge will be installed in the current location

3rd PARTY PUMP CERTIFICATION

The pump test will be witnessed by a 3rd party testing company, UL an Underwriters Laboratory technician and a certification document will be issued.

ALL EMERGENCY WARNING AND DOT LIGHTS WILL BE UPDATED TO LED LIGHTS AS FOLLOWS:

CAB DOME LIGHTS

There will be four (4) Weldon, 808* series, dual LED dome lights with black bezels provided. Lights will be mounted in current location

VEHICLE CAMERA SYSTEM

There will be a color vehicle camera system provided with the following:

- One (1) camera located at the rear of the apparatus, pointing rearward, displayed automatically with the vehicle in reverse.
- One (1) camera located on the right side of the apparatus, pointing rearward, displayed automatically with the right side turn signal.
- One (1) camera located on the left side of the apparatus, pointing rearward, displayed automatically with the left side turn signal.

The camera images will be displayed on the left side vehicle information center display. Audio from the microphone on the rear camera will be emitted by an amplified speaker with volume control located behind the driver seat.

The following components will be included:

- One (1) SV-CW134639CAI Rear Camera
- Two (2) CS134404CI Side Cameras
- All necessary cables

HEADLIGHTS

There will be four (4) JW Speaker®, Model 8800, 4" x 6" rectangular LED lights mounted in the front quad style, chrome housing on each side of the cab grille:

- the outside light on each side will contain a part number 055***1 low beam module
- the inside light on each side will contain a part number 055***1 high beam module
- the headlights to include chrome bezels

REAR CLEARANCE/MARKER/ID LIGHTING

There will be three (3) Truck-Lite®, Model 26250R, LED lights used as identification lights located at the rear of the apparatus

There will be two (2) Truck-Lite, Model 26250R, LED lights installed at the rear of the apparatus used as clearance lights located at the rear of the apparatus

There will be two (2) Truck-Lite, Model 26250R, LED lights installed on the side of the apparatus as marker lights as close to the rear as practical

There will be two (2) red reflectors located on the rear of the truck facing to the rear. One (1) each side, as far to the outside as practical, at a minimum of 15.00", but no more than 60.00", above the ground.

There will be two (2) red reflectors located on the side of the truck facing to the side. One (1) each side, as far to the rear as practical, at a minimum of 15.00", but no more than 60.00", above the ground.

REAR FMVSS LIGHTING

There will be the following stop/tail and directional lighting provided at the rear of the truck with chrome bezels

- Two (2) Whelen®, Model 604BTT*, red LED stop/taillights
- Two (2) Whelen, Model 604T, amber LED directional lights

BACK UP LIGHTS

Two (2) Whelen Model 60C00VCR, LED backup lights will be provided.

LICENSE PLATE BRACKET

There will be one (1) license plate bracket mounted on the rear of the body.

A white LED light will illuminate the license plate. A stainless-steel light shield will be provided over the light that will direct illumination downward, preventing white light to the rear.

INTERMEDIATE LIGHT

There will be one (1) pair of Truck-Lite, Model 60115Y, amber, LED, turn signal, marker lights furnished, one (1) each side, horizontally in the rear fender panel.

A stainless-steel trim will be included with this installation.

CAB PERIMETER SCENE LIGHTS

There will be four (4) Amdor, Model AY-LB-12HW020, 350 lumens each, 20.00" white LED strip lights provided, one (1) for each cab door.

These lights will be activated automatically when the battery switch is on and the exit doors are opened or by the same means as the body perimeter scene lights.

BODY PERIMETER SCENE LIGHTS

There will be three (3) Amdor®, Model AY-LB-12HW012, 190 lumens, 12.00" long, white 12-volt DC LED strip lights provided.

The lights will be mounted in the following locations.

- Two (2) lights shall be provided under the rear step area.
- Two (2) lights shall be provided under the pump panel running boards, one (1) each side.

ADDITIONAL PERIMETER LIGHT

An On Scene Solution Night Axe, Model 70015, 27.00" long LED weatherproof light will be provided in addition to the normal body perimeter lights.

