REQUEST FOR PROPOSAL (RFP)

Mini Pumper (Based on Ford F-550 4x4 Crew Cab Chassis with Fire/Rescue Package)

Issued by: Houlton Fire Department

Date Issued: October 1, 2025

Proposal Due Date: October 31, 2025, at 2:00 PM

1. Introduction

The Houlton Fire Department, hereafter referred to as the "Department," is soliciting sealed proposals from qualified vendors for the provision of one (1) new Mini Pumper built on a Ford F-550 4x4 Crew Cab chassis with the OEM Fire/Rescue package or equivalent meeting/exceeding these specifications. This unit will serve as a quick attack vehicle for fire suppression, wildland fires, EMS first response, service calls, and structural firefighting support.

2. Objective

The Department is seeking a versatile, highly maneuverable Mini Pumper that can:

- Perform initial attack on structural fires
- Response to wildland fires.
- Respond to EMS and service calls
- Operate in rural, suburban, and tight-access environments
- Tow specialty trailers (Hazmat, UTV, etc.)
- Provide pump-and-roll capability for mobile attack

1 - Chassis Specification

- Ford F-550 4x4 Crew Cab chassis XL package or equivalent with OEM Fire/Rescue package or equivalent
- GVWR: 19,500 lbs minimum (Class 5)
 - o Standard specs:
 - 7.3L V8 gasoline engine
 - CA: 84 in.
 - 10-Speed automatic transmission
 - PTO Provision
 - 4.88 Limited slip axle
 - Race Red exterior paint
 - 19½ in. Argent painted steel wheels, tires shall be of high traction designed for off road and snow conditions with appropriate load rating
 - Carpet Delete
 - AdvanceTrac with Roll Stability Control (RSC®) and Trailer Sway Control
 - One (1) set of running boards shall be mounted to each side of the chassis. The running boards shall exceed the NFPA requirements for stepping surface and slip resistance
 - o Ford chassis will be ordered with the following packages as required:
 - Power Equipment Group
 - Payload Upgrade Package 2
 - Rear View Camera and Prep kit
 - Back-up Alarm
 - Dual Battery
 - 410-amp Alternator
 - Vehicle Integration System 2.0

2 - Apparatus Body

2.1 - Apparatus Body Construction Overview

- The body shall be of self-standing rigid cage style construction consisting of the following:
 - o 2 in. x 3 in. aluminum 6063 box tube inner frame
 - o The exterior/interior walls shall be sheeted with aluminum 5052 alloy
 - o Custom engineered aluminum corner extrusions of a 6061 alloy
 - o Roof to be sheeted in an aluminum 3003 tread plate
- The body shall consist of seven (7) individual exterior compartments. The body shall be mounted on the before mentioned chassis and shall come with a fifteen (15) year structural warranty.
- The body shall measure approximately 144 in. long x 76 in. tall x. 96 in. wide.
- Apparatus body is purpose built and designed to meet the unique needs and demands of the emergency services environment.
- The body shall be mounted to the chassis with no chassis building be required or permitted.

2.2 - Roof Construction

- The roof shall be constructed of \(\frac{1}{8} \) in. thick aluminum embossed diamond plate.
- The roof structure shall consist of 2 in. x 3 in. aluminum 6063 box tube that shall span the full width of the compartments.
- The roof structure tubes shall be spaced at a maximum of 12 in. on center.
- The roof tubes shall be welded to the inner structural connector of the radius.
- Inner cage to be welded to the aluminum embossed diamond plate roof and inner structural connector of the extruded radius.
- Aluminum embossed diamond plate roof seams shall be fully welded with no caulking or screws utilized or acceptable.

2.3 - Roof Radius

- The roof cove radius shall be an extruded aluminum 6061 alloy shape with an ultimate strength of 42,000 PSI.
- The shape shall be a 2 in. radius with a built in inner structural connector to form a one (1) piece side and roof structure.
- The radius shall be semi hollow shape for strength, reduced weight and to also allow passage for electrical wires.
- The roof and side sheets shall fit into the roof radius and shall be welded from the inside/outside of the body.

2.4 - Corner Radius

- The corner radius shall be of the same heavy construction as the roof radius. The corner radius shall have a radius of 3 in.
- All corners shall be semi hollow extruded shapes for structural strength and shall give a smooth exterior appearance without bending or forming sheet metal.

2.5 - Side Structure

- The sides shall be constructed with four (4) corner radii.
- The corner and roof shall be designed to work as a system that has a double gusset connector in each corner joint.
- The roof, corner, and sides shall be welded so as no bolts or rivets are required or permitted.
- Inner structural cage members shall be placed no more than 16 in. on center and welded to the roof rail inner structural connector.
- Side and rear walls of the body, compartments, and door skin shall be aluminum 5052 alloy. Front wall to be aluminum diamond plate.
- Streetside wheel area shall include a stainless steel fuel fill door and hardware.

