



Coastside Fire Protection District **STAFF REPORT ADDENDUM**

TO: Honorable Board of Directors

FROM: Jonathan Cox, Deputy Fire Chief

DATE: April 27, 2022

SUBJECT: ADDENDUM TO RECOMMENDATION TO AWARD CONTRACT FOR ONE (1) BME TYPE-3 FIRE ENGINE PUMPER TO GOLDEN STATE FIRE APPARATUS, INC. IN AN AMOUNT NOT TO EXCEED \$474.069.23.

Staff Recommendation

The following addendum should be made to Staff Report dated April 27, 2022, Subject: RECOMMENDATION TO AWARD CONTRACT FOR ONE (1) BME TYPE-3 FIRE ENGINE PUMPER TO GOLDEN STATE FIRE APPARATUS, INC. IN AN AMOUNT NOT TO EXCEED \$474.069.23.

Addendum

1. Pierce Fire Engine Proposal

April 20, 2022

Coastside Fire Protection District
1191 Main Street
Half Moon Bay, CA 94019

I am enclosing our proposal for one (1) new BME Fire Trucks, LLC (BME) Model 34 Engine. **This is being proposed as a consortium purchase to HGAC contract FS12-19, product code FS19DB12.** Based on your department's input, we have selected the *4X4 International Model HV507 SFA* chassis on which to base this proposal. Some of the noteworthy features you will find include:

- ✓ 350 horsepower Cummins L9 motor with an Allison EVS 3000 transmission
- ✓ 500 GPM Darley Model JMP two stage pump with 500-gallon water tank
- ✓ 150 GPM Darley 1.5 AGE auxiliary pump
- ✓ FoamPro 1600 single agent foam system

The cost of the unit described in this proposal is dependent on how the Department may choose to purchase it. As noted in the various options, BME deducts certain prepayment credits from the final invoice, depending on the selected purchasing option. Lease purchase options are available upon request and provide greater budget flexibility using customized repayment terms to meet the unique cash flow requirements of your organization. **Please note that the 100% Pre-Payment Discount is also available if a 3rd party (such as a leasing company) makes payment on behalf of the Department within these terms.** BME deducts a prepayment credit from the final invoice when this option is elected, please take a look at the information and figures attached.

The total price shown in this package includes California Sales Tax at the rate of 9.375% and two (2) factory inspection trips for CFPD representatives. Price is based on delivery F.O.B. to the Coastside Fire Protection District Headquarters. If the District elects to purchase the proposed apparatus and would like to submit a purchase order, please address it to the following:

Golden State Fire Apparatus Inc.
7400 Reese Road
Sacramento, CA 95828

This quote will be valid until June 2, 2022.

We appreciate the opportunity to submit this information and look forward to going over any questions you might have. Let me know if there's anything else I can do and feel free to give me a call anytime. My cell number is (209) 777-0650 and thank you again.

Sincerely,

Dewayne Young

Dewayne Young
Sales Consultant



FIRE TRUCKS

PRODUCT
PROPOSAL

Exhibit "A"



**GOLDEN
STATE**
FIRE APPARATUS

PROPOSAL PREPARED FOR

Coastside Fire Protection District
BME Fire Trucks, LLC.
4X4 International Model 34 Engine
HGAC FS12-19, Code FS19DB12
April 18, 2022

SALES CONSULTANT

Dewayne Young
Golden State Fire Apparatus, Inc.
7400 Reese Road
Sacramento, CA 95828
(209) 777-0650 Cell
dyoung@goldenstatefire.com

PARTS, SERVICE & SUPPORT

Golden State Emergency Vehicle Service, Inc.
7400 Reese Road
Sacramento, CA 95828
916.330.1638 Office
parts@goldenstatefire.com

PROPOSAL PREPARED FOR:

Coastside Fire Protection District
1191 Main Street
Half Moon Bay, CA 94019

Submitted Date:	April 18, 2022
Proposal Number:	11418-22A
<i>Expiration Date:</i>	<i>June 2, 2022</i>
Sales Consultant:	Dewayne Young

We hereby propose and agree to furnish, after your acceptance of this proposal and the proper execution by the COASTSIDE FIRE PROTECTION DISTRICT, hereinafter called "Customer" and an officer of Golden State Fire Apparatus, Inc., hereinafter called "GSFA", the following fire apparatus and equipment, hereinafter called "Product":

#	Description	Unit Price
A	One (1) BME Fire Trucks, LLC 4X4 International Model 34 Engine (<i>HGAC contract FS12-19, Product Code FS19DB12</i>)	442,566.67
B	<i>Pre-Payment Discount for 100% Payment at Time of Order</i>	<i>(9,141.54)</i>
C	SUBTOTAL	433,425.13
D	9.375% State Sales Tax	40,633.61
E	California Tire Fee	10.50
F	GRAND TOTAL	474,069.23



PROPOSAL SUMMARY

This proposal includes the following items in accordance with the specifications hereto attached:

- Fire apparatus and equipment
- Delivery to GSFA service center in Sacramento
- Pre-delivery inspection/services by GSFA
- Final delivery from service center to Customer

PRODUCT COMPLETION

Product shall be built in accordance with the specifications hereto attached, delays due to acts of God, strikes, war, or intentional conflict, failures to obtain chassis, materials, unusual weather conditions or other causes beyond GSFA's control not preventing, within approximately **625 CALENDAR DAYS** after receipt of this order and the acceptance thereof at our Sacramento, California office. Within thirty (30) calendar days after receipt of this order and acceptance thereof, GSFA shall submit to Customer a production schedule including tentative pre-construction conference, final inspection and final delivery dates.

DELIVERY LOCATION

Product shall be shipped in accordance with the specifications hereto attached and be delivered to you at **HALF MOON BAY, CALIFORNIA**. Proof of insurance must be demonstrated by the Customer to GSFA prior to transferring of the Product(s).

ACCEPTING THIS PROPOSAL

In the event Customer wishes to purchase the Product described in this Proposal and the attached specifications, then, prior to the expiration date listed on page 2 of this Proposal, Customer shall sign and return this Proposal. Thereafter, GSFA and Customer will endeavor to enter into a purchase agreement incorporating this Proposal and including additional terms (a "Purchase Agreement"). If Customer returns a signed copy of this Proposal alone, GSFA will send Customer its form of Purchase Agreement for Customer's review and signature. **If Customer desires to use its standard form of purchase order as the Purchase Agreement, then Customer should return a signed copy of this Proposal along with a copy of such purchase order. All purchase orders shall be made out to GSFA.** GSFA will review such purchase order and contact the Customer regarding any required revisions. Only upon a full execution of a Purchase Agreement shall GSFA and Customer be obligated to purchase and sell the Product set forth in this Proposal.

TERMS AND CONDITIONS

The following Terms and Conditions are hereby made part of this Proposal:

1. Payment Terms (100% Pre-Payment at Time of Order) – Customer shall pay the amount listed on page one of this Proposal, which includes: (i) the total price for the Product (the "Purchase Price"), (ii) the estimated state sales tax on the Product, and (iii) the California tire fee (together with the Purchase Price and estimated state sales tax, the "Grand Total") within fifteen (15) calendar days from the date on which the Purchase Agreement is fully executed. The proposed delivery timeframe for the Product, which is outlined on page one of this Proposal, shall not begin until full payment of the Grand Total is received. In the event Customer does not pay GSFA the Grand Total in the timeframe set forth in this Section 1, GSFA may, in its sole discretion, cancel the Purchase Agreement entered into between the parties.

2. Multiple Unit Purchase – If the Purchase Price includes pricing for multiple units, the price stated on this Proposal shall only be valid if the quantity of Products being proposed are purchased at the same time, pursuant to the same Purchase Agreement.

3. Stock / Demo Units – If applicable, any stock/demo units, including those identified by this Proposal, are available for sale on an as-is, first-come and first served-basis. Regardless of this Proposal, the first Customer to enter into a Purchase Agreement identifying any such stock/demo units shall obtain said units.

4. Order Changes – The Customer may request that GSFA incorporate a change to the Product or the Specifications for the Product by delivering a written change order to GSFA, which shall include a description of the proposed change sufficient to permit GSFA to evaluate the feasibility of such change (a "Change Order"). GSFA will provide Customer a written response (a "Response") stating (i) whether GSFA will accommodate such Change Order (which GSFA may decide in its sole and absolute discretion) and (ii) the terms of the modification to the order, including any increase or decrease in the Purchase Price resulting from such Change Order, and any effect on production scheduling or Delivery resulting from such Change Order. Customer shall have seven (7) days after receipt of the Response to notify GSFA as to whether Customer desires to make the changes GSFA has approved in the Response. In the event Customer counter-signs GSFA's Response, Customer shall pay the increase (or be refunded the decrease) in the Purchase Price prior to final delivery to Customer location.

5. Force Majeure – GSFA shall not be responsible nor deemed to be in default on account of delays in performance due to causes which are beyond GSFA's and manufacturer's control and which make GSFA's performance impracticable, including but not limited to wars, insurrections, strikes, riots, fires, storms, floods, other acts of nature, explosions, earthquakes, accidents, any act of government, delays in transportation, inability to obtain necessary labor supplies or manufacturing facilities, allocation regulations or orders affecting materials, equipment, facilities or completed products, failure to obtain any required license or certificates, acts of God or the public enemy or terrorism, failure of transportation, epidemics, quarantine restrictions, failure of vendors (due to causes similar to those within the scope of this clause) to perform their contracts or labor troubles causing cessation, slowdown, or interruption of work.

6. Cancellation/Termination – In the event Customer and GSFA enter into a Purchase Agreement and Customer thereafter cancels or terminates the Purchase Agreement, GSFA will charge a cancellation fee as follows: (a) 10% of the Purchase Price after order is accepted and entered by GSFA; (b) 20% of the Purchase Price after completion of the pre-construction phase of the order process; and (c) 50% of the Purchase Price after the requisition of any materials or commencement of any manufacturing or assembly of the Product by either GSFA or the manufacturer of the Product. The tier of cancellation fee applicable to any cancellation shall be in the sole and absolute discretion of GSFA.

7. State Sales Tax – Customer shall be responsible for the cost of state sales tax associated with, or attributable to the Product. The taxes owed by Customer for the Product is subject to adjustment for the applicable state sales tax rate in effect when the Product is delivered to the Customer. Therefore, the sales tax will be increased or decreased at the time of delivery if a change in the sales tax rate has occurred, in which case Customer shall pay GSFA (or be refunded by GSFA) the applicable change in sales tax.

8. Proposal Expiration – After the Expiration Date shown on page one of this Proposal, Customer shall require GSFA's written consent to accept this Proposal.

9. Governing Law – This Proposal is to be governed by and under the laws of the state of California.

Thank you for providing Golden State Fire Apparatus, Inc. with the opportunity to provide this proposal. If you have any questions regarding the options presented or need additional options, please contact me.

Sincerely,

Dewayne Young

Dewayne Young
Golden State Fire Apparatus, Inc.

I, _____ authorized representative of **COASTSIDE FIRE PROTECTION DISTRICT** agrees to purchase the proposed Product(s) and agree to the terms and conditions of this proposal and the specifications hereto attached.

SIGNATURE: _____

TITLE: _____ DATE: _____



FIRE TRUCKS

PRODUCT SPECIFICATIONS

Exhibit "B"

Boise Mobile Equipment



FIRE TRUCKS

COASTSIDE FIRE DEPARTMENT

MODEL 34 "TARGEE"

Boise Mobile Equipment

DETERMINATION OF APPARATUS WEIGHT

BME Fire Trucks, LLC. shall submit estimated "in-service" weight analysis required by applicable NFPA standards. This Excel computer weight analysis shall break down all major components of the apparatus and shall show the impact on percentage-of-load on the front and rear axles, total weight, and weight on each tire set.

The analysis shall evenly distribute the NFPA required minimum payload allowance or estimated equipment payload as provided by the purchaser into the specified compartments. The allowance for personnel, hose loads, water and foam fluids, and required NFPA equipment shall be outlined individually in the analysis and placed on the apparatus in its specific intended position.

CENTER-OF-GRAVITY ANALYSIS

BME Fire Trucks, LLC. shall perform an estimated center of gravity calculation as required by the applicable section of NFPA standards. This calculation shall include tilt angles, the estimated right to left load distribution, and load on each axle, including all specified major components.

LOW VOLTAGE TEST REQUIRMENTS

The fire apparatus low voltage electrical system shall be tested as required by this section and the test results shall be certified by the apparatus manufacturer. The certification shall be delivered to the purchaser with the documentation for the completed apparatus. The tests shall be performed when the air temperature is between 0 degrees Fahrenheit and 110 degrees Fahrenheit.