There will be a total of six (6) lights provided. The light(s) will be installed recess below the rubrails, sides and rear, **matching 25608**.

STEP LIGHTS

There will be four (4) white LED step lights will be provided at the rear to illuminate the tailboard/step area.

In order to ensure exceptional illumination, each light will provide a minimum of 25 foot-candles (fc) covering an entire 15" x 15" square placed ten (10) inches below the light and a minimum of 1.5 fc covering an entire 30" x 30" square at the same ten (10) inch distance below the light.

These step lights will be actuated with the perimeter scene lights.

All other steps on the apparatus will be illuminated per the current edition of applicable NFPA standards.

12 VOLT LIGHTING CAB FRONT

There will be one (1) Whelen® Pioneer™, Model PCP2*, 12-volt LED combination spot/flood light(s) provided on the front visor, centered.

The painted parts of this light assembly to be white.

The light(s) will be controlled by the current switching.

These light(s) may be load managed when the parking brake is set

12 VOLT LIGHTING UPPER CAB SIDES

There will be two (2) Whelen Model PCP2, 12-volt LED combination spotlight and floodlight(s) installed in semi-recessed housing(s) Model PBA203 located on the tight tower enclosure

The painted parts of this light assembly to be white.

The light(s) selected above will be controlled by the current switching.

These light(s) may be load managed when the parking brake is set

12 VOLT LIGHTING BODY SIDES

There will be four (4) Whelen Model PCP2, 12-volt LED combination spotlight and floodlight(s) installed in semi-recessed housing(s) Model PBA203 located two side of body one front and one rear.

The painted parts of this light assembly to be white.

The light(s) selected above will be controlled by the current switching.

These light(s) may be load managed when the parking brake is set

240 VOLT LIGHTING

There will be one (1) Fire Research Spectra, Model SPA851-J20, white 240-volt AC, LED light(s) provided in the current location of the driver side rear body

COMPARTMENT LIGHTING

There will be nine (9) compartments with Amdor, Model AY-9220, white 12-volt DC LED compartment light strips. The lights will be mounted with mechanical fasteners.

There will be two (2) strip lights installed vertically in each compartment opening per the latest NFPA requirements.

The lights will be activated when the battery switch is on and the respective compartment door is opened.

HATCH COMPARTMENT LIGHTING

There will be Amdor LumaBar, Model AY-9220-0** LED strip lights mounted the full length on the interior, hinged side of each compartment. The lights will be mounted with mechanical fasteners.

The hatch compartment lights will be activated when the battery switch is on and the respective door is opened.

SIDE CONTROL PUMP OPERATOR'S/PUMP PANEL LED LIGHTING

Illumination will be provided for controls, switches, essential instructions, gauges, and instruments necessary for the operation of the apparatus and the equipment provided on it.

The pump panels will be illuminated by four (4) Truck-Lite, Model 44308C white 12 volt DC LED lights installed on the back of the cab, two (2) each side. These lights will be activated with the perimeter lights.

The pump operator's panel will be illuminated by three (3) Fire Research Model 115-Q01 white 12-volt DC LED lights on the forward wall near the doorframe.

LIGHTBAR

There will be one (1) 88.00" Whelen Freedom, Model FN**QLED lightbar mounted on the cab roof.

This lightbar will include the following:

- Three (3) red flashing LED modules facing forward.
- Three (3) blue flashing LED modules facing forward.
- Two (2) forward facing clear flashing LED warning lights.
- Two (2) red flashing corner LED modules, one in each front corner.
- One (1) red flashing LED module facing the driver side.
- One (1) red flashing LED module facing the passenger side.
- One (1) GTT, Model 795 LED Opticom™ traffic light controller with national standard high priority.

The color of the lenses will be clear.

The lightbar will be controlled by two (2) switches located on a cab switch panel.

- One (1) switch will control all the warning lights.
- One (1) switch will control the traffic light controller.

The white warning lights and the traffic light controller will be disabled when the parking brake is applied

OPTICOM GPS PRIORITY CONTROL DEVICE

There will be a Global Traffic Technologies, Model 76-1000-1155-0, GPS preemption vehicle kit provided. This GPS preemption vehicle kit is set for high priority. This system is designed to use satellite communications with a receiver board at an intersection to control the traffic lights.