- There shall be three (3) SCBA bottle storage tubes, approximately 8 in. round x 24 in. deep, placed above the wheel wells, below (SS2) and (CS2) compartments.
 - o One (1) on the Streetside
 - o Two (2) on the Curbside
 - o They shall have a stainless steel door and hardware, same as the fuel door

2.6 - Floor Structure

- The floor structure shall consist of 3 in. x 2 in. aluminum 6063 box tube spaced specifically for each body style as structurally required. Lateral tubing shall extend the full width of the body between compartment boxes.
- The floor tubes shall be welded to the side structure channels. The interior floor surface shall be covered with a heavy duty aluminum sheet.

2.7 - Rear Step Construction

- The rear step of the apparatus shall be constructed of aluminum embossed diamond plate (Tread plate) for minimum body maintenance.
- The step surface shall contain a minimum 10 in. wide insert of aluminum grip strut.
- The step shall extend from the module's body with 2 in. x 3 in. x $\frac{1}{4}$ in. aluminum 6061 box tube for strength and integrity.
- The box tube shall be placed as to form a structural matrix to the chassis and keep the body in a complete modular form.

2.8 - Compartment Construction

- All exterior compartments shall be constructed of heavy duty aluminum sheet.
- All corners shall be welded.
- Each compartment shall be vented with a minimum 4 in. pre-cut vent.
- All compartment floors shall be of the "sweep out" style.
- Compartment skins shall be fully welded in place.
- All interior of compartments shall be coated with Black PPC material for excellent durability.

3 - Body Mounting

- The body structure sills shall be constructed of 2 in. x 3 in. x $\frac{1}{4}$ in. aluminum box tube and shall run the full length of the body structure.
- The 2 in. x 3 in. x ¼ in. aluminum box tubes shall be welded to every lateral structural member on both sides.
- The chassis and body shall be separated with a 1 in. x 3 in. rubber sill.
- The body shall be capable of being removed from and transferred to a new chassis similarly sized to the old chassis.
- There shall be adequate space left between the cab and body allowing for common flexing.
- The body shall be attached to the chassis using 5% in. powder-coated Black steel "U" bolts.
- The body shall be mounted as per the chassis manufacturer's guidelines.
- 4 Vehicle, Body Appearance, & Accessories
- 4.1 BuckStop Front Bumper or equivalent to provide protection for front end of vehicle
 - There shall be a BuckStop Outback front bumper installed.
 - o The bumper shall have an internal winch mount
 - Shall have a Factory powder-coated Hammered Black finish
- 4.2 Roll Up Style Compartment Doors AMDOR, INC.
 - Each side exterior compartment shall have a roll up aluminum door.
 - The doors shall be constructed and installed within the guidelines of AMDOR, INC.
 - Each slat shall interlock to create a flexible joint. At the end of the slats there shall be plastic end shoes for easy sliding of the doors.
 - The roll up track shall include a rubber seal.
 - Roll up door curtains, trim, and drip rail pieces shall be NON-PAINTED/satin.
 - Each door shall have a stainless steel drip pan installed.

- Each door shall have White LED Lighting on both sides of the opening to give ample lighting in the compartments.
 - o Lights to turn on automatically when the door is opened
- Each door will have an integrated magnetic sensor to detect if a door is open and will activate the "Door Ajar" light on the center console.
- These doors shall be installed on the compartments (SS1), (SS2), (SS3), (R1), (CS1), (CS2), and (CS3).

4.3 - Mud Flaps

- There shall be provided a set of heavy duty rear mud flaps with aluminum weights.
- The flaps shall be made of thick rubber material and shall be as wide as the wheel(s).
- The mud flaps shall be securely fastened using stainless steel fasteners.

4.4 - Fenders & Wheel Wells

- The wheel well shall be provided with full fender liners as to eliminate pockets that might trap and collect road dirt.
- Rear fenders shall be of stainless steel with a polished finish.
- The fuel and DEF (if applicable) fills will be located on the Left side towards the rear of the wheel well.
 - This will have a stainless steel door and hardware

4.5 - Running Boards

- Custom Running Boards
 - Aluminum Grip Strut wrapped in embossed diamond plate
 - o Meets or exceeds NFPA tread plate requirement

4.6 - Exterior Body Trim

• There shall be provided natural/unfinished aluminum "C" channels, used as a rub rail, installed at the lowest edge of the apparatus body below compartments (SS1), (SS3), (CS1), and (CS3).