TEST SEQUENCE

The three tests defined below shall be performed in the order in which they appear. Before each test, the chassis batteries shall be fully charged until the voltage stabilizes at the voltage regulator set point and the lowest charge current is maintained for 10 minutes. The failure of any of these tests shall require a repeat of the test sequence.

RESERVE CAPACITY TEST

The chassis engine shall be started and kept running until the chassis engine and engine compartment temperatures are stabilized at normal operating temperatures and the chassis battery system is fully charged. The chassis engine shall be shut off and the minimum continuous electrical load shall be applied for 10 minutes. All electrical loads shall be turned off prior to attempting to restart the chassis engine. The chassis battery system shall then be capable of restarting the chassis engine. The failure to restart the chassis engine shall be considered a failure of this test.

ALTERNATOR PERFORMANCE TEST AT IDLE

Boise Mobile Equipment

The minimum continuous electrical load shall be applied with the chassis engine running at idle speed. The chassis engine temperature shall be stabilized at normal operating temperature. The chassis battery system shall be tested to detect the presence of a chassis battery current discharge. The detection of chassis battery current discharge shall be considered a failure of this test.

ALTERNATOR PERFORMANCE TEST AT FULL LOAD

The total continuous electrical load shall be applied with the chassis engine running up to the engine manufacturer's governed speed. The test duration shall be a minimum of two hours. The activation of the electrical system load management system shall be permitted during this test. The activation of an alarm due to excessive chassis battery discharge, as detected by the system required by NFPA (current edition), or an electrical system voltage of less than 11.8 volts direct current for a 12 volt direct current nominal system, for more than 120 seconds, shall be considered a failure of this test.

LOW VOLTAGE ALARM TEST

Following the completion of the tests described above, the chassis engine shall be turned off. With the chassis engine turned off, the total continuous electrical load shall be applied and shall continue to be applied until the excessive battery discharge alarm activates. The chassis battery voltage shall be measured at the battery terminals.

The test shall be considered to be a failure if the low voltage alarm has not yet sounded 140 seconds after the voltage drops to 11.70 volts direct current for a 12 volt direct current nominal system. The chassis battery system shall then be able to restart the chassis engine. The failure of the chassis battery system to restart the chassis engine shall be considered a failure of this test.

The completed fire apparatus shall undergo a complete 12 volt electrical load and performance testing per applicable sections of NFPA standards with inspection and test sheets included in delivery documentation.

DOCUMENTATION

The apparatus manufacturer shall provide the results of the low-voltage electrical system performance test, certified in writing, with the documentation provided to the purchaser at the time of delivery of the completed apparatus.

The test results shall consist of the following documents:

- (1) Documentation of the electrical system performance tests.
- (2) A written electrical load analysis, including the following:
 - (a) The nameplate rating of the alternator.
 - (b) The alternator rating under the conditions specified in NFPA 1906 (current edition).
 - (c) Each of the component loads specified that make up the minimum continuous electrical load.

Boise Mobile Equipment

- (d) Additional electrical loads that, when added to the minimum continuous electrical load, determine the total continuous electrical load.
- (e) Each individual intermittent electrical load.

TEST RESULTS

BME Fire Trucks LLC. shall provide results of the apparatus testing and shall certify the following:

The weight of the completed apparatus, when loaded to its estimated in service weight, does not exceed the GVWR and GAWR of the chassis.

The complete unit, when loaded to its estimated in service weight, meets the weight distribution and vehicle stability requirements, as defined in the current NFPA guidelines.

The unit meets all required federal standards pertaining to the manufacturer and completion of the apparatus and a label tag has been affixed to the apparatus by the manufacturer stating same.

BME Fire Trucks LLC. shall provide all testing results, including engine, speed, acceleration, road ability, braking, and auxiliary braking to the Purchaser at the time of delivery.

DELIVERY REQUIREMENTS

The bidder shall not be responsible for delays in delivery due to strikes, acts of God, failure of suppliers to deliver, chassis shortage and other reasons beyond the reasonable control of the builder. Should BME Fire Trucks, LLC. be unable to comply with the proposed delivery date, we shall immediately contact the purchaser regarding delay information and actions to be taken by the company.

This vehicle shall be F.O.B. the BME Fire Trucks facility in Boise Idaho. Dealer shall be responsible for arrangement of delivery from factory.

GENERAL WARRANTY PROVISIONS

All materials and workmanship herein specified, including all equipment furnished, shall be guaranteed for a period of one (1) year after the acceptance date of the apparatus, unless otherwise noted, with the exception of any normal maintenance services or adjustments which shall be required. Under this warranty, BME Fire Trucks, LLC. shall be responsible for the costs of repairs to the apparatus that have been caused by defective workmanship or materials during this period.

This warranty shall not apply to the following:

- Any component parts or trade accessories such as chassis, engines, tires, pumps, valves, signaling devices, batteries, electric lights, bulbs, alternators, and all other installed equipment and accessories, in as much as they are usually warranted separately by their respective manufacturers, or are subject to normal wear and tear.

Boise Mobile Equipment

- Failures resulting from the apparatus being operated in a manner or for a purpose not recommended by the apparatus manufacturer.
- Loss of time or use of the apparatus, inconvenience or other incidental expenses.
- Any apparatus which has been repaired or altered without written consent or outside of the apparatus manufacturer's factory and or authorized service center in any way that affects its stability, or which has been subject to misuse, negligence, or accident.
- Delivery of the apparatus to repair site.

DISCLAIMER

NO WARRANTIES ARE GIVEN BEYOND THOSE DESCRIBED HEREIN. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. THE COMPANY SPECIFICALLY DISCLAIMS WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ALL OTHER REPRESENTATIONS TO THE USER/PURCHASER AND ALL OTHER OBLIGATIONS OR LIABILITIES. FURTHER, THE COMPANY EXCLUDES LIABILITY FOR CONSEQUENTIAL AND INCIDENTAL DAMAGES, ON THE PART OF THE COMPANY OR SELLER. No person is authorized to give any other warranties or to assume any liabilities on the Company's behalf unless made or assumed in writing by the seller; and no other person is authorized to give any warranties or to assume any liabilities on the seller's behalf unless made or assumed in writing by the seller.

OBTAINING SERVICE

Return the vehicle to any BME Fire Trucks, LLC. dealer/authorized service center; Return the vehicle to BME Fire Trucks, LLC. or contact BME Fire Trucks, LLC.. BME Fire Trucks, LLC. shall be solely responsible for determining the extent of repair under the terms of the warranty. Transportation costs shall be the responsibility of the purchaser.

MATERIAL AND WORKMANSHIP

All equipment provided shall be guaranteed to be new and of current manufacture, and unless specified otherwise, shall meet all requirements of these specifications and prevailing NFPA documents and be in condition at time of delivery for use as specified for this type of apparatus.

All workmanship shall be of the highest quality and accomplished in a professional manner so as to insure a functional apparatus with a high quality aesthetic appearance.

The construction shall be rugged and ample safety factors shall be provided to carry the loads specified to meet both on and off road requirements.

Boise Mobile Equipment

The apparatus shall be designed and the equipment mounted with due consideration to the distribution of load between the front and rear axles, so all specified equipment, with a full complement of personnel, can be carried without damage to the apparatus.

BODY AND STRUCTURAL WARRANTY

BME Fire Trucks, LLC. shall warrant each new apparatus body, if used in a normal and reasonable manner, against structural defects caused by defects in material, design or workmanship for a period of ten (10) years, covering parts & labor to the original purchaser which shall start on day of acceptance.

This warranty shall not apply to:

- Normal maintenance services or adjustments
- To any vehicle which will have been repaired or altered outside of our factory in any way so as, in the judgment of BME Fire Trucks, LLC., to affect it's stability, nor which has been subject to misuse, negligence, or accident, nor to any vehicle made by us which will have been operated to a speed exceeding the factory rated speed, or loaded beyond the factory rated load capacity.
- Commercial chassis and associated equipment furnished with chassis, signaling devices, generators, batteries, or other trade accessories as they are usually warranted separately by their respective manufacturers.
- Shipping costs of parts or apparatus for purposes of repair or replacement of parts. This warranty is in lieu of all other warranties, expressed or implied. All other representations as to the original purchaser and all other obligations or liabilities, including for incidental or consequential damage on the company's behalf unless made in writing by the company.

PLUMBING WARRANTY

The stainless steel fire pump plumbing shall carry a ten (10) year parts and labor warranty against defects in workmanship and perforation corrosion.

AKRON VALVE WARRANTY

The Akron valves shall carry a ten (10) year parts and labor manufacturer's warranty. Provisions of this warranty shall be provided with the completed apparatus documentation.

PAINT WARRANTY

BME Fire Trucks, LLC. shall provide a seven (7) year paint warranty which shall cover peeling and/or de-lamination of the top coat and other layers of paint, cracking or checking, loss of gloss caused by cracking, checking or chalking, and any paint failure caused by defective paint materials covered by the paint manufacturer's material warranty.

CHASSIS WARRANTY

Boise Mobile Equipment

The specified chassis shall be provided with the chassis manufacturer's warranty. The exact provisions of this warranty shall be supplied with the completed apparatus documentation.

CHASSIS OPERATION MANUALS

BME Fire Trucks, LLC. shall include one (1) printed commercial chassis manufacturer's operational manual(s).

APPARATUS OPERATION MANUAL(S)

BME Fire Trucks, LLC. shall provide (2) electronic apparatus operational manual(s) on a USB thumb drive.

CHASSIS SPECIFICATIONS

Base Chassis, Model HV507 SFA with 183.00 Wheelbase, 64.10 CA, and 65.00 Axle to Frame.

TOW HOOK, FRONT (2) Frame Mounted

AXLE CONFIGURATION {Navistar} 4x4

Notes : Pricing may change if axle configuration is changed.

FRAME RAILS Heat Treated Alloy Steel (120,000 PSI Yield); 10.125" x 3.580" x 0.312" (257.2mm x 90.9mm x 8.0mm); 480.0" (12192) Maximum OAL

FRAME REINFORCEMENT Full Outer C-Channel, Heat Treated Alloy Steel (120,000 PSI Yield), 10.813" x 3.892" x 0.312" (274.6mm x 98.8mm x 7.9mm), 480.0" (12192mm) OAL

BUMPER, FRONT Swept Back 15-Degrees, Steel, for use with Front Frame Extensions, Heavy Duty

FRAME, SPECIAL EFFECTS Dimple on Left and Right Top Flange of Frame Rail to Reference Rear Axle Centerline

FRAME EXTENSION, FRONT Integral; 20" In Front of Grille

WHEELBASE RANGE 181" (460cm) Through and Including 205" (520cm)

AXLE, FRONT DRIVING {Meritor MX-12-120 EVO} Single Reduction, 12,000-lb Capacity, with Hub Piloted Wheel Mounting

Notes : Axle Lead Time is 90 Days

AXLE, FRONT DRIVING, LUBE {EmGard FE-75W-90} Synthetic Oil; 1 thru 29.99 Pints

SUSPENSION, FRONT, SPRING Parabolic Taper Leaf, Shackle Type, 12,000-lb Capacity, with Shock Absorbers

Boise Mobile Equipment

BRAKE SYSTEM, AIR Dual System for Straight Truck Applications

Includes

: BRAKE LINES Color and Size Coded Nylon

: DRAIN VALVE Twist-Type

: GAUGE, AIR PRESSURE (2) Air 1 and Air 2 Gauges; Located in Instrument Cluster

: PARKING BRAKE CONTROL Yellow Knob, Located on Instrument Panel

: PARKING BRAKE VALVE For Truck

: QUICK RELEASE VALVE On Rear Axle for Spring Brake Release: 1 for 4x2, 2 for 6x4

: SPRING BRAKE MODULATOR VALVE R-7 for 4x2, SR-7 with relay valve for 6x4/8x6

AIR BRAKE ABS {Bendix AntiLock Brake System} 4-Channel (4 Sensor/4 Modulator) Full Vehicle Wheel Control System

AIR DRYER {Bendix AD-IP} with Heater

BRAKE CHAMBERS, POSITION Rotated Forward and Up For Maximum Ground Clearance with 4x4