The system will be activated when the battery switch is on and the emergency master switch is on.

The system will be deactivated when the parking brake is applied.

The kit will include:

- Radio/GPS unit containing a GPS receiver and transceiver
- Radio/GPS antenna on the cab roof.
- A controller, which also provides an interface point between the radio/GPS unit the vehicle wiring, and an external PC used for configuration, diagnostics, and downloading log information. The location of this controller will be in available space in switch panel.

WARNING LIGHTS (Cab Face)

Two (2) pair of Whelen model 60*02F*R LED lights will be installed on the cab face, above the headlights in a two (2) light bezel.

The outer LEDs will be required for NFPA and will meet or exceed the NFPA required light output for the front lower zone. The color of these LEDs will be red Super LED/clear lens.

The inner LEDs will be additional lighting. The color of these lights will be blue Super LED/clear lens.

SIDE ZONE LOWER LIGHTING

There will be four (4) Whelen®, Model 60*02F*R, flashing LED lights installed per the following:

- Two (2) lights located, one (1) each side on the bumper extension. The red Super LED/clear lens each side.
- Two (2) lights located, on passenger and driver side body fender panel. The red Super LED/clear lens each side.
- These lights will be installed with two (2) pairs of flange kits.

SIDE WARNING LIGHTS

There will be three (3) pairs of flush mounted Whelen, Model 90**5F*R flashing LED lights provided.

The lights will be located on Add a Whelen 900 series warning light on each side of the housing for the light tower, and upper front and rear corners of the body, clear lens and red LEDs.

The color of the lights will be red Super LED/clear lens .

The lights will be controlled by with the side warning switch.

These lights will be installed with a flange.

REAR ZONE LOWER LIGHTING

There will be two (2) Whelen®, M6, flashing LED warning lights located at the rear of the apparatus.

The color of these lights will be driver side blue Super LED/clear lens, passenger side red Super LED/clear lens.

There will be a switch in the cab on the switch panel to control these lights.

These lights will be installed with a flange

REAR AND SIDE UPPER ZONE WARNING LIGHTS

There will be four (4) Whelen, Model 90**5F*R LED flashing warning lights provided with Whelen, Model 90FLANGC chrome flanges at the rear and side of the apparatus.

The side rear upper light(s) on the driver's side to be red.

The rear upper light(s) on the driver's side to be red.

The rear upper light(s) on the passenger's side to be blue.

The side rear upper light(s) on the passenger's side to be blue.

The color of the lenses will be clear.

TRAFFIC DIRECTING LIGHT

There will be one (1) Whelen®, Model TAL65, 36.01" long x 2.84" high x 2.24" deep, amber LED traffic directing light installed at the rear of the apparatus.

The Whelen, Model TACTLD1, control head will be included with this installation.

The auxiliary warning mode will be activated with the control head only.

CAB AND BODY

DOOR JAMB SCUFFPLATES

All cab door jambs will be furnished with a 1.00" brushed stainless steel scuffplate, mounted on the striker side of the jamb.

SCUFFPLATES, REAR CAB CORNER GUARDS

Both rear cab corners will be furnished with a full height, brushed stainless steel corner guard scuffplate. The guard will extend 1.00" from the corner to protect paint from damage when pulling items (such as booster hose) around the cab.

TRIM BAND (cab face)

A 10.00" band of 22 gauge polished stainless steel trim will be installed across the front of the cab, from door hinge to door hinge. Polished stainless steel corner covers will be provided at the cab turn signals. The trim band will be centered on the head lights and applied with two-sided tape. A .625" self-adhesive trim strip will be applied around the perimeter of the trim band.

DUAL STEPS

A dual step will be provided below each cab and crew cab door. The steps will be designed with a grip pattern punched into bright aluminum treadplate material providing support, slip resistance, and drainage. The steps will be a bolt-on design and provide a 24.00" wide x 7.00" deep stepping surface. The step design raises the middle step higher and closer to the cab floor, resulting in a 12.00" distance from the step to cab floor in the cab and a 13.50" distance from the step to cab floor in the crew cab. Stepping distances from the ground to first step will be 16.50" and from first step to middle step will be 12.00".