4.7 - Wheel Chocs

- There shall be two (2) Zico non-folding wheel chocs installed on the bottom edge, one (1) ea. side, of (SS1) and (SS3) compartments.
 - o This will include a horizontal mounting bracket for storage when not in use

4.8 - Class V Trailer Hitch

- There shall be provided a custom Class V trailer hitch, 2 in. square, which shall be securely fastened to the chassis/body. The receiver shall be custom built to bring it to the end of the body.
- There shall be a combination seven (7)/four (4)-pin trailer plug installed near the rear hitch receiver area.

4.9 - Apparatus Body Painting

- The entire cab structure will be painted from the vehicle manufacturer, Race Red. There will be a white reflective strip applied to the apparatus. The paint and lettering scheme will be representative of the other apparatus of the department. Photos of equipment can be provided upon request. Final design will be presented to the department for approval.
 - Any requested paint modifications will not include the following locations:
 - Underside of cab, engine compartment, underside of hood, and hood hinges will remain factory color
- The entire module shall be fully ground smooth and sanded to eliminate any visible welded deflections.
- Prior to applying the first coat of primer on the module, all removable hardware items such as doors, handles, hinges, grab rails, lights etc. Shall be removed.
- The module shall be painted to match the cab's Factory Race Red.
 - Confirmation of color will be made at the pre-con meeting
- The priming and final coat application shall conform to the paint manufacturer's guidelines.
- The cab (if applicable) and the module shall be painted using 2 stage Sikkens Autocoat BT paint.

- 5 Compartment Layout
- 5.1 Streetside Compartment 1 (SS1)
 - This compartment shall start on the driver's side front of the module and shall be approximately 23 in. deep x 58 in. tall x 48 in. wide.
 - Compartment shall have one (1) 120-VAC 20-amp outlet to work off shoreline power and while the vehicle is running
 - Outlet shall be located within the removable panel that is located in the forward, outer corner of the compartment
 - One (1) 6-circuit 12-VDC fuse block to be mounted to the forward most wall, high as possible
 - (SS1) Lower compartment will contain an electrical compartment.
 - The compartment will house the following:
 - One (1) Whelen CenCom Core Amplifier and fuse block(s)
 - One (1) Xantrex Freedom XC Pro 3000 Inverter/Charger system
 - One (1) 12-VDC power lead hardwired thru ignition switching
 - One (1) 12-VDC power lead hardwired thru chassis batteries
 - One (1) ground lead hardwired to chassis frame and negative battery terminal
- 5.2 Streetside Compartment 2 (SS2)
 - This compartment shall be located above the wheel well and shall be approximately 23 in. deep x 32 in. tall x 48 in. wide.
 - The following to be mounted to the forward most wall, high as possible
 - One (1) 120-VAC 20-amp outlet to work off shoreline power and when the vehicle is running
 - Mounting for 4 SCBA in compartment
 - There shall be one (1) access panel installed for pump access and maintenance

5.3 - Streetside Compartment 3 (SS3)

- This compartment shall be located between the wheel well and the rear of the module and shall be approximately 23 in. deep x 58 in. tall x 28 in. wide.
 - o Compartment shall have one (1) 120-VAC 20-amp outlet to work off shoreline power and while the vehicle is running
 - Outlet shall be located within the removable panel that is located in the rearward, outer corner of the compartment

5.4 - Curbside Compartment 1 (CS1)

- This compartment shall start on the passenger's side front of the module and shall be approximately 23 in. deep x 58 in. tall x 48 in. wide.
 - Compartment shall have one (1) 120-VAC 20-amp outlet to work off shoreline power and while the vehicle is running
 - Outlet shall be located within the removable panel that is located in the forward, outer corner of the compartment

5.5 - Curbside Compartment 2 (CS2)

- This compartment shall be located above the wheel well and shall be approximately 23 in. deep x 32 in. tall x 48 in. wide.
 - The following to be mounted to the forward most wall, high as possible
 - One (1) 120-VAC 20-amp outlet to work off shoreline power and when the vehicle is running
- There shall be one (1) access panel installed for pump access and maintenance

5.6 - Curbside Compartment 3 (CS3)

- This compartment shall be located between the wheel well and the rear of the module and shall be approximately 23 in. deep x 58 in. tall x 28 in. wide.
 - o Compartment shall have one (1) 120-VAC 20-amp outlet to work off shoreline power and while the vehicle is running
 - Outlet shall be located within the removable panel that is located in the rearward, outer corner of the compartment
- There shall be one (1) access panel installed for pump access and maintenance

5.7 - Rear Area (R1)

- The (R1) area shall be located on the rear of the apparatus and shall contain the water tank, hose reel, Back-up camera, pump, and pump controls. There will be a flat sheet of aluminum bolted in to create a pump panel. This panel shall be recessed 14 in. into this area behind the roll up door.
 - There will also be a waterproof compartment to house a remote speaker\mic and control head of the Kenwood Radio that is installed in the cab.