BRAKE CHAMBERS, FRONT AXLE {MGM} 20 SqIn

BRAKE CHAMBERS, REAR AXLE {MGM TR3030LP3TSHD} 30/30 SqIn Spring Brake

SLACK ADJUSTERS, FRONT {Haldex} Automatic

SLACK ADJUSTERS, REAR {Gunite} Automatic

AIR COMPRESSOR {Cummins} 18.7 CFM

AIR DRYER LOCATION Mounted Inside Left Rail, Behind Transfer Case Mounting

AIR TANK LOCATION (2) Mounted Under Battery Box, Outside Left Rail, Back of Cab, Perpendicular to Rail

DUST SHIELDS, FRONT BRAKE for Air Cam Brakes

DRAIN VALVE (3) Petcocks, for Air Tanks

DUST SHIELDS, REAR BRAKE for Air Cam Brakes

BRAKES, REAR {Meritor 16.5X7 P} Air S-Cam Type, Cast Spider, Cast Shoe, Double Anchor Pin, Includes Greaseable and Zinc Coated Anchor Pins, Size 16.5" X 7", 38,000-lb Capacity per Axle

Boise Mobile Equipment

BRAKES, FRONT {Meritor 16.5X5 Q-PLUS CAST} Air S-Cam Type, Cast Spider, Fabricated Shoe, Double Anchor Pin, Size 16.5" X 5", 14,700-lb Capacity

STEERING COLUMN Tilting

STEERING WHEEL 4-Spoke; 18" Dia., Black

STEERING GEAR {Sheppard M100} Power

DRIVELINE SYSTEM {Dana Spicer} SPL170 Main Driveline, 1710 Driveline to Transfer Case, SPL140 Driveline to Front Axle, for 4x4

AFTERTREATMENT COVER Polished Aluminum

EXHAUST SYSTEM Horizontal Aftertreatment System, Frame Mounted Right Side Under Cab, for Single Short Horizontal Tail Pipe, Frame Mounted Right Side Back of Cab, for All-Wheel Drive

ENGINE COMPRESSION BRAKE {Jacobs} for Cummins ISL/L9 Engines; with Selector Switch and On/Off Switch

SWITCH, FOR EXHAUST 3 Position, Momentary, Lighted Momentary, ON/CANCEL, Center Stable, INHIBIT REGEN, Mounted in IP Inhibits Diesel Particulate Filter Regeneration When Switch is Moved to ON While Engine is Running, Resets When Ignition is Turned OFF

ELECTRICAL SYSTEM 12-Volt, Standard Equipment

Includes

: DATA LINK CONNECTOR For Vehicle Programming and Diagnostics In Cab

: HAZARD SWITCH Push On/Push Off, Located on Instrument Panel to Right of Steering Wheel

: HEADLIGHT DIMMER SWITCH Integral with Turn Signal Lever

: PARKING LIGHT Integral with Front Turn Signal and Rear Tail Light

: STARTER SWITCH Electric, Key Operated

: STOP, TURN, TAIL & B/U LIGHTS Dual, Rear, Combination with Reflector

: TURN SIGNAL SWITCH Self-Cancelling for Trucks, Manual Cancelling for Tractors, with Lane Change Feature

: WINDSHIELD WIPER SWITCH 2-Speed with Wash and Intermittent Feature (5 Pre-Set Delays), Integral with Turn Signal Lever

: WINDSHIELD WIPERS Single Motor, Electric, Cowl Mounted

: WIRING, CHASSIS Color Coded and Continuously Numbered

CIGAR LIGHTER Includes Ash Cup

HORN, ELECTRIC (2) Disc Style

Boise Mobile Equipment

FOG LIGHTS Prewire; Includes Auxiliary Switch and Wiring to Front Bumper, for Driving Lights or Fog Lights Mounted by Customer

POWER SOURCE Cigar Type Receptacle without Plug and Cord

ALTERNATOR {Leece-Neville BLP4006HN} Brushless, 12 Volt, 325 Amp Capacity, Pad Mount, with Remote Sense

BODY BUILDER WIRING Rear of Frame; Includes Sealed Connectors for Tail/Amber Turn/Marker/Backup/Accessory Power/Ground and Sealed Connector for Stop/Turn

BATTERY SYSTEM {Fleetrite} Maintenance-Free, (3) 12-Volt 2850CCA Total, Top Threaded Stud

SPEAKERS (2) 6.5" Dual Cone Mounted in Both Doors, (2) 5.25" Dual Cone Mounted in Both B-Pillars

ANTENNA for Increased Roof Clearance Applications

RADIO AM/FM/WB/Clock/Bluetooth/USB Input/Auxiliary Input

BATTERY CABLES with 36" of Extra Length Coiled and Strapped Near Battery Box

DATA RECORDER Includes Display Mounted in Overhead Console

STOP-LIGHT WIRING MODIFIED Stop-Lights Turned on When Engine Compression Brake, Exhaust Brake or Retarder is Activated

WINDSHIELD WIPER SPD CONTROL Force Wipers to Slowest Intermittent Speed When Park Brake Set and Wipers Left on for a Predetermined Time

HORN, AIR Accommodation Package, Less Horn

BATTERY BOX Steel, with Fiberglass Cover, 2-4 Battery Capacity, Mounted Left Side Perpendicular to Frame Rail, 53" Back of Cab

CLEARANCE/MARKER LIGHTS (5) {Truck Lite} Amber LED Lights, Flush Mounted on Cab or Sunshade

TEST EXTERIOR LIGHTS Pre-Trip Inspection will Cycle all Exterior Lamps Except Back-up Lights

HEADLIGHTS ON W/WIPERS Headlights Will Automatically Turn on if Windshield Wipers are turned on

Boise Mobile Equipment

STARTING MOTOR {Delco Remy 38MT Type 300} 12 Volt, Less Thermal Over-Crank Protection

COURTESY LIGHT (4) Mounted In Front & Rear Map Pocket Left and Right Side

INDICATOR, LOW COOLANT LEVEL with Audible Alarm

ALARM, PARKING BRAKE Electric Horn Sounds in Repetitive Manner When Vehicle Park Brake is "NOT" Set, with Ignition "OFF" and any Door Opened

INDICATOR, BATTERY WARNING Green BATTERY ON Indicator, Mounted on Left Side of Instrument Panel, To be Used with Factory Installed or Customer Mounted Battery Disconnect Switch

CIRCUIT BREAKERS Manual-Reset (Main Panel) SAE Type III with Trip Indicators, Replaces All Fuses

SWITCH, AUXILIARY Switch 40 amp Circuit for Customer Use; Includes Wiring Connection at Power Distribution Center (PDC) and Control in Cab

TURN SIGNALS, FRONT Includes LED Side Turn Lights Mounted on Fender

BATTERY DISCONNECT SWITCH 300 Amp, Disconnects Charging Circuits, Locks with Padlock, Cab Mounted

HEADLIGHTS Halogen

FENDER EXTENSIONS Omit

LOGOS EXTERIOR Model Badges

LOGOS EXTERIOR, ENGINE Badges

INSULATION, UNDER HOOD for Sound Abatement

GRILLE Stationary, Chrome

INSULATION, SPLASH PANELS for Sound Abatement

BUG SCREEN Mounted Behind Grille

FRONT END Tilting, Fiberglass, with Three Piece Construction, for WorkStar/HV

GRILLE EMBER SCREEN Mounted to Grille and Cowl Tray to Keep Hot Embers out of Engine and HVAC Air Intake System

Boise Mobile Equipment

PAINT SCHEMATIC, PT-1 Single Color, Design 100

Includes

: PAINT SCHEMATIC ID LETTERS "WK"

PAINT IDENTITY, PT-2 Single Color, Instruction No. 936. Frame/Running Gear, Less Fuel Tanks

Includes

: NOTE: Battery Box, Air Tanks, Fuel Tanks, Steps and Straps NOT Painted

PAINT TYPE Base Coat/Clear Coat, 1-2 Tone

PAINT CLASS Premium Color

COMMUNICATIONS MODULE Telematics Device with Over the Air Programming; Includes Five Year Data Plan and International 360

PROMOTIONAL PACKAGE Government Silver Package

KEYS - ALL ALIKE, ID I-1003 Compatible with Z-001

CLUTCH Omit Item (Clutch & Control)

ANTI-FREEZE Red, Extended Life Coolant; To -40 Degrees F/ -40 Degrees C, Freeze Protection

BLOCK HEATER, ENGINE 120V/1000W, for Cummins ISB/B6.7/ISL/L9 Engines

Includes

: BLOCK HEATER SOCKET Receptacle Type; Mounted below Drivers Door

ENGINE, DIESEL {Cummins L9 350} EPA 2021, 350HP @ 2200 RPM, 1050 lb-ft Torque @ 1200 RPM, 2200 RPM Governed Speed, 350 Peak HP (Max)

FAN DRIVE {Horton Drivemaster} Two-Speed Type, Direct Drive, with Residual Torque Device for Disengaged Fan Speed

Includes

: FAN Nylon

RADIATOR Aluminum, Cross Flow, Front to Back System, 1228 SqIn, with 1167 SqIn Charge Air Cooler, Includes In-Tank Oil Cooler

Includes

Boise Mobile Equipment

: DEAERATION SYSTEM with Surge Tank

: HOSE CLAMPS, RADIATOR HOSES Gates Shrink Band Type; Thermoplastic Coolant Hose Clamps

: RADIATOR HOSES Premium, Rubber

AIR CLEANER Dual Element

EMISSION, CALENDAR YEAR {Cummins L9} EPA, OBD and GHG Certified for Calendar Year 2022

THROTTLE, HAND CONTROL Engine Speed Control; Electronic, Stationary, Variable Speed; Mounted on Steering Wheel

FAN OVERRIDE Manual; with Electric Switch on Instrument Panel, (Fan On with Switch On)

ENGINE WATER COOLER {Sen-Dure} Auxiliary, For Use with Fire Trucks

CARB IDLE COMPLIANCE Engine Shutdown System Exempt Vehicles, Complies with California Clean Air Regulations

12WZY CARB EMISSION WARR COMPLIANCE for Cummins L9 Engines

ENGINE CONTROL, REMOTE MOUNTED Provision for; Includes Wiring for Body Builder Installation of PTO Controls and Starter Lockout, with Ignition Switch Control, for Cummins B6.7 and L9 Engines

TRANSMISSION, AUTOMATIC {Allison 3000 EVS} 5th Generation Controls, Close Ratio, 6-Speed with Double Overdrive, with PTO Provision, Less Retarder, Includes Oil Level Sensor

TRANSFER CASE {Meritor MTC-4210} 2-Speed, 10,000 lb-ft Torque Rating, Less PTO Provision, Electric Over Air Control, with Lube Pump

OIL COOLER, AUTO TRANSMISSION {Modine} Water to Oil Type

TRANSFER CASE LUBE {EmGard 50W} Synthetic; 1 thru 14.99 Pints

TRANSMISSION SHIFT CONTROL Column Mounted Stalk Shifter, Not for Use with Allison 1000 & 2000 Series Transmission

OIL COOLER, TRANSFER CASE with Oil Coolant Lines Routed to Oil Cooler

TRANSMISSION OIL Synthetic; 29 thru 42 Pints

ALLISON SPARE INPUT/OUTPUT for Emergency Vehicle Series (EVS), Rescue, Ambulance, Package Number 170

Boise Mobile Equipment

SHIFT CONTROL PARAMETERS {Allison} 3000 or 4000 Series Transmissions, Performance Programming

PTO LOCATION Dual, Customer Intends to Install PTO at Left and/or Right Side of Transmission

AXLE, REAR, SINGLE {Meritor RS-26-185} Single Reduction, 26,000-lb Capacity, R Wheel Ends . Gear Ratio: 5.86

Notes

: Axle Lead Time is 60 Days

SUSPENSION, REAR, SINGLE 31,000-lb Capacity, Vari-Rate Springs, with 4500-lb Capacity Auxiliary Rubber Springs

SHOCK ABSORBERS, REAR (2)

AXLE, REAR, LUBE {EmGard FE-75W-90} Synthetic Oil; 40 thru 49.99 Pints

DEF TANK 9.5 US Gal (36L) Capacity, Frame Mounted Outside Left Rail, Under Cab

FUEL/WATER SEPARATOR {Racor 400 Series} 12 VDC Electric Heater, Includes Pre-Heater, with Primer Pump, Includes Water-in-Fuel Sensor, Mounted on Engine

FUEL TANK Top Draw, Non-Polished Aluminum, 26" Dia, 70 US Gal (265L), Mounted Left Side, Under Cab