FENDER CROWNS

Stainless steel fender crowns will be installed at the cab wheel openings.

DRIVER SEAT

A Pierce PS6® seat will be provided in the cab for the driver. The seat design will be a cam action type with air suspension. For increased convenience, the seat will include electric controls to adjust the rake (15 degrees), height (1.75" travel) and horizontal (7.00" travel) position. Electric controls will be located below the forward part of the seat cushion. To provide flexibility for multiple driver configurations, the seat will have a reclining back, adjustable from 20 degrees back to 45 degrees forward. Providing for maximum comfort, the seat back will be a high back style with manual lumbar adjustment lever, for lower back support, and will include minimum 7.50" deep side bolster pads for maximum support. The lumbar adjustment lever will be easily located at the lower outboard position of the seat cushion. For optimal comfort, the seat will be provided with 17.00" deep dual density foam cushions designed with EVC (elastomeric vibration control).

The seat will include the following features incorporated into the side roll protection system:

- Side air curtain will be mounted integral to the outboard bolster of the seat back. The air curtain will be covered by a decorative panel when in the stowed position.
- A suspension seat safety system will be included. When activated in the event of a side roll, this system will pretension the seat belt and retract the seat to its lowest travel position.

The seat will be furnished with a 3-point, shoulder type seat belt. The seat belt will be furnished with dual automatic retractors that will provide ease of operation in the normal seating position.

OFFICER SEAT

A Pierce PS6® seat will be provided in the cab for the passenger. The seat will be a cam action type with air suspension. For increased convenience, the seat will include a manual control to adjust the horizontal position (6.00" travel). The manual horizontal control will be a towel-bar style located below the forward part of the seat cushion. For optimal comfort, the seat will be provided with 17.00" deep dual density foam cushions designed with EVC (elastomeric vibration control). To ensure safe operation, the seat will be equipped with seat belt sensors in the seat cushion and belt receptacle that will activate an alarm indicating a seat is occupied but not belted.

The seat back will be an SCBA back style with 7.5 degree fixed recline angle, and will include minimum 4.50" wide x 7.50" deep side bolster pads for maximum support. The SCBA cavity will be adjustable from front to rear in 1.00" increments, to accommodate different sized SCBA cylinders. Moving the SCBA cavity will be accomplished by unbolting, relocating, and re-bolting it in the desired location.

The seat will include the following features incorporated into the side roll protection system:

- Side air curtain will be mounted integral to the outboard bolster of the seat back. The air curtain will be covered by a decorative panel when in the stowed position.
- A suspension seat safety system will be included. When activated, this system will pretension the seat belt and then retract the seat to its lowest travel position.

The seat will be furnished with a 3-point, shoulder type seat belt. The seat belt will be furnished with dual automatic retractors that will provide ease of operation in the normal seating position.

REAR FACING DRIVER SIDE OUTBOARD SEAT

There will be one (1) rear facing, Pierce PS6® seat provided at the driver side outboard position in the crew cab. For optimal comfort, the seat will be provided with 17.00" deep dual density foam cushions designed with EVC (elastomeric vibration control). To ensure safe operation, the seat will be equipped with seat belt sensors in the seat cushion and belt receptacle. It will activate an alarm indicating a seat is occupied but not buckled.

The seat back will be an SCBA back style with 7.5 degree fixed recline angle, and will include minimum 4.50" wide x 7.50" deep side bolster pads for maximum support. The SCBA cavity will be adjustable from front to rear in 1.00" increments, to accommodate different sized SCBA cylinders. Moving the SCBA cavity will be accomplished by unbolting, relocating, and re-bolting it in the desired location.

The seat will include the following features incorporated into the side roll protection system:

- Side air curtain will be mounted integral to the outboard bolster of the seat back. The air curtain will be covered by a decorative panel when in the stowed position.
- A seat safety system will be included. When activated, this system will pretension the seat belt around the occupant to firmly hold them in place in the event of a side roll.