5.8 - Upper Body Compartment "Rear Access" Curbside

- Compartment to house $2\frac{1}{2}$ in. hard suction hose and be accessible from the rear of the unit. Hard suction and strainer to be included. On the opposite side another compartment that will hold included and specified pike pole.
 - Compartments shall be next to the Hose Bed

5.9 - Hose Bed

- Hose Bed is open to the rear of the apparatus and shall be approximately 84 in. deep x 12 in. tall x 40 in. wide.
 - o One (1) adjustable Hose Bed, DA finish, divider shall be provided
 - O Hose Bed will have a DA finish
- Black vinyl cover from D&S Covers, with hook and bungee mounting system, shall be provided for the Hose Bed and sectioned off area for the water tank.

6 - Compartment Accessories

6.1 - Adjustable Shelves

- The provided aluminum adjustable shelves shall be constructed of 3/16 in. aluminum and have a full 2 in. lip surround for durability and strength.
- Shelving mounting hardware shall be aluminum unistrut and locking jam nuts.
- Adjustable shelves will be finished in the same color PPC as the compartments they will occupy.

6.2 - Compartment Floor/Shelf Matting

- There shall be Turtle Tile, or equivalent, floor tiles installed in compartments (SS1), (SS2), (SS3), (CS1), (CS2), and (CS3)
 - Compartment floor
 - Shelves and slide-out tray(s) (if applicable)
 - Tiles shall be custom fitted to the individual area and shall assist in protecting the surface of the compartment from damage. It will also allow air flow/separation from standing water to the underside of anything laying on the matting.

6.3 - Compartment Lighting

• Compartments (SS1), (SS2), (SS3), (R1), (CS1), (CS2), and (CS3) shall all have dual track lighting, built into door tracking.

7 - Skid Unit

7.1 - Custom Skid Unit

- There shall be provided and installed a Custom Skid Unit built specifically for this build.
- The water tank shall be of poly construction and have a capacity of 260 gallons, 250 gal of water/10 gal. of foam. The tank will be covered by the manufacturer's Limited Lifetime warranty. Foam fill tower shall be accessible through the Hose Bed, Curbside forward most portion.
 - The tank shall be baffled to be compliant with NFPA
 - There shall be an Overflow "vent" piped to the ground.
 - There shall be one (1) $2\frac{1}{2}$ in. bung for the Tank-to-Pump
 - There shall be one (1) 1½ in. threaded port for Tank Fill/Recirculate
- The Fire Pump shall be a Hale HPX275-B35, Max Flow: 300 GPM @ 50 PSI or equivalent
 - Pump Ratings:
 - 50 GPM @ 175 PSI
 - 100 GPM @ 160 PSI
 - 170 GPM @ 150 PSI
 - 250 GPM @ 100 PSI
 - o Briggs and Stratton 35-HP 4-cycle V-Twin big bore gasoline engine, air-cooled, and electric starter
 - Fuel shall be plumbed from the chassis' fuel tank
 - Pump exhaust shall be routed to exit the vehicle between the frame rails to below the truck
 - 12-VDC ESP-12 Primer, with push button

- The control panel shall be a stand alone unit with the following:
 - Approximately 40 in. wide Black PPC coated aluminum sheet
 - Gauges
 - Ignition switch
 - Push-button START
 - Throttle switch
 - Choke
 - Primer button
 - Electric valve controls
 - One (1) FRC Tank Vision Water Tank LED Level Gauge
 - One (1) FRC TankVision Foam LED Level Gauge
- The stainless steel Intake manifold: Fire-type valves
 - One (1) 2½ in. electric valve between the tank and the pump, Tank-to-Pump
 - \circ One (1) $2\frac{1}{2}$ in. NH Rear Suction swing handle valve between the pump and intake with Cap/Chain
- The stainless steel Discharge manifold: Fire-type electric valves
 - o One (1) 1½ in. Discharge 2 in. valve for Tank Fill/Recirculate
 - One (1) ¾ in. Garden Hose Discharge, exterior ¼ turn shutoff valve
 - One (1) 1 in. Discharge for booster hose reel
 - o One (1) 1½ in. NPSH Pre-connect Discharge, outlet of this discharge shall be in the front of the Hose Bed, Curbside
 - o Two (2) 1½ in. NPSH Rear Discharge, Caps/Chains
 - One (1) 2½ in. NH Rear Discharge, Cap/Chain