AUXILIARY FUEL DRAW TUBE Located at Auxiliary Port on Fuel Tank

CAB Conventional 6-Man Crew Cab

AIR CONDITIONER with Integral Heater and Defroster

GAUGE CLUSTER Base Level; English with English Electronic Speedometer

Includes

: GAUGE CLUSTER DISPLAY: Base Level (3" Monochromatic Display), Premium Level (5" LCD Color Display); Odometer, Voltmeter, Diagnostic Messages, Gear Indicator, Trip Odometer, Total Engine Hours, Trip Hours, MPG, Distance to Empty/Refill for

: GAUGE CLUSTER Speedometer, Tachometer, Engine Coolant Temp, Fuel Gauge, DEF Gauge, Oil Pressure Gauge, Primary and Secondary Air Pressure

: WARNING SYSTEM Low Fuel, Low DEF, Low Oil Pressure, High Engine Coolant Temp, Low Battery Voltage(Visual and Audible), Low Air Pressure (Primary and Secondary)

Boise Mobile Equipment

SEATBELT WARNING PREWIRE Includes Seat Belt Switches and Seat Sensors for all Belted Positions in the Cab and a Harness Routed to the Center of the Dash for the Aftermarket Installation of the Data Recorder and Seatbelt Indicator Systems, for 4 to 6 Seat Belts

GAUGE, OIL TEMP, AUTO TRANS for Allison Transmission

GAUGE, AIR CLEANER RESTRICTION {Filter-Minder} with Black Bezel, Mounted in Instrument Panel

IP CLUSTER DISPLAY On Board Diagnostics Display of Fault Codes in Gauge Cluster

SEAT, DRIVER {H.O. Bostrom Sierra Air 100} NFPA Compliant, Air Suspension, High Back, Vinyl with Covered Back and International Logo on Headrest, for Fire Truck

SEAT, PASSENGER {H.O. Bostrom Sierra Air 100} NFPA Compliant, Air Suspension, High Back, Vinyl with Covered Back, International Logo on Headrest, for Fire Truck

GRAB HANDLE, EXTERIOR (2) Chrome, Towel Bar Type, with Anti-Slip Rubber Inserts, for Cab Entry Mounted Left and Right Side at B-Pillar

GRAB HANDLE, ADDITIONAL EXT (2) Chrome, Towel Bar Type, with Anti-Slip Rubber Inserts, Mounted Left and Right Side, Rear of Rear Doors, for Crew Cab

SEAT, REAR {National} BENCH; Full Width; Vinyl, with Fixed Back and Two Integral Outboard Headrests

MIRRORS (2) C-Loop, Power Adjust, Heated, LED Clearance Lights, Bright Heads and Arms, 7.5" x 14" Flat Glass, Includes 7.5" x 7" Convex Mirrors, for 102" Load Width
Notes : Mirror Dimensions are Rounded to the Nearest 0.5"

SEAT BELT All Red; 4 to 6

CAB INTERIOR TRIM Classic, for Crew Cab

Includes

: CONSOLE, OVERHEAD Molded Plastic with Dual Storage Pockets, Retainer Nets and CB Radio Pocket; Located Above Driver and Passenger

: DOME LIGHT, CAB Door Activated and Push On-Off at Light Lens, Timed Theater Dimming, Integral to Overhead Console, Center Mounted

: SUN VISOR (2) Padded Vinyl; 2 Moveable (Front-to-Side) Primary Visors, Driver Side with Toll Ticket Strap

ARM REST, RIGHT, DRIVER SEAT

Boise Mobile Equipment

ARM REST, LEFT, PASSENGER SEAT

CAB SOUND INSULATION Includes Dash Insulator and Engine Cover Insulator

WINDOW, POWER (4) And Power Door Locks, Front and Rear Doors, Left and Right, Includes Express Down Feature

HOURMETER, PTO for Customer Provided PTO; with Indicator Light and Hourmeter in Gauge Cluster Includes Return Wire for PTO Feedback Switch

CAB REAR SUSPENSION Air Bag Type

INSTRUMENT PANEL Flat Panel

ACCESS, CAB Steel, Driver & Passenger Sides, Two Steps per Door, for use with Crew Cab

STEP, STANDARD, OMIT Driver & Passenger Sides, Omit Rear Steps for use with Crew Cab

WHEELS, FRONT {Accuride 42644} DISC; 22.5x8.25 Rims, Standard Polish Aluminum, 10-Stud, 285.75mm BC, Hub-Piloted, Flanged Nut, with Steel Hubs

WHEELS, REAR {Accuride 42644} DUAL DISC; 22.5x8.25 Rims, Standard Polish Aluminum, 10-Stud, 285.75mm BC, Hub-Piloted, Flanged Nut, with Steel Hubs

(2) TIRE, FRONT 12R22.5 Load Range H G622 RSD (GOODYEAR), 482 rev/mile, 75 MPH, Drive

(4) TIRE, REAR 12R22.5 Load Range H G622 RSD (GOODYEAR), 482 rev/mile, 75 MPH, Drive

Services Section:

WARRANTY Standard for HV507, HV50B, HV607 Models, Effective with Vehicles Built July 1, 2017 or Later, CTS-2025A

SRV CONTRACT, EXT VEH COVERAGE {Navistar} To 60-Month/100,000 Miles (160,000 km), Excludes

Extended Warranty for Engine and Transmission

Code Description

Rear Back Panel

CAB SEATING AND WEIGHT ALLOWANCE

Boise Mobile Equipment

A warning label shall be installed in the cab to indicate seating positions for five (5) people. A weight allowance of 250 pounds shall be calculated for each person.

LABELS, STANDARD PACKAGE SET

A standard set of labels shall be provided and installed on the inside of chassis cab area. The labels shall contain the required information based on the applicable components for the apparatus.

DATA PLAQUE

A data plaque shall be provided and installed on the inside of the driver's door. The data plaque shall contain the required information based on the applicable components for the apparatus:

- Engine oil
- Engine coolant
- Chassis transmission fluid
- Drive axle lubricant
- Power steering fluid
- Pump, generator, or other component lubrications
- Other NFPA applicable fluid levels or data as required
- Paint manufacturer, type, and color number
- Tire Speed Ratings

Location shall be in the driver's compartment or on the driver's door.

WARNING LABEL -- NO RIDING ON REAR

A warning label stating: "WARNING: DO NOT RIDE ON REAR STEP WHILE VEHICLE IS IN MOTION. DEATH OR SERIOUS INJURY MAY RESULT" shall be installed on the rear of the apparatus. The label shall be applied to the vehicle at the rear step area. The label shall warn personnel that riding in or on these areas, while the vehicle is in motion, is prohibited.

WARNING LABEL -- SEAT BELT USAGE

A warning label, stating: "WARNING CRASH HAZARD OCCUPANTS MUST BE SEATED AND BELTED WHEN VEHICLE IS IN MOTION..." shall be provided in the apparatus cab interior. This label shall be located so that it is visible from all seating positions.

LOUD NOISE WARNING LABEL

A final stage manufacturer shall install "hearing loss" potential warning labels on the vehicle in any areas or fixed equipment that produces excessive noise levels. (Exhaust outlet, sirens and air horns shall not be required for such equipment.)

AIR FILTER EMBER PROTECTION SCREEN WARNING LABEL

A warning label, stating: "THIS VEHICLE HAS AN AIR INTAKE EMBER SCREEN WHICH REQUIRES PERIODIC INSPECTION & CLEANING" shall be provided and installed in the apparatus cab interior.

Boise Mobile Equipment

FRESH AIR EMBER SEPARATOR WARNING LABEL

A warning label, stating: "THIS APPARATUS IS EQUIPPED WITH A CAB FRESH AIR INTAKE EMBER PROTECTION SCREEN. ROUTINE INSPECTION IS REQUIRED." shall be provided and installed in the apparatus cab interior.

WARNING LABEL -- DO NOT WEAR HELMET

A warning label, stating: "CAUTION: DO NOT WEAR HELMET WHILE SEATED" shall be provided in the apparatus cab interior. This label shall be located so that it is visible from all seating positions.

MANUFACTURER LOGO

The apparatus shall include a BME logo plaque which shall be affixed at the rear of the apparatus.

The BME plaque shall feature white reflective material on the outside of the Maltese cross and red reflective material in the middle.

FRONT TOW PLATE

A horizontal full frame width, $\frac{3}{4}$ -inch thick steel plate, center pull, front tow eye shall be furnished and installed through or below the front bumper. The tow eye plate shall be triangle shaped extended 6 inches beyond the front bumper with a 3-inch X 4-inch rectangle tow eye.

The tow eye shall be braced and gusseted to prevent frame rail or bumper damage and bolted to the front frame rail web with eight (8) Grade 8 frame bolts and lock nuts.

The tow plate shall to be sprayed with black durabak.

FRONT RECEIVER

There shall be one bolted 2" receiver hitch on the front of the apparatus. The receiver shall be mounted off set as to prevent towing use.

REAR RECEIVER

There shall be one bolted 2" receiver hitch on the rear of the apparatus. The receiver shall be mounted off set as to prevent towing use.

REAR BUSTLE

A single, frame mounted, 3-inch X 4-inch diameter, rear towing eye shall be provided. It shall be manufactured from $\frac{3}{4}$ -inch thick steel plate and bolted between the rear frame rail webs with a minimum of eight (8), four (4) on each side, SAE Grade 8 frame bolts and lock nuts.

The tow eye shall be braced and gusseted to prevent damage to the frame rails, bumper or apparatus body while being towed from various angles. Access to the tow eye shall be below the bumper and designed not to interfere with the required angle of departure. The bustle shall be painted job color.

FRONT FRAME EXTENSION

Boise Mobile Equipment

The front frame rails shall be extended 16” ahead of the cab grill or fender area.

BUMPER PLATFORM

The front bumper extended frame rails shall feature an overlay constructed of .125 inch, 5052 grade, aluminum deck bright which shall offer space for mounting components necessary to the apparatus. The bumper extension shall measure approximately sixteen (16) inches from the cab to the front face of the extension and shall be approximately eight (8) inches in height.

LEFT HAND -- FRONT BUMPER COMPARTMENT

One (1) recessed hose storage compartment shall be installed in the left side of the bumper. The compartment shall be constructed of smooth aluminum. The floor of the compartment shall have drain holes provided.

BUMPER COMPARTMENT NYLON HOLD DOWN STRAP

One (1) nylon strap with a buckle shall be installed on the specified front bumper compartment. The nylon strap shall act as a hold down mechanism for the hose in the compartment.

The straps shall be black in color.

BUMPER COMPARTMENT GRATING

The specified bumper compartment shall be fitted with removable interlocking vinyl Dri-Dek grating. This material shall be resistant to heat, cold, ultra-violet radiation, mechanical impacts, chemical actions and is corrosion resistant.

The specified Dri-Deck grating shall be black in color.

CENTER -- FRONT BUMPER COMPARTMENT

One (1) recessed hose storage compartment shall be installed in the center front bumper. The compartment shall be constructed of smooth aluminum. The floor of the compartment shall have drain holes provided.

BUMPER COMPARTMENT DOOR

An aluminum tread plate door shall be installed on the specified front bumper compartment. The non-skid surface door shall have a stainless steel hinge at the rear, latch, and hold open device installed.

The specified door(s) shall have a Polished stainless-steel D-ring door handle.

BUMPER COMPARTMENT GRATING

The specified bumper compartment shall be fitted with removable interlocking vinyl Dri-Dek grating. This material shall be resistant to heat, cold, ultra-violet radiation, mechanical impacts, chemical actions and is corrosion resistant.

The specified Dri-Deck grating shall be black in color.

RIGHT HAND -- FRONT BUMPER COMPARTMENT

One (1) recessed hose storage compartment shall be installed in the right side of the bumper. The compartment shall be constructed from smooth aluminum. The floor of the compartment shall have drain holes provided.

Boise Mobile Equipment

BUMPER COMPARTMENT NYLON HOLD DOWN STRAP

One (1) nylon strap with a buckle shall be installed on the specified front bumper compartment. The nylon strap shall act as a hold down mechanism for the hose in the compartment.

The straps shall be black in color.

BUMPER COMPARTMENT GRATING

The specified bumper compartment shall be fitted with removable interlocking vinyl Dri-Dek grating. This material shall be resistant to heat, cold, ultra-violet radiation, mechanical impacts, chemical actions and is corrosion resistant.

The specified Dri-Deck grating shall be black in color.

BUMPER

There shall be an International 15 degree bumper installed on the apparatus.

BUMPER DISCHARGE SWIVEL STOPPER

There shall be a swivel elbow stopper installed just behind the front discharge(s).