The seat will be furnished with a 3-point, shoulder type seat belt. The seat belt will be furnished with dual automatic retractors that will provide ease of operation in the normal seating position.

REAR FACING PASSENGER SIDE OUTBOARD SEAT

There will be one (1) rear facing, Pierce PS6® seat provided at the passenger side outboard position in the crew cab. For optimal comfort, the seat will be provided with 17.00" deep dual density foam cushions designed with EVC (elastomeric vibration control). To ensure safe operation, the seat will be equipped with seat belt sensors in the seat cushion and belt receptacle that will activate an alarm indicating a seat is occupied but not buckled. The seat back will be an SCBA back style with 7.5 degree fixed recline angle, and will include minimum 4.50" wide x 7.50" deep side bolster pads for maximum support. The SCBA cavity will be adjustable from front to rear in 1.00" increments to accommodate different sized SCBA cylinders. Moving the SCBA cavity will be accomplished by unbolting, relocating, and re-bolting it in the desired location.

The seat will include the following features incorporated into the side roll protection system:

- Side air curtain will be mounted integral to the outboard bolster of the seat back. The air curtain will be covered by a decorative panel when in the stowed position.
- A seat safety system will be included. When activated, this system will pretension the seat belt and firmly hold the occupant in the event of a side roll.

The seat will be furnished with a 3-point, shoulder type seat belt. The seat belt will be furnished with dual automatic retractors that will provide ease of operation in the normal seating position.

FORWARD FACING CENTER SEATS

There will be two (2) forward facing, Pierce PS6® seats provided at the center position in the crew cab. For optimal comfort, the seats will be provided with 17.00" deep dual density foam cushions designed with EVC (elastomeric vibration control). To ensure safe operation, the seats will be equipped with seat belt sensors in the seat cushion and belt receptacle that will activate an alarm indicating a seat is occupied but not buckled.

The seat backs will be an SCBA back style with 7.5 degree fixed recline angle, and will include minimum 4.50" wide x 7.50" deep side bolster pads for maximum support. The SCBA cavity will be adjustable from front to rear in 1.00" increments, to accommodate different sized SCBA cylinders. Moving the SCBA cavity will be accomplished by unbolting, relocating, and re-bolting it in the desired location.

The seats will include the following feature incorporated into the side roll protection system:

- A seat safety system will be included. When activated, this system will pretension the seat belts around the occupants to firmly hold them in place in the event of a side roll.

The seats will be furnished with 3-point, shoulder type seat belts. The seat belts will be furnished with dual automatic retractors that will provide ease of operation in the normal seating position.

SEAT UPHOLSTERY

All seat upholstery will be leather grain gray vinyl resistant to oil, grease and mildew. The cab will have six (6) seating positions

AIR BOTTLE HOLDERS

All SCBA type seats in the cab will have a "Hands-Free" auto clamp style bracket in its backrest. For efficiency and convenience, the bracket will include an automatic spring clamp that allows the occupant to store the SCBA bottle by simply pushing it into the seat back. For protection of all occupants in the cab, in the event of an accident, the inertial components within the clamp will constrain the SCBA bottle in the seat and will exceed the NFPA standard of 9G. There will be a quantity of five (5) SCBA brackets.

SEAT BELTS

All seating positions in the cab and crew cab will have red seat belts and new buckles

CAB AND CREW CAB DOORS

The cab and crew cab doors windows and latches will be repaired and serviced to like new condition.

- Replace door latches interior, exterior, rods, striker bolts.
- Replace window regulators.
- Replace the cab and crew cab door weather seals with double automotive type rubber seals around the perimeter of the door to ensure a weather tight fit.
- New window track lining and weather stripping will be supplied.

All cab and crew cab doors will be properly adjusted for fit and operation to include new door stay straps.

DOOR SEALS

Replace the cab and crew cab door weather seals with double automotive type rubber seals around the perimeter of the door opening to ensure a weather tight fit.