- One (1) Hannay Reels, , hose reel with roller assembly shall be installed in the (R1) area with a rearward hose discharge
 - One (1) section of 1 in. x 150 ft. Reel Lite forestry booster hose, Yellow, will be installed onto the reel
 - o One (1) TFT Twister Selectable One-Piece Nozzle, DS1040P, With Pistol Grip, Ball Valve − 10/40 GPM @ 100 PSI, 1 in. Rocker Swivel Inlet shall be installed on the hose reel
 - One (1) PAC Stow-N-Lok (tall), 1005-Y, shall be mounted on the (R1) panel for nozzle securement

7.2 - Foam System

- There shall be a Scotty 4171 "Through-The-Pump" Foam system shall be plumbed from the foam tank to the manifold. All discharges will be foam capable.
 - Will inject concentrate at percentages of 0% to 3.75% at flow rates from 15 GPM to 125 GPM at 100 PSI

8 - 12-VDC Electrical System

- The electrical systems and associated equipment shall comply with all Federal Motor Vehicle Safety Standards, Federal Motor Carrier Safety Regulations, and shall also conform to all applicable SAE recommended standards and practices.
- The module body and accessory electrical equipment shall be served by circuits separate and distinct from the chassis circuits.
- All wiring shall be permanently color coded and marked to identify each wire.
- Wiring shall be routed in conduit or loom.
- All looms shall meet the SAE J-1128 GLX temperature rating of 257°F/125°C
- Wiring shall be located and installed in such a manner that facilitates easy removal and servicing.

- 9 Audible Warning Systems
- 9.1 Siren & Lighting Control
 - There shall be provided and installed a Whelen CenCom Core Amplifier Control module, Whelen CenCom Core Control Head w/slider switch rotary knob siren.
 - Slider positions on light controller
 - Position 1: Rear and four (4) corner modules in lightbar
 - Position 2: Adds front Red warning
 - Position 3: Adds front White warning
 - When transmission is placed into PARK, all lighting should go to a Position 2 style flash pattern
 - O Side perimeter & scene lights shall activate when adjacent cab door is opened
 - Rear Scene can be activated when transmission is placed in REVERSE

9.2 - Siren Speaker(s)

• There shall be provided one (1) Whelen SA315P, 123dB, 100-watt electronic speaker mounted behind the grille with a siren speaker bracket.

10 - Apparatus Lighting

10.1 - DOT Lighting

- There shall be provided the proper number of LED style marker lights located on the apparatus body Tecniq S34 Red & Amber LED/Clear lenses
 - Center rear markers will be located on the rear bumper
- Stop/Tail/Turn/Back-up lights are mentioned below.
- One (1) License plate light, Chrome, shall be mounted on the rear of the apparatus to illuminate the installed license plate.

10.2 - Visual Warning Systems

- All of the following lighting shall be mounted to the vehicle per manufacturer specifications.
- The lighting shall be positioned to provide adequate coverage on all zones of the vehicle.

10.3 - Roof Mounted Lightbar

- One (1) 54 in. Whelen Liberty II DUO lightbar, Red/White LEDs w/Clear lens, includes full flood and alley lights. Cab mounted with vehicle specific brackets, Stainless.
 - Lightbar shall auto dim in night time conditions
 - White warning shall only flash on slider Position 3 and vehicle's transmission is in DRIVE
 - White modules in lightbar will be activated for Front Scene and Side Scenes

10.4 - Front of Vehicle

- Mounted to the BuckStop bumper:
 - o Two (2) Whelen M4 DUOs, Red/White LED/Clear, Chrome flanges
 - Mounted to the side, outward face, of the BuckStop bumper
 - o Four (4) Whelen 500 Vs, Red warning/scene/puddle, Chrome flanges
 - Two (2) mounted in the square factory cut out areas
 - Two (2) mounted on the lower cross member, lower side, of the brush guard
 - o Two (2) Whelen PAR-36, fog lights
 - Mounted in the round factory 6 in. cut out areas
 - One (1) Whelen Pioneer Summit 30 in., Red Warning/Scene/Flood with built-in Amber marker lights, Black housing
 - Mounted to the top cross member, upper side, of the brush guard
- White flash to be cut out when the slider is in Position 3 and vehicle's transmission is placed into PARK.

10.5 - Side of Vehicle

- Two (2) Whelen M4 SOLOs, Red LED/Clear lens, Chrome flanges.
 - One (1) ea. shall be mounted on the truck chassis, front fender, just after the headlights, before the front wheel
- Two (2) Whelen M4 SOLOs, Red LED/Clear lens, Chrome flanges.
 - One (1) ea. of the above lighting shall be mounted on the module's body, lower level, centered directly above the rear axle
- Four (4) Whelen M9 SOLOs, Red LED/Clear lens, Chrome flanges.
- The above lighting shall be mounted on the module's body, upper level, one (1) ea. just after the front edge of the body, and one (1) ea. Just before the rear edge of the body, per side