BUMPER SIDE WINGS

The bumper shall have steel side wings.

FRONT BUMPER BEZEL

The center of the front bumper shall feature a bezel, the bezel shall trim out around the front tow plate and front Whelen Micro Pioneer lights and have an BME logo. The BME logo shall have reflective material behind it.

REFLECTIVE BACKGROUND

Part shall feature a Red reflective background.

AIR HORN

One (1) Buell brand, Model #1063 15" air horn shall be provided and mounted on the frame rail of the passenger's side frame, behind the bumper.

AIR HORN FOOT SWITCH

One (1) foot switch shall be provided and installed. The foot switch shall be located on the driver's side of the floor and shall activate the air horn system.

AIR HORN

A Grover Model # 1512, Stutter Tone air horn shall be installed forward of the cab. All tubing shall be loomed and clamped the entire length. The horn supply line, DOT approved synflex air hose, if routed from an air tank shall terminate at a threaded bulkhead connector at the cab firewall.

Boise Mobile Equipment

The air horn mounting location shall be on the passenger side, mounted to the frame rail behind the front bumper.

AIR HORN FOOT SWITCH

One (1) foot switch shall be provided and installed. The foot switch shall be located on the driver's side of the floor and shall activate the air horn system.

AIR HORN PUSH BUTTON SWITCH

One (1) push button switch shall be provided on the pump panel. The switch shall activate the air horn system.

EXHAUST SYSTEM MODIFICATION

The chassis exhaust system shall be modified to exit on the right hand side of the apparatus ahead of the rear wheel.

EXHAUST HEAT WRAP

The exhaust pipe shall be wrapped with heat wrap from the diesel particulate filter to just shy of the end of the tailpipe.

BUMPER BOX PROTECTIVE FLAP

The protective flap shall be a cut down mud flap installed on the rear edge of the front bumper to eliminate debris from being deposited on the top of the front bumper and in the hose boxes.

REAR MUD FLAPS

The chassis shall be supplied with mud flaps with BME's logo. The mud flaps shall be installed behind the rear wheels.

LEFT SIDE CAB STEP

The apparatus shall be equipped with a chassis fuel tank and step area. The fuel tank and step area shall be located on the left side of the commercial chassis. The fuel tank shall be covered with aluminum tread plate.

DRIVER'S SIDE UNDER CAB COMPARTMENT

The apparatus shall be equipped with an enclosed stainless steel compartment located under the crew door on the left side of the cab. The compartment shall measure approximately 36" wide x 18" high x 21" deep with a hinged aluminum door and a D-ring style latch.

The doors shall be painted job color.

COMPARTMENT LIGHTING

One (1) Code 3 800 Series Corner LED lights shall be installed in each of the specified compartment(s).

COMPARTMENT LIGHT / DOOR SWITCH

Boise Mobile Equipment

The interior compartment light shall be automatically controlled by a door activated "On-Off" switch. The switch shall be tied to the door ajar system also.

PASSENGER'S SIDE UNDER CAB COMPARTMENT

The apparatus shall be equipped with an enclosed stainless steel compartment located under the crew door on the right side of the cab. The compartment shall measure approximately 37" wide x 13" high x 22" deep with a hinged aluminum door and a D-ring.

The door shall be painted job color.

SLIDE TRAY

A 250# capacity slide tray shall be installed in the specified under cab compartment.

COMPARTMENT LIGHTING

One (1) Code 3 800 Series Corner LED lights shall be installed in each of the specified compartment(s).

COMPARTMENT LIGHT / DOOR SWITCH

The interior compartment light shall be automatically controlled by a door activated "On-Off" switch. The switch shall be tied to the door ajar system also.

CAB STEPS

Aggressive, extruded aluminum surfaces shall be installed on each of the cab steps areas. The outside edges of the specified step shall be provided with 2" x 1.5" x .250" extruded and knurled aluminum rub rails.

CAB DOOR REFLECTIVE PANELS

The cab doors shall include reflective trim installed inside each door.

CAB SEATING

The apparatus shall be equipped with four (4) Bostrom Sierra 100 air ride seats. The seats shall have inside arm rests and are charcoal grey vinyl material, installed in the cab.

BATTERY RELOCATION

The chassis batteries are to be relocated to the passenger side of the chassis, below the rear cab door in a custom made under cab box.

UNDERHOOD LIGHTS

There shall be two (2) Tecniq LED light(s) installed under the hood of the chassis. Lights shall have local switching on the driver side under the hood.

AIR FILTER EMBER PROTECTION SCREEN AND WARNING LABEL

The chassis air intake shall be protected by an ember guard of 18 Mesh, 0.017-inch wire diameter, and a maximum mesh opening of 0.039 inches. The ember guard shall be sized to fit and located at the intake

Boise Mobile Equipment

opening. The screen shall be readily accessible for inspection and maintenance. The ember guard shall maintain a minimum ½ inch separation from the air filter.

EMBER SEPARATOR -- FRESH AIR INTAKE TO CAB

The cabin air filter shall be protected by an ember guard with a maximum mesh opening of 0.039 inches.

EMBER SEPARATOR

The final stage manufacturer shall install an ember separator within the fire pump engine air intake system.

FUEL TANK SKID PLATE

A heavy duty removable skid plate shall be fastened to the bottom side of the fuel tank. The skid plate shall have the front and rear sides turned up to prevent digging into the ground when the apparatus is in off road conditions.

EXTERIOR CAB TRIM

A rubber debris skirt will be installed to prevent debris and embers from entering between the cab and frame. The debris skirt will be attached with a 12 gauge stainless steel trim piece the full length along the lower body seam below the cab doors. The trim shall be fastened to the body seam with evenly spaced 10/32 stainless steel Phillips head machine screws and nylock nuts.

AIR, FUEL, ELECTRICAL LINE PROTECTION

All air lines, fuel lines and electrical harnesses below the chassis frame rails shall be protected with fire resistive sleeves.

FUEL TANK VENTING

The O.E.M fuel tank vent line shall be extended from the fuel tank and vented to the atmosphere. The vent line shall extend vertically from the tank to the bottom of the cab rear window and then bend 180 degrees towards the ground. A vent plug orifice (#60 drill size) shall be installed into the upper end of each line. No fuel tank roll over protection check valves shall be removed from the fuel system. Any chassis fuel system modifications shall be fully compliant CARB regulations, CVC and FMVSS.

All fuel vent lines shall be copper, steel, or Aeroquip hose, and shall be loomed, “grommeted”, and firmly clamped in position to prevent chafing or damage and all synflex fuel hoses shall be wrapped with fire wrap lagging capable of withstanding temperatures in excess of 250°C.

The fuel tanks and lines shall be protected as necessary from exhaust heat through the use of heat shields or baffles. Use only metal fasteners, coated or insulated for maximum fuel line protection.

TIRE PRESSURE INDICATOR SYSTEM

There shall be a tire pressure indicator at each tire's valve stem on the vehicle that shall indicate if there is insufficient pressure in the specific tire.

FIRE PUMP SPECIFICATIONS

Boise Mobile Equipment

A Darley model JMP 500 GPM two stage fire pump shall be installed. Power to drive the pump shall be provided by the same engine used to propel the apparatus. The pump shall be equipped with a series-parallel changeover valve control on the pump panel.

Pump casing shall be a fine grain cast iron, with a minimum tensile strength of 30,000 PSI. Pump shall contain a cored heating jacket feature that, if selected, can be connected into the vehicle antifreeze system to protect the pump from freezing in cold climates, and to help reject engine heat from engine coolant, providing longer life for the engine. Seal rings shall be renewable, double labyrinth, wrap around bronze type.

The pump shaft shall be splined to receive broached impeller hubs, for greater resistance to wear, torsional vibration, and torque imposed by engine, as well as ease of maintenance and repair.

Bearings provided shall be heavy duty, deep groove, radial-type ball bearings. Sleeve bearings on any portion of the pump or transmission shall be prohibited due to wear, deflection, and alignment concerns. The bearings shall be protected at all openings from road dirt and water splash with oil seals and water slingers.

The impeller shall be a high strength bronze alloy, splined to the pump shaft for precision fit, durability, and ease of maintenance. Impeller shaft oil seals shall be constructed to be free from steel components except for the internal lip spring. The impeller shaft oil seals shall carry a lifetime warranty against damage from corrosion from water and other fire-fighting fluids.

The pump transmission case shall be heavy-duty cast iron with adequate oil reserve capacity to maintain low operating temperature. Pump ratio to be selected by the manufacturers engineering department. Gears shall be helical in design and precision ground for quiet operation and extended life. Gears to be cut from high strength alloy steel, ground, and carburized. Chain drive and/or design requiring extra lubricating pump is not acceptable.

Pump drive shaft shall be precision ground, heat-treated alloy steel, with a 1-3/8 spline. Gears shall be helical design, and shall be precision ground for quiet operation and extended life. The pump transmission shall require no further lubrication beyond that provided by the intrinsic action of the gears, to reduce the likelihood of failure due to loss of auxiliary lubrication.

MECHANICAL SEAL

The mechanical seal shall use silicon carbide mechanical seals with welded springs. The stationary face of our mechanical seals shall be made from silicon carbide, an extremely hard and heat dissipative material, which resists wear and dry running damage.

PUMP SHIFT NO PUMP AND ROLL

The pump transmission shall be engaged by a guarded toggle switch which will lock in both the road and the pump mode to ensure that accidental pump engagement or disengagement is avoided.

Boise Mobile Equipment

The main fire pump shift controls shall be mounted in the cab and identified as "PUMP SHIFT" and shall include a permanently inscribed pump shift instruction I.D. plate. The pump shift controls shall include indicating lights located on the in-cab and left pump panels that advise the operator that the pump shift has been completed and it is O.K. to pump.

The main pump shall be used for stationary pumping only. The main pump shall include a lock-out system that is interfaced with the apparatus electrical and parking brake systems and is designed to keep the main pump from being used in pump and roll operations.

FIRE PUMP ANODE SYSTEM

The fire pump plumbing system shall be provided with anode system to reduce corrosion within the piping. The anode shall be bolt-in or screw-in type and easily replaceable.

ELECTRIC PRIMER SPECIFICATIONS

A 12 volt electrically driven positive displacement fire pump primer system shall be installed. The priming pump shall be constructed of heat treated aluminum and hard coat anodized and shall not use oil in the operation. The system shall perform in compliance to applicable NFPA standards. A single, push-pull control shall be located on the pump operator's panel with a "Pull to Prime - Push to Close" label.

FIRE PUMP TEST

The fire pump shall undergo factory fire pump tests for a minimum of 30 minutes of continuous pump at rated capacity at rated net pump pressure prior to delivery of the completed apparatus. The complete pump test shall include a pressure control test, a priming system test, a vacuum test and a water tank to pump flow test. The factory pump testing results shall be furnished on delivery.

FIRE PUMP PTO AND DRIVELINES

A "Hot Shift" power-take-off shall be installed on the transmission PTO opening with the controls located in the chassis cab, with an AMBER warning light to note engagement. The drive shaft and universals shall be sized for intended usage and pump rating.

INTAKE DUMP VALVE

An Elkhart model #40/40 intake dump valve shall be provided and mounted on the suction side of the pump. The valve shall be preset from the factory at 125 psi. The discharge piping of the dump valve shall be a minimum of 2-1/2" diameter and shall terminate with a 2-1/2" male NST adapter. The excess water shall be discharged to the ground. A label shall be provided indicating: "DUMP VALVE DISCHARGE, DO NOT CAP".

THERMAL PUMP COOLER

The fire pump shall be equipped with an overheat protection device which monitors the temperature of the water inside the pump and relieves water when the temperature inside the pump exceeds 140 degrees Fahrenheit. The Waterous Model #OPM shall also have an warning light on the pump panel to provide additional protection in the event the temperature inside the pump continues to rise with the overheat protection valve open. The

Boise Mobile Equipment

warning light and test button shall be mounted to a heavy polished casting that is mounted to the pump operator's panel.

MASTER PUMP DRAIN

One (1) Trident, multiple-port drain valve, fabricated from bronze, shall be provided and controlled at the pump operator's control panel. The valve shall be opened by turning a rotary hand wheel. The valve shall be plumbed to drain both the discharge and intake sides of the pump, the relief valve and other plumbing components as required.

The valve shall be placed as low as possible to provide proper drainage of the components plumbed to it. The valve shall be rated to 600 PSI minimum and suitable for daily valve actuation.