PULL STRAP, DOOR

There will be eight (8) compartment doors provided with pull straps. The compartment door(s) to be provided with a pull strap will be roll up doors on the passenger , driver side body, passenger and driver side crosslay

SIDE COMPARTMENT ROLLUP DOOR(S)

There will be nine (9) compartment doors installed on the side compartments. The doors will be double faced aluminum construction, the passenger and driver side compartment door will be painted to match the lower portion of the body and manufactured by Gortite®.

ROLLUP REAR COMPARTMENT DOOR

The rear compartment will have a rollup door. The door will be double faced aluminum construction, an anodized satin finish and manufactured by Gortite®.

BRIGHT ALUMINUM TREADPLATE

The following bright, aluminum treadplate will be replaced with NFPA 1901 compliant, slip-resistant material::

- Catwalks
- Front bulkhead
- Tailboard
- Beavertail lining
- Rear body walls
- Rear cab wall
- Hosebed covers
- Generator cover
- Foam pump cover

HANDRAILS

All existing body and cab handrails will be replaced with new NFPA 1901 compliant non-slip 1.25" diameter anodized aluminum extrusion, with a ribbed design, to provide a positive gripping surface.

Chrome plated end stanchions will support the handrail. Plastic gaskets will be used between end stanchions and any painted surfaces.

Drain holes will be provided in the bottom of all vertically mounted handrails.

BODY FENDER CROWNS

Stainless steel fender crowns will be provided around the rear wheel openings.

A rubber welting will be provided between the body and the crown to seal the seam and restrict moisture from entering.

RUB RAIL

Replace all body compartment rubrails.

Bottom edge of the side compartments will be trimmed with a bright aluminum extruded rub rail.

Trim will be 2.12" high with 1.38" flanges turned outward for rigidity.

The rub rails will not be an integral part of the body construction, which allows replacement in the event of damage.

AIR BOTTLE DOORS

New brushed stainless-steel door and hinges with a chrome plated flush lift & turn latch will be provided to contain the air bottle. A dielectric barrier will be provided between the door hinge, hinge fasteners and the body sheet metal.

FUEL DOOR

A new Stainless-Steel fuel door and hinge will be provided

SIGN KIT FOR LETTERING/NUMERALS

Four (4) painted stainless steel plate(s) and holder(s) will be provided for department lettering. Sign holders will be 7" high x 11" wide in size.

The location of the sign holders will be determined by the Fire Department

MUD FLAPS FRONT and REAR

New mud flaps with a Pierce logo and all new mounting brackets will be installed behind the front and rear wheels

CAB, BODY REPAINT

CAB THREE-TONE PAINT

The cab will be painted three-tone with the upper section painted #479 charcoal metallic, the middle section painted #20 white, and the lower section painted #100 red. There will be a standard two-tone cab break with an additional break at the roof line provided. There will be a standard cab shield provided.

BODY PAINT

The body will be painted #100 Red to match the lower section of the cab.

GRAPHICS

REFLECTIVE BAND, LETTERING and GRAPHICS

All graphics, lettering and reflective bands are to match the newest current apparatus for Central Mat-Su Fire Department **TR 34962**

CHEVRON/INVERTED "V" STRIPING ON REAR WALL DIAMOND GRADE

All vertical surfaces of the rear aluminum will be replaced with smooth aluminum sheet and covered with chevron striping.

There will be alternating inverted "V" chevron striping located on the rear wall of the apparatus to include the rear bulkheads.

The striping will consist of the following colors:

The first color will be Diamond grade RED

The second color will be Diamond grade YELLOW

The size of the striping will be 6".

TESTING AND CLEAN UP

- Check all electrical functions, DOT, and emergency lighting.
- Have front alignment checked and rear axle tracking set.
- Check tire pressure, chassis fluid levels, and road test truck.
- Wash and Fuel truck for inspection.

CARWELL CORROSION INHIBITOR

The underside of the apparatus will be sprayed with Carwell Corrosion Inhibitor.

Customer will be responsible for any further annual re-applications.

TRANSPORTATION

Transportation is not included in this estimate.

Additional repair costs will be open: subject to inspection and written approval by the fire department.

It is recommended to allocate at least 20% contingency money of estimated total price for unknown items discovered during inspections/teardown.

TOTAL DEALER NET: \$858,640.00

END