10.6 - Rear of Vehicle

- Two (2) Whelen M9 SOLOs, Red LED/Clear lens, Chrome flanges.
 - The above lighting shall be mounted on the rear of the module's body, upper edge. One (1) ea. side between the outer edge of the body and the Hose Bed.
- One (1) Whelen 40 in. 2240 Traffic Advisor, Amber/Red LED/Clear lens.
 - Surface mounted on the rear of the vehicle, above the (R1) roll up door
 - All lights shall activate with warning lights
 - The two (2) center light heads shall function as a third brake light
 - These lights shall be overrode when the traffic advisor is in use
 - o Traffic advisor control shall be Left, Center Out, and Right
- The following warning and DOT lighting shall be mounted in a Whelen 4-Head M6 taillight pods, Chrome. Placed one (1) ea. side of the rear of the module's body, lower portion. The lighting shall be placed as follows, top to bottom:
 - o Two (2) Whelen M62BTT, Brake/Tail, Red LED/lens
 - o Two (2) Whelen M62T, Turn arrow, Amber LED/lens
 - o Two (2) Whelen M62BU, Back-Up light, White LED/lens
 - o Two (2) Whelen M6RC, SOLO warning light, Red LED/Clear lens

10.7 - Scene & Underbody Lighting

- Scene Lighting
 - Front of the Apparatus:
 - Front Scene lighting will be provided by the lightbar's White modules and the M4 DUOs, 500 Vs, & Pioneer Summit on the BuckStop bumper
 - Side of the Apparatus:
 - Side Scene lighting will be provided by four (4) Whelen M9 EZ Scene lights, Chrome flange
- One (1) ea. shall be mounted on the inward side of the M9 SOLOs
 - The lightbar's side White modules shall also provide illumination
 - Rear of the Apparatus:
 - Rear Scene lighting will be provided by two (2) Whelen M9 EZ Scene lights, Chrome flange
- One (1) ea. shall be mounted on the below the rear M9 SOLOs
- Underbody Lighting:
 - o Ten (10) Tecniq E10 White LED underbody lights w/stainless steel brackets
 - Four (4) shall be mounted, two (2) ea. side, inboard of the running board on the chassis
 - Four (4) shall be mounted:
- One (1) ea. under compartments (SS1), (SS3), (CS1), & (CS3)
 - Two (2) shall be mounted under the rear bumper
 - All the above lighting shall be activated automatically in PARK
- 11 Reverse Safety Systems
- 11.1 Back-Up Alarm
 - There shall be provided an automatic back-up alarm that activates when the vehicle's transmission is placed in REVERSE.

11.2 - Back-Up Camera

- Factory back-up camera shall be installed on the rear of the apparatus.
 - Camera screen to come on automatically in REVERSE

12 - Battery Charger/Inverter

- There shall be provided a Xantrex Freedom XC Pro 3000 Inverter/Charger system installed.
 - Selectable 5-100-amps DC
 - \circ 25-amps AC, 50-amps surge (\leq 5s)
 - This Charger/Inverter will allow for 120-VAC power to be produced while the vehicle is running
- Included in the system shall be a Kussmaul 20-amp Auto Eject shoreline receptacle that shall provide 120-VAC service when active.
 - o Auto Eject cover: Yellow
 - Location: TBD at pre-con meeting

13 - Interior Configuration

13.1 - Console

- The console shall be constructed from ¾ in. Birch plywood covered with a heavy duty Black bed lining coating.
- The console shall extend from the dashboard area to the rear wall area of the cab, two-piece full length.
- All switches shall be lighted and properly identified. Additionally, there shall be one (1) Sync USB extension (if applicable), two (2) USB-C & one USB-A charge ports, one (1) cigarette lighter outlet, one (1) lighting control head, two (2) locations for department provided mobile radios, one (1) magnetic mic clip, and two (2) built-in cup holders.
 - o "Door Ajar" light, Tecniq S34 Red marker light, will be affixed on the console to illuminate when activated
 - Red Steady, compartment door open and transmission in PARK
 - Red Fast flash, compartment door open and transmission in anything other than PARK
- There shall be a "Master Switch", with Green LED indicator, mounted on the Left side. This switch will disconnect the ignition sense to the Whelen CenCom Core, preventing

power ON until this switch is activated. In essence, rendering most aftermarket lighting to not be active. This will not interrupt the operations of any light tied into the factory DOT lighting circuits.

- Customer has requested the following items, be able to be installed on the center console:
 - o Two (2) Kenwood NX-5200 portable radios chargers
 - Custom storage slot for notebooks and maps, powder-coated Black
 - o Two (2) Streamlight Vulcan 180 lantern, Orange
- Kenwood TK-5710HG 100-watt P25-compliant radio mounted to cab console
- One (1) 120-VAC 20-amp outlet to work off shoreline power and when the vehicle is running
 - Any additional items to be mounted, shall be reviewed at the pre-con meeting and added to a Change Order.