MAIN PUMP PLUMBING

The PTO main pump plumbing system shall utilize stainless steel piping incorporating hosing to allow for flex. The piping shall utilize TIG welding to provide a complete seal. Hard angles shall be avoided when possible to improve water flow characteristics. The piping shall utilize Victaulic couplers whenever possible to allow flex as the body module flexes.

Threaded sections of piping shall be avoided to reduce the leak potential of the system. Victaulic couplers shall be used in place of threading to reduce leak potential. Schedule 10 stainless steel piping shall be used for transport type piping. Schedule 40 stainless steel shall be used for areas requiring threading to provide a stable threading base. Brackets shall be installed to support threading locations thereby reducing the potential for leaks.

All hoses shall be connected directly to the tank due to the different flex ratios of the tank to body. Any front discharges, any rear discharges, and all cross lays shall use hose to reach the actual discharge. The use of hose shall be utilized due to the difference in flex or movement between the discharge location and the pump connection. Drain lines shall be provided at the lowest points in the plumbing system to allow for complete drainage. Bleeders shall be provided for all gauges to relieve pressure after use.

PORTABLE PUMP

A Darley 1-1/2AGE 24K portable pump shall be provided on the apparatus. The unit shall have a liquid cooled, 24 HP, Kubota D902 diesel engine equipped with an electric start.

Pump Performance

- 20 gpm @ 310 psi
- 140 gpm @ 145 psi
- 180 gpm @ 80 psi

Diesel Engine

Kubota, D902 Diesel, water-cooled, 24 hp.

Fuel Supply

Boise Mobile Equipment

The engine shall be piped to the chassis fuel system with provisions to prevent fuel drain back to the tank when the engine is shutdown.

Fuel Prime

A fuel re-prime pump shall be provided to assist in fuel delivery to the diesel engine from the chassis tank.

Lubrication

Pressure feed with spin-on filter.

Starter

12-volt electric wired into the chassis battery system

Exhaust

A spark arrestor shall be provided on the engine exhaust system.

Air Intake

An air cleaner shall be provided with easy access to remove the element.

An ember screen shall be provided on the inlet to the air cleaner.

The aux pump shall be capable of flowing water through the following discharges only.

- Front bumper discharges
- Front bumper monitor (if applicable)
- Booster hose reel
- Cross lay pre connect discharges
- Rear 1-1/2" discharge

DUAL DARLEY DELUXE PANELS

The auxiliary pump shall be controlled by a dual Darley, Deluxe panel set up. One panel shall be located on the pump panel and one panel shall be located in the cab console.

AUXILIARY PUMP PLUMBING

The auxiliary fire pump plumbing system shall utilize stainless steel piping incorporating hosing to allow for flex. The piping shall utilize TIG welding to provide a complete seal. Hard angles shall be avoided when possible to improve water flow characteristics. The piping shall utilize Victaulic couplers whenever possible to allow flex as the body module flexes.

Threaded sections of piping shall be avoided to reduce the leak potential of the system. Victaulic couplers shall be used in place of threading to reduce leak potential. Schedule 10 stainless steel piping shall be used for transport type piping. Schedule 40 stainless steel shall be used for areas requiring threading to provide a stable threading base. Brackets shall be installed to support threading locations thereby reducing the potential for leaks.

Boise Mobile Equipment

All hoses shall be connected directly to the tank due to the different flex ratios of the tank to body. Any front discharges, any rear discharges, and all cross lays shall use hose to reach the actual discharge. The use of hose shall be utilized due to the difference in flex or movement between the discharge location and the pump connection. Drain lines shall be provided at the lowest points in the plumbing system to allow for complete drainage. Bleeders shall be provided for all gauges to relieve pressure after use. Push/ pull handles shall be provided for all bleeders and the primer control.

AUXILIARY PUMP EXHAUST SYSTEM

The auxiliary fire pump and engine assembly shall have a muffler and exhaust pipe. The exhaust pipe shall be directed out of the compartment and away from the pump operator. An additional guard shall be installed where the pipe is exposed to touch by an operator.

PRIMER ASSEMBLY

The auxiliary pump shall use the main pump primer to prime the pump.

LOW PRESSURE PUMP SHUT-DOWN

If the fire pump runs out of water and the pressure decreases below 15 PSI, an automatic pressure switch shall detect the condition, and turn off the fire pump operation.

LOW OIL PRESSURE / HIGH TEMPERATURE PUMP SHUT-DOWN

If the fire pump has low oil pressure or high engine temperature, automatic pressure switches shall detect the condition, and the device shall turn off the fire pump operation. There shall be an override switch provided and installed on the operators pump panel to allow the system to be disabled when required.

AUXILIARY FUEL SYSTEM

The fuel system for the auxiliary fire pump shall be plumbed to the chassis fuel system. There shall be a separate fuel pickup tube mounted in the chassis fuel tank specifically for a separate engine driven pump assembly. There shall be an electric fuel pump with regulator and fuel hose furnished between the chassis fuel tank and the auxiliary pump.

AUXILIARY FIRE PUMP ELECTRIC START WIRING TO CHASSIS

Properly sized 12 volt positive and negative cables shall be provided from the chassis battery to the auxiliary fire pump.

AUXILIARY AND MAIN PUMP PLUMBING

The auxiliary fire pump shall be plumbed to the main pump discharge.

AUXILIARY PUMP OIL DRAIN EXTENSION

There shall be an oil drain extension installed on the auxiliary pump. This will allow for the engine oil to be drained without removing the auxiliary engine.

AUXILIARY PUMP COVER

Boise Mobile Equipment

A louvered hinged cover with suitable latches shall be provided over the pump and power unit assembly. The area around the assembly shall remain open for maintenance and air circulation and the radiator shall be located behind ventilated side sheet.

The specified compartment shall have no compartment lighting.

DOOR AJAR SENSOR

The Specified door shall feature a magnetic proximity switch to indicate when the compartment door is ajar.

PUMP COOLER

The fire pump shall be equipped with 1/4" cooling line from the discharge side of the main pump to the water tank.

This line will be designed to circulate water when the engine cooler valve is open and to maintain the pump/engine water temperature at a safe level. A check valve will be installed in the return line to ensure the ability to pull a vacuum during pumping operations.

This re-circulation line shall be controlled by a pump panel control valve with nameplate label noting it as the "pump cooler".

4" UNGATED INTAKE -- LEFT SIDE

One (1) 4" un-gated suction intake shall be installed on the left side pump panel to supply the fire pump from an external water supply. The threads shall be 4" NH male and equipped with a removable screen and a chrome brass cap.

One (1) chrome brass 4" NH rocker lug cap with a securing chain or cable shall be installed on the intake.

2-1/2" GATED INTAKE -- LEFT SIDE

One (1) 2-1/2" gated suction intake shall be recessed mounted on the left side pump panel to supply the fire pump from an external water supply. The valve shall be a quarter-turn ball valve with the appropriate handle and shall have 2-1/2" NH female thread.

The discharge outlet shall be equipped with a South Park Corp. 3/4" Push-pull type drain valve mounted to the bottom of the valve.

One (1) Akron 8825 series swing-out style valve(s) shall be supplied and installed. All valves shall be designed to operate under normal conditions up to 500 PSI and shall have dual seats to work in both pressure and vacuum environments. All valves and controls shall be easily accessible for service, repair or replacement.

The specified valve shall have a direct actuated 'local' control Akron Model TSC valve handle.

One (1) chrome brass 2-1/2" NH rocker lug plug with a securing chain or cable shall be installed on the intake.

2-1/2" GATED INTAKE -- RIGHT SIDE

One (1) 2-1/2" gated suction intake shall be recess mounted on the right side pump panel to supply the fire pump from an external water supply. The valve shall be a quarter-turn ball valve with the appropriate handle and shall have 2-1/2" NH female thread.

Boise Mobile Equipment

The discharge outlet shall be equipped with a South Park Corp. 3/4" Push-pull type drain valve mounted to the bottom of the valve.

One (1) Akron 8825 series swing-out style valve(s) shall be supplied and installed. All valves shall be designed to operate under normal conditions up to 500 PSI and shall have dual seats to work in both pressure and vacuum environments. All valves and controls shall be easily accessible for service, repair or replacement.

The specified valve shall have a direct actuated 'local' control Akron Model TSC valve handle.

One (1) chrome brass 2-1/2" NH rocker lug plug with a securing chain or cable shall be installed on the intake.

WATER TANK SUPPLY LINE TO FIRE PUMP

A 3" water tank to pump line shall be installed, with a 3" full flow quarter turn ball valve and 3" piping. The line shall be equipped with a hump hose with stainless steel hose clamps and a 3" check valve to prevent pressurization of the water tank.

One (1) Akron 8830 series swing-out style valve(s) shall be supplied and installed. All valves shall be designed to operate under normal conditions up to 500 PSI and shall have dual seats to work in both pressure and vacuum environments. All valves and controls shall be easily accessible for service, repair or replacement.

The specified valve shall have a direct actuated 'local' control Akron Model TSC valve handle.

The 3" valve shall be equipped with an air operated cylinder and control actuator installed on pump panel.

PUMP TO TANK

There shall be a pump to tank line provided from the discharge side of the pumps and plumbed to the top of the tank. The plumbing shall be 2-inch with a 2-inch Akron 8800 series ¼-turn full flow ball valve, and shall be controlled at the left pump panel by a push/pull T-handle and linkage. The pump to tank shall be plumbed to flow water from both the main and auxiliary pumps

One (1) Akron 8820 series swing-out style valve(s) shall be supplied and installed. All valves shall be designed to operate under normal conditions up to 500 PSI and shall have dual seats to work in both pressure and vacuum environments. All valves and controls shall be easily accessible for service, repair or replacement.

The valve shall be equipped with a Thuemling manually operated pull rod, with quarter-turn locking feature.

2-1/2" DISCHARGE LEFT SIDE -- FORWARD PUMP PANEL

One (1) 2-1/2" discharge shall be installed on the left side forward pump panel area controlled by a quarter turn ball valve with the appropriate handle. The discharge shall have 2-1/2" NH male hose threads, bleeder valve, and chrome brass cap, with a label adjacent the control handle.

A Class 1 quarter-turn 3/4" drain and bleeder valve shall be installed on the discharge valve.

One (1) Akron 8825 series swing-out style valve(s) shall be supplied and installed. All valves shall be designed to operate under normal conditions up to 500 PSI and shall have dual seats to work in both pressure and vacuum environments. All valves and controls shall be easily accessible for service, repair or replacement.

The specified valve shall have a direct actuated 'local' control Akron Model TSC valve handle.

(1) chrome brass 2.5" NH rocker lug cap with a securing chain or cable shall be installed on the discharge.

2.5" DISCHARGE -- REAR LEFT

One (1) 2.5" discharge shall be installed on the rear left panel with controlled by a quarter turn ball valve. The discharge shall have 2.5" NH male hose threads and nameplate label adjacent the control handle.

Boise Mobile Equipment

One (1) Akron 8825 series swing-out style valve(s) shall be supplied and installed. All valves shall be designed to operate under normal conditions up to 500 PSI and shall have dual seats to work in both pressure and vacuum environments. All valves and controls shall be easily accessible for service, repair or replacement.

The specified valve shall have a direct actuated 'local' control Akron Model TSC valve handle.

(1) chrome plated brass 30 degree elbow with 2.5" swivel female NH x 2.5" male NH thread with rocker lugs shall be provided on the discharge.

(1) chrome brass 2.5" NH rocker lug cap with a securing chain or cable shall be installed on the discharge.

2" DISCHARGE -- REAR RIGHT

One (1) 2" discharge shall be installed on the rear right panel, controlled by a quarter turn ball valve on pump panel. The discharge shall have 2" NPT x 1-1/2" NH male hose threads and nameplate label adjacent the valve control handle.

One (1) Akron 8820 series swing-out style valve(s) shall be supplied and installed. All valves shall be designed to operate under normal conditions up to 500 PSI and shall have dual seats to work in both pressure and vacuum environments. All valves and controls shall be easily accessible for service, repair or replacement.

The specified valve shall have a direct actuated 'local' control Akron Model TSC valve handle.

One (1) chrome plated brass reducing adapter with a 2" swivel female NH x 1.5" male NH thread with rocker lugs shall be provided on the discharge.

One (1) chrome plated brass 30 degree elbow with 1.5" swivel female NH x 1.5" male NH thread with rocker lugs shall be provided on the discharge.

One (1) chrome plated brass 1.5" NH rocker lug cap with a securing chain or cable shall be installed on the discharge.