13.2 - Radio Installation

• The manufacture shall coordinate with the departments vendor to install and program radio. Manufacture shall pay for cost of install and radio.

14 - Other Vehicle Accessories

- One (1) Warn 16.5TI -S to be internally mounted in the BuckStop front bumper.
 - o 16,500 lbs.
 - Synthetic rope
 - o 12 ft. wired remote with integrated wireless remote
- Six (6) illuminated fold down steps, Chrome, from Innovative Controls. These shall be mounted to the rear of the apparatus, allowing access to the Hose Bed.
- Stepping distance shall NOT exceed 18 in. as referenced in NFPA 1900Rails,
 Chrome, will be mounted to assist in getting up to the Hose Bed.
 - Two (2) will measure 30 in. long, on the rear of the module
 - Two (2) will measure 12 in. long, on the top rear of the module
- Two (2) Zico pull-out steps shall be mounted at the ends of the rear step, one (1) ea. side.

- Stepping distance shall NOT exceed 24 in. as referenced in NFPA 1900
- The following loose equipment items shall be provided by the manufacturer and mounting shall be billed per section 16.1 Tool Mounting. Exact mounting locations, TBD at pre-con or mid-point.
 - o Ten (10) 1 in. x 100 ft. Snap-Tite BlazeLine forestry hose, Yellow
 - \circ Two (2) TFT Twister Selectable One-Piece Nozzle, DS1040P, With Pistol Grip, Ball Valve 10/40 GPM @ 100 PSI, 1 in. NH-F Rocker Swivel Inlet
 - o One (1) TFT QuadraFog Selectable One-Piece Nozzle, FQS125PS, With Pistol Grip, Ball Valve − 30/60/95/125 GPM @ 100 PSI, 1½ in. NPSH-F Rocker Swivel Inlet, Spinning Metal Teeth
 - o One (1) SuperVAC Milwaukee battery powered 18 in. PPV
 - Shore Power operation, 120-VAC
 - Two (2) 12-Ah M18 Milwaukee batteries
 - One (1) Dual AC battery charger
 - One (1) Fire Hooks Unlimited Dynamic Trio tool set, DT-3
 - \blacksquare One (1) 8 lbs. force axe
 - One (1) Pro Bar 30 in.
 - One (1) marring strap
 - o One (1) Fire Hooks Unlimited New Yorker Fiberglass, NYF-6, w/ Ash Core Pike Pole, 6 ft. w/Pry end
 - o Two 10 lbs. ABC dry chemical fire extinguishers

15 - Graphics

15.1 - Standard Graphics Package

- Standard Package will include:
 - Standard lettering with font title or Department provided patch/logo art FILE on front cab door, unit designation number on the A-Pillar or front fender
 - If font name is not provided, it is up to the discretion of the graphics team to find a similar font
 - If no similar font is available, additional cost will be incurred due to needing to recreate the font as close as possible

- Standard reflective stripe on the cab and the sides of module body
- o Badge Delete: The factory fender badging (F550), will be replaced with custom reflective badges
- o (R2) Door: There shall be a reflective vinyl, Black, outline American flag
- Graphics package to be finalized during pre-con meeting.

15.2 - Door Jamb Striping

• Each door on the cab shall have Red/Fluorescent White striping that shall run along the bottom interior edge of the door. This strip shall be 3 in. wide and be full depth of the door.

15.3 - Rear Chevron Striping

- There shall be prismatic reflective striping, V98 material in single sheets, on the rear of the apparatus body.
- Exact layout and design of rear reflective chevron striping shall be determined during the pre-con meeting.

16 - Documentation & Inspections

16.1 - Tool Mounting (Time & Material)

- Tool mounting will be billed separately from the invoice of the apparatus. If tool mounting is requested, the locations shall be discussed and terms of this agreement shall be acknowledged at the pre-con meeting. Tool mounting timeline:
 - o Customer has up to 15 business days to add tools to be mounted at the normal rate once the apparatus enters the Up-fit process
 - From 15 business days to 30 business days in the Up-fit process, Time & Material rates will be doubled
 - o From 30 business days to delivery date, Time & Material rates will be tripled and could have the potential to push delivery date back with no penalty to the manufacture/dealer

If an estimated cost is requested, there shall be an ESTIMATED cost given. Any changes to the discussed tool mounting will result in an increased cost to the customer.

16.2 - OEM Parts

• Any and all OEM parts removed from the chassis during the manufacturing process of the apparatus, will be retained by the manufacturer.