1-1/2" CROSSLAY DISCHARGES

Two (2) pre-connected 1-1/2" hose cross lays shall be installed over pump enclosure. One (1) each side. They shall be arranged in a single stack design with a divider in the center of the storage area. Each storage area shall extend from the side of the pump house to the center of the pump house. The dimensions shall be approximately 4-1/2" wide x 36" deep x 32" tall.

Two (2) Akron 8820 series swing-out style valve(s) shall be supplied and installed. All valves shall be designed to operate under normal conditions up to 500 PSI and shall have dual seats to work in both pressure and vacuum environments. All valves and controls shall be easily accessible for service, repair or replacement.

The specified valve shall have a direct actuated 'local' control Akron Model TSC valve handle.

The crosslay hosebed shall be equipped with an aluminum diamond plate hinged cover and vinyl end flap enclosures on each side, installed in compliance with applicable NFPA #1901 standards. The cover shall be equipped with rubber bumpers and lift up handle on each end of the cover.

The specified crosslay flaps shall be red.

CROSSLAY EDGES

The crosslay side sheets shall be rolled on each side to act as a guide for the hose to come out of the tray.

One (1) chrome plated brass reducing adapter with a 2" swivel female NH x 1.5" male NH thread with rocker lugs shall be provided on the discharge.

One (1) chrome plated brass 1.5" NH rocker lug cap with a securing chain or cable shall be installed on the

Boise Mobile Equipment

discharge.

1-1/2" BUMPER AREA DISCHARGE (LEFT SIDE)

One (1) 2" discharge shall be provided at the driver's side of the front bumper extension. The discharge shall be plumbed with 2" flexible high pressure hose with reusable fittings or welded stainless steel pipe. The front bumper discharge shall be equipped with a 2" quarter turn ball valve. The discharge shall have a 90 degree full swivel elbow, terminating in 1-1/2" NST male threads, to allow the hose to be pulled in any direction without kinking.

One (1) Akron 8820 series swing-out style valve(s) shall be supplied and installed. All valves shall be designed to operate under normal conditions up to 500 PSI and shall have dual seats to work in both pressure and vacuum environments. All valves and controls shall be easily accessible for service, repair or replacement.

The specified valve shall have a direct actuated 'local' control Akron Model TSC valve handle.

One (1) chrome plated brass 1.5" NH rocker lug cap with a securing chain or cable shall be installed on the discharge.

1-1/2" BUMPER AREA DISCHARGE (RIGHT SIDE)

One (1) 1-1/2" discharge, labeled #3, shall be provided at the passenger's side of the front bumper extension. The discharge shall be plumbed with 2" flexible high pressure hose with reusable fittings or welded stainless steel pipe. The front bumper discharge shall be equipped with a 2" quarter turn ball valve. The discharge shall have a 90 degree full swivel elbow, terminating in 1-1/2" NST male threads, to allow the hose to be pulled in any direction without kinking.

One (1) Akron 8820 series swing-out style valve(s) shall be supplied and installed. All valves shall be designed to operate under normal conditions up to 500 PSI and shall have dual seats to work in both pressure and vacuum environments. All valves and controls shall be easily accessible for service, repair or replacement.

The specified valve shall have a direct actuated 'local' control Akron Model TSC valve handle.

2" ISOLATION VALVE

One (1) 2" inline valve, labeled, shall be provided to isolate the front bumper extension discharge piping in the case of a hose or piping failure. This valve shall normally be left in the open position. Control for this valve shall be through the use of a R1 handle, painted red, located at the valve.

One (1) Akron 8820 series swing-out style valve(s) shall be supplied and installed. All valves shall be designed to operate under normal conditions up to 500 PSI and shall have dual seats to work in both pressure and vacuum environments. All valves and controls shall be easily accessible for service, repair or replacement.

The specified valve shall have a direct actuated 'local' control Akron Model TSC valve handle.

HOSE REEL

One (1) Hannay aluminum hose reel Model #SBSEPF17-28-29-RT shall be installed. The reel shall have leak proof ball bearing swing joint, adjustable friction brake, electric 12 volt rewind and manual crank rewind provisions. The reel shall be plumbed with wire reinforced, high-pressure hose coupled with brass fittings. The reel shall be designed to hold 125% of the specified hose capacity.

Boise Mobile Equipment

The reel shall be provided with a 12 volt electric motor of appropriate size for rewinding. The hose reel shall have provisions for being rewound manually. The pinion shaft for the manual rewind gear shall be equipped with an adjustable tension brake, controlled at the hose reel.

One (1) Akron 8810 series swing-out style valve(s) shall be supplied and installed. All valves shall be designed to operate under normal conditions up to 500 PSI and shall have dual seats to work in both pressure and vacuum environments. All valves and controls shall be easily accessible for service, repair or replacement.

The specified valve shall have a direct actuated 'local' control Akron Model TSC valve handle.

HOSE REEL MOUNTING

The hose reel shall be mounted over the pump enclosure.

Two (2) Cole Hersee #M-608 push button hose reel rewind controls shall be installed supplied and installed to rewind the hose reel. One (1) button shall be installed on the left pump panel and one (1) button shall be installed on the right panel.

REEL MOUNTED HOSE

One (1) 50' foot length of 1" fabric covered REEL-TEX water hose shall be installed on the hose reel. The hose shall be equipped with chrome plated pin lug couplings and have a minimum 1000 PSI burst pressure.

HOSE REEL ROLLERS

The hose reel shall include one horizontal and two vertical chrome fairlead rollers. Two (2) additional sets of fair lead rollers shall be located on the auxiliary pump cover for guiding the hose across the top of the apparatus.

FOAM SYSTEM

A FoamPro electronic foam system shall be provided. The system shall be designed for use with Class A foam concentrate. The foam proportioning operation shall be designed for direct measurement of water flows and shall remain consistent within the specified flows and pressures. The system shall be capable of accurately delivering foam solution as required by applicable sections of the NFPA standards.

The system shall be equipped with a control module suitable for installation on the pump panel. There shall be a microprocessor incorporated within the motor driver that shall receive input from the system's flowmeter, while also monitoring the foam concentrate pump output. The microprocessor shall compare the values to ensure that the desired amount of foam concentrate is injected onto the discharge side of the fire pump. A "foam capable" paddlewheel-type flowmeter shall be installed in the discharge side of the piping system.

The control module shall enable the pump operator to:

- Activate the foam proportioning system
- Select the proportioning rates from 0.1% to 1.0%
- See a "low concentrate" warning light flash when the foam tank level becomes low and in two (2) minutes, if the foam concentrate has not been added to the tank, the foam concentrate pump shall be capable of shutting down.

Boise Mobile Equipment

A 12-volt electric motor driven positive displacement plunger pump shall be provided. The pump capacity range shall be 0.1 to 1.7 GPM (6.4L/min) at 200 PSI (13.8 BAR) with a maximum operating pressure up to 400 PSI (27.6 BAR). The system shall draw a maximum of 30 amps at 12 volts. The motor shall be controlled by the microprocessor which shall be mounted to the base of the pump. It receives signals from the control module and power the 1/3 horsepower (.25 Kw) electric motor in a variable speed duty cycle to ensure that the correct proportion of concentrate is injected into the water stream.

A full flow check valve shall be provided in the discharge piping to prevent foam contamination of the fire pump and water tank. A 5 PSI (.35 BAR) opening pressure check valve shall be provided in concentrate line.

Components of the complete proportioning system as described above shall include:

- Operator control module
- Paddlewheel flowmeter
- Pump and electric motor/motor driver
- Wiring harnesses
- Low level tank switch
- Foam tank
- Foam injection check valve
- Main waterway check valve
- Flowmeter and tee

The foam system shall be installed and calibrated to manufacturer's requirements. In addition the system shall be tested and certified by the apparatus manufacturer to applicable NFPA standards.

The foam system design shall be tested and pass environmental testing in accordance to SAE standards.

An installation and operation manual shall be provided for the unit. The system shall have a one (1) year limited warranty by the foam system manufacturer.

The FoamPro 1601 Series foam system shall be provided with a control cable from the controller to the foam pump assembly.

The FoamPro 1601 Series foam system shall be provided with a standard pump panel mounted FoamPro control head.

A FoamPro brass flowmeter shall be provided. The flowmeter shall be installed in the "foam capable" discharge line. The flowmeter shall have maximum accuracy between the flow range of 10 GPM and 320 GPM and be capable of operation between 3 GPM to 380 GPM. The tee shall have NPT and Victaulic inlet and outlets connections.

Boise Mobile Equipment

A FoamPro instruction and system rating label shall be provided. The label shall display information for a FoamPro 1601 Series foam system and shall meet applicable sections of the NFPA standards.

FOAM SYSTEM OUTLETS

The following discharges shall have foam distributed to them.

- Front bumper discharges
- Front bumper monitor (if applicable)
- Pump house crosslay pre connects
- Booster hose reel
- Rear 1-1/2" discharge

FOAM SYSTEM CAB CONTROL

A FoamPro on-off control switch shall be installed in the cab console.

FOAM UPLOAD SYSTEM

There shall be a Hale EZ Foam upfill system supplied and installed on the apparatus.

PUMP MODULE ENCLOSURE

The PTO fire pump enclosure shall be a separate unit from the body unit and shall be attached and supported at the chassis frame rails. This module shall allow for independent flexing of the pump enclosure from the body, chassis, and tank, and shall permit quick removal. The module shall have Polypro mounting pads and shall be attached to the frame rails. The bolt-on pump enclosure support structure shall be constructed of steel tubing.

The pump enclosure shall be approximately 27" front to rear, 72" right to left, and 60" high.

PUMP ENCLOSURE RUNNING BOARD

Both the drivers and passenger side shall be equipped with a side running board a minimum of 12" deep. The running board shall extend along the width of the pump enclosure from the forward end of the body module to behind the chassis cab. The exterior edge of the running board shall be constructed of a non-slip aggressive surface, supported by the pump enclosure framework, and bolted in place with stainless steel fasteners. The outside edges of the specified step shall be provided with 2" x 1.5" x .250" extruded and knurled aluminum rub rails.

PUMP ACCESS SERVICE DOOR -- UPPER LEFT SIDE

The upper left side of the side mount pump enclosure shall be provided with a pump service access door. The hinged door shall be constructed of stainless steel with push button type lever latches for service access.

PUMP PANELS

The pump panels shall be constructed of stainless steel, bolted to the pump enclosure with stainless steel fasteners.

Boise Mobile Equipment

MASTER PUMP DISCHARGE AND INTAKE GAUGES

MASTER INTAKE PRESSURE GAUGE

One (1) master intake pressure gauge shall be provided on the operator's panel, located close to, and to the left of, the master discharge pressure gauge. The gauge shall be a Span brand, or equivalent, 30-0-150 PSI graduated, with a minimum diameter of 4-1/2", backlit for nighttime operations and silicone liquid filled to prevent condensation inside the gauge and to dampen the movement.

The gauge housing shall be constructed of Zytel nylon with a 1/4" NPT brass male fitting centrally located on the rear of the housing. The gauge shall be filled with low-temperature liquid with an operating range of -40 to +150 degrees Fahrenheit, which prevents bouncing of the readout needle and provides for an accuracy rating of 3% or 1" hg on the vacuum side and 5% or 15 PSI on the pressure side of the gauge.

The specified gauge shall feature a drain located at the gauge inlet to help prevent freezing. The drain shall be a twist open and close type.

Gauge(s) shall include internal, back-lit 12 volt lighting. Replaceable, White, LED bulb in a water-resistant holder.

Gauge(s) shall be supplied with a white dial face with black lettering and black gauge marks.

Gauge bezel shall be Chrome in color.

MASTER DISCHARGE PRESSURE GAUGE

One (1) master discharge pressure gauge shall be provided on the operator's panel, located close to, and to the right of, the master intake pressure gauge. The gauge shall be a Span brand, or equivalent, 0-600 PSI graduated, with a minimum diameter of 4-1/2", backlit for nighttime operations and silicone liquid filled to prevent condensation inside the gauge and to dampen the movement.

The gauge housing shall be constructed of Zytel nylon with a 1/4" NPT brass male fitting centrally located on the rear of the housing. The gauge shall be filled with low-temperature liquid with an operating range of -40 to +150 degrees Fahrenheit, which prevents bouncing of the readout needle and provides for an accuracy rating of 5% or 15 PSI on the pressure side of the gauge.

Gauge(s) shall include internal, back-lit 12 volt lighting. Replaceable, White, LED bulb in a water-resistant holder.

Gauge(s) shall be supplied with a white dial face with black lettering and black gauge marks.

Gauge bezel shall be Chrome in color.

TEST TAPS

Test taps for pump intake and pump pressure with name plate labels shall be provided on the pump instrument panel.

SCENE LIGHT SWITCH

Boise Mobile Equipment

Three (3) switches shall be installed on the left pump panel to activate driver side, passenger side, and rear scene lights respectively.

PRESSURE GOVERNOR and ENGINE MONITORING DISPLAY

Fire Research PumpBoss series PBA201-D00 pressure governor and monitoring display kit shall be installed. The kit shall include a control module, discharge pressure sensor, and cables. The control module case shall be waterproof and have dimensions not to exceed 6 3/4" high by 4 5/8". The control knob shall be 2" in diameter with no mechanical stops, have a serrated grip, and a red idle push button in the center. It shall not extend more than 1 3/4" from the front of the control module. Inputs for monitored engine information and outputs for engine control shall be on the J1939 databus. Input from the pump discharge pressure sensor shall be electrical.

The following continuous displays shall be provided:

- Engine RPM; shown with four daylight bright LED digits more than 1/2" high
- Check engine and stop engine warning LEDs
- Engine oil pressure; shown on a dual color (green/red) LED bar graph display
- Engine coolant temperature; shown on a dual color (green/red) LED bar graph display
- Transmission Temperature; shown on a dual color (green/red) LED bar graph display
- Battery voltage; shown on a dual color (green/red) LED bar graph display
- Pressure and RPM operating mode LEDs
- Pressure / RPM setting; shown on a dot matrix message display
- Throttle ready LED.

The dot-matrix message display shall show diagnostic and warning messages as they occur. It shall show monitored apparatus information, stored data, and program options when selected by the operator. All LED intensity shall be automatically adjusted for day and night time operation.

The program shall store the accumulated operating hours for the pump and engine to be displayed with the push of a button. It shall monitor inputs and support audible and visual warning alarms for the following conditions:

- High Battery Voltage
- Low Battery Voltage (Engine Off)
- Low Battery Voltage (Engine Running)
- High Transmission Temperature
- Low Engine Oil Pressure
- High Engine Coolant Temperature
- Out of Water (visual alarm only)
- No Engine Response (visual alarm only).

The program features shall be accessed via push buttons located on the front of the control module. There shall be a USB port located at the rear of the control module to upload future firmware enhancements.

The governor shall operate in two control modes, pressure and RPM. No discharge pressure or engine RPM variation shall occur when switching between modes. A throttle ready LED shall light when the interlock signal is recognized. The governor shall start in pressure mode and set the engine RPM to idle. In pressure mode the governor shall automatically regulate the discharge pressure at the level set by the operator. In RPM mode the

Boise Mobile Equipment

governor shall maintain the engine RPM at the level set by the operator except in the event of a discharge pressure increase. The governor shall limit a discharge pressure increase in RPM mode to a maximum of 30 psi. Other safety features shall include recognition of no water conditions with an automatic programmed response and a push button to return the engine to idle.

The pressure governor and display shall be programmed to interface with a Cummins engine.

WATER TANK GAUGE

One (1) Fire Research TankVision model WLA300-A00-S20 tank gauge shall be installed on the pump panel. The water tank indicator kit shall include an electronic indicator module, a pressure sensor, and a 10' sensor cable. The indicator shall show the volume of water in the tank on nine (9) easy to see super bright LEDs. The specified level gauge shall be active anytime the chassis battery switch is turned on.

CLASS A FOAM TANK GAUGE

One (1) Fire Research brand, Model WLA360-A00 tank level gauge shall be provided on the pump operator's panel to monitor the foam concentrate storage tank level. The gauge shall indicate the foam concentrate storage tank liquid level on an LED bar graph display.

The specified level gauge shall be active anytime the chassis battery switch is turned on.

NOMENCLATURE PLATES

The apparatus shall be equipped with color coded labels. The labels shall be furnished for discharges, intakes, and for other controls and indicators. All labels shall be in English format.

Valve orientation will not be labeled.

MIDSHIP PUMP PANEL LIGHTS -- LEFT SIDE

There shall be three Tecniq brand LED lights installed under a stainless steel light shield mounted above the pump panel. The two outer lights shall be operated by a panel mounted switch, while the middle light will only be activated upon pump engagement.

One (1) of the pump panel lights shall illuminate at the time the fire pump is engaged.

MIDSHIP PUMP PANEL LIGHTS -- RIGHT SIDE

There shall be three (3) Tecniq brand LED light installed under a stainless steel light shield mounted above the pump panel. The light shall activate upon pump engagement.

PUMP ENCLOSURE WORK LIGHTS

Two (2) LED work lights shall be installed in the pump enclosure. The work lights shall have clear lenses and shall have a control switch.

DESIGN AND SCOPE OF WILDLAND BODY

The body shall be designed and constructed of commonly available structural components for ease of repair and maintenance. The body shall be of a modular design with the body structure independent of the chassis frame rails. The body module shall be mounted to the chassis frame rails utilizing a unique double spring mounting

Boise Mobile Equipment

system for flexibility and durability over the lifetime of the apparatus. The fabrication of the body shall be of welded construction to withstand the rigors of fire service use.

The body shall be designed to incorporate and support the tank, hose bed, compartments, and all other equipment intended to be stored in or mounted to the body module. The body skeleton and compartment framework shall be designed of tubular members for increased strength and stress resistance. There shall be no sheet metal or extrusions utilized in the foundation or structural components of the body module due to their critical role in assuring lifetime durability, functionality and usability.

BODY FRAMEWORK

The entire body framework shall be fabricated from steel tubing. The body framework shall be a completely welded unit, forming a connected, stable frame for strength, longevity and providing the skeleton of the body module. The internal upright members of the framework shall act as support for the top layer of the body module. The external upright members shall act as an exoskeleton providing form and support for compartments while acting as the external surfaces of the module. The framework shall define the compartment openings and provide a rigid mounting location for all compartments and doors.

The foundation cross-members shall be placed perpendicular to the chassis frame rails in the wheel well area extending the full width of the body and shall be constructed of 3 inch high x 2 inch wide x .25 inch tubing. The foundation members parallel to the chassis frame rails shall be constructed of 3 inch square x .25 inch tubing and shall connect the foundation cross members and extend the full length of the body.

All tank support cross members shall be placed to support the water tank as per the tank manufacture's recommendation. These supports shall be constructed of 3 inch high x 2 inch wide x .25inch steel tubing. The tank support angles shall be constructed of 4 inch x 4 inch x .25 inch thick angles and shall be placed at the tank sides parallel to the chassis frame rails to provide lateral support for the tank and protection from debris from the wheels.

The internal upright supports for top layer components shall be placed to provide support for all components located on the top layer of the body module and shall be constructed of steel tubing measuring 2 inch square x .25 inch wall thickness. All front to rear connecting members shall be 3 inches high x 2 inches wide x .125 inch wall thickness and shall be placed in between the interior upright support members to provide rigidity, stability and support to all top layer components. All gussets shall be constructed of 2 inches high x 3 inches wide x .25 inch thick plate which shall be placed on the top and bottom of the foundation cross members where they intersect with the exterior members.

BODY MOUNTING SYSTEM

The mounting assembly shall be designed to isolate and protect the body module from vibration and twisting stresses imparted by the flexing of the chassis frame rails. The body module shall employ spring loaded body mounting assemblies. Each two piece mounting assembly shall be designed to positively position the body on the frame rails while allowing lateral and forward or aft movement. Mounting assemblies shall be placed forward and rearward of the rear axle as necessary to provide a strong and stable mounting of the body module

Boise Mobile Equipment

Each mounting assembly shall consist of a “male” upper mounting bracket and a “female” lower mounting bracket. The upper mounting brackets shall be fabricated from .25 inch thickness steel plate, with .250 inch painted steel lower mounting brackets. The upper mounting brackets shall be welded directly to the foundation connecting members. The lower mounting brackets shall be bolted to the exterior side facing surface of the chassis frame rails.

The mounting brackets shall be aligned and connected by two (2) 5/8 inch diameter grade 8 bolts equipped with compression springs. The springs shall be of the appropriate tension rating for the weight requirements of the body module. The mounting assembly shall be designed to completely eliminate sheering forces on the mounting bolts.

The foundation connecting members shall be placed on top of the chassis frame rails for added strength and stability. The foundation members shall be isolated from the steel chassis frame rails by .25 inch thickness steel plates which have .5 inch thick 80 durometer rubber pads vulcanized to the bottom surface of each plate. The steel plates shall be welded to the bottom of the foundation, doubling as additional gussets at foundation cross member joints.

COMPARTMENT FLOOR, RECESSED

Each compartment shall feature a recessed floor, sufficient enough so the lip of the compartment shall prevent compartment contents from sliding easily from the compartment when parked on side hills.

BODY MATERIAL

All materials utilized shall be of the correct type, alloy, and thickness to withstand the intended usage and provide protection against cracking, corrosion or metal fatigue. The body compartments shall be fabricated using .125 inch 5052-H32 steel for most compartments unless otherwise stated. Any use of proprietary parts or materials in the construction of the body shall be unacceptable, due to potential delays or difficulties in an unlikely event of future repairs or when service becomes necessary.

All external upright supports for integral compartments shall incorporate a second set of upright supports constructed of 3 inch wide x 2 inch deep x .250 inch wall thickness and shall be located outboard of the internal upright supports to provide a rigid structure for the compartments to be mounted to. The compartment openings shall be constructed of 3 inch high x 2 inch wide x .125 inch wall thickness cross members and shall be placed in between the external upright supports to define the openings of all enclosed body compartments again, providing a rigid mounting location for compartments.

COMPARTMENTATION

All compartments shall be constructed of 14 gauge E.G. steel welded for strength and shall be sealed from the elements. The compartments shall be attached to the steel superstructure only, in order to maintain a truly modular design. Each compartment shall feature a smooth edges and surfaces from the walls to each weld without burs or sharp edges in the material.

DRIVER'S SIDE BODY COMPARTMENTS

Boise Mobile Equipment

COMPARTMENT D1

One compartment shall be provided on the driver's side of the apparatus body above the rear wheels. This compartment shall span from just behind the pump panel to the back of the rear wheel well quarter panel. The compartments approximate "clear door opening" is 50.5" wide by 38" high with a variable depth of 13.5/22.5".

COMPARTMENT VENTILATION

A minimum 2-inch single "Weber" style polished stainless steel swivel vent with four (4) ¼-inch vent holes shall be provided. These vents shall have a stainless steel center bolt to lock the vent in either the open or closed position and be located in the compartment walls. All vents will contain fire resistant filters to minimize dust entering the compartment.

COMPARTMENT FLOOR DRAIN

The compartment shall be provided with rear corner floor drains to the underside of the body.

COMPARTMENT SILL PLATE

The compartment shall feature a polished stainless steel sill plate protecting the painted surface of the compartment when items are accessed.

AJUSTABLE UNISTRUT

Adjustable Uni-Strut equipment mounting tracks shall be installed inside the compartment with two (2) channels on the left wall and two (2) channels on the right wall. The tracks shall be positioned to provide support for equipment mounting. The length of the tracks shall be sized to allow for optimum use of the compartment interior.

Adjustable Uni-Strut equipment mounting tracks shall be installed inside the compartment with two (2) horizontal channels on the back wall of the compartment.

ADJUSTABLE SHELF

There shall be two (2) adjustable shelf installed; and the shelf shall be constructed of .125" thick smooth aluminum plate and be mounted in the specified compartment with double bolt aluminum shelf brackets. The shelf shall have a broken front edge, and a broken rear edge for added strength and reinforcement.

The compartment shelf and or shelves shall have a red and white 3M Diamond Grade reflective stripe applied horizontally on the front edge. The stripe shall be a 1-1/2" minimum in width.

COMPARTMENT DIVIDER

There shall be one (1) compartment divider(s) installed in the specified compartment. The divider(s) shall be bolted in place for ease of removal.

SCBA MOUNTINGS

The apparatus shall be equipped with one (1) Ziamatic brand "EZ-Out" adjustable strap and release assembly. The assembly shall provide a smooth release without snagging.

COMPARTMENT LIGHTING

Boise Mobile Equipment

The specified compartment shall have two vertical and one horizontal Code 3 800 series lights installed.

DOOR AJAR SENSOR

The Specified door shall feature a magnetic proximity switch to indicate when the compartment door is ajar.

COMPARTMENT D2

One full height compartment shall be provided on the driver's side of the apparatus body aft of the rear wheels. This compartment shall span from behind the rear wheel