16.3 - Pre-Construction Meeting

- There shall be a required pre-con meeting in the selected manner of the department before any construction can begin.
- At least one representative from the manufacturer shall be in attendance.
- At this meeting, parties shall again go over the specifications to ensure that the apparatus is built to meet or exceed all requirements.
- After this meeting the representative of the manufacturer shall present the department a copy of the written work order to be used in production.

16.4 - Detailed, Scaled Drawings

- After the pre-con meeting, there shall be provided a detailed set of scaled computer drawings to be used in the production process.
- Drawings and all other visual representations shall be used for reference purposes only. Any discrepancies will revert back to written approved specifications and/or Change Orders.

16.5 - Pre-Delivery Inspection

- There shall be a pre-delivery inspection trip at the manufacturing facility:
- The inspection trip shall consist of up to four (4) members from the department who shall inspect the apparatus to ensure compliance to all specifications.

(Airfare and lodging is NOT included in this specific spec)

- All product provided documents shall be organized and presented to members, including drawings, diagrams and renderings.
- The truck shall be weighed before delivery.

17 - Warranties

• General Outline:

o The warranty and remedies set forth below are exclusive and in lieu of all others, oral or written, expressed or implied. No reseller, agent or employee is authorized to make any modification, extension or addition to this warranty. Any alterations to installed equipment will void all labor and manufacturer warranties. Any alterations to wiring not by the manufacturer or as otherwise directed associate will void any/all warranties. The manufacturer extends two (2) months for end-customers to advise of work needing to be changed, replaced, missing that did not meet the specifications of the outlined quote. After a two (2) months time frame, the manufacturer is not responsible or liable for these issues. Movement, placement, rewiring, alterations, modifications, or any other after-installation tampering will void warranties unless explicit written consent is obtained by the manufacturer.

• Limited Structure Module Warranty:

o Subject to the requirements, exclusions, and limitations stated below, the structure is warranted to the original retail purchaser against defects in materials and workmanship by the manufacturer from normal use for a period of fifteen (15) years from the date of purchase. The structure is that portion of the module, which includes the mainframe, consisting of the bottom rails, cross members, side posts and exterior walls, interior walls, roof rails and bows, and the sub-frame.

• Limited Wiring Warranty:

 \circ Wiring routing and quality of its installation related to rubbing or chafing is covered for the LIFE of the original owner. Wiring quality relating to its ohm (Ω) resistance is guaranteed for fifteen (15) years. The wiring should maintain operating voltage over its length. Any alterations to wiring NOT by the manufacturer will VOID any/all warranties relating to the areas it reflects.

• Paint:

• Paint is covered for three (3) years from peeling and fading as long as no neglect or improper care occurred.

• Graphics:

o Graphics is covered under one (1) year Bumper-to-Bumper warranty which covers the lifting and peeling of applied vinyl graphics to painted surfaces. The separation of vinyl from lamination is also covered.

• Full Warranty:

o Commonly known as Bumper-to-Bumper in the automotive industry. The performed work and equipment by the manufacturer is guaranteed for one (1) year at no cost to the customer. Warranty repair work during this time shall fall within the guidelines within this document.

• Vehicle Chassis Warranty:

• Per the manufacturer's warranty policy. Seek manufacture for their warranty terms and conditions.

- Exclusions of Items Warranted by Other Manufacturers:
 - o Expressly excluded from the Limited Warranty are any claims related to items that are warranted by their manufacturer. These items include, but are not limited to: lights, audible devices, pre-manufactured roll up doors, rub rails, fenderettes, mounting solutions, storage devices, pump, motors, roll out trays, tires, rims, axles, and axle components including, without implied limitation, tow in/tow out and camber on axle; brake components; springs and suspension components; and any other items purchased and installed by the manufacturer any claims related to these items must be presented to their manufacturer for adjustment or replacement.
- Other Exclusions NOT Covered by this Warranty:
 - o This Limited Warranty covers only defects in original components which arise from normal use and does not apply if the vehicle has been subject to negligence, accident, abuse, misuse, improper loading or has been repaired or altered without the prior written consent of the manufacturer. Damages caused by failure to provide proper maintenance and repair, failure to care properly for the exterior and interior of the vehicle, scratches, dings and dents and product failure due to miss use per manufacturer guidelines, are not covered by this Limited Warranty.
- Prior Written Consent Required for Warranty or Defective Parts:
 - o No reimbursement will be made to any dealer or owner for repairs made without the prior written consent of the manufacturer. Any defective part(s) must be sent by prepaid freight to the manufacturer in order to qualify for replacement or reimbursement under this Limited Warranty. In the event, a dealer is required to perform or have performed locally warranty work and shop rate no higher than the manufacturer rate will be paid. All work and pricing must be agreed upon prior to any repairs.

18 - NFPA

• This apparatus meets NFPA 1900 classifications within its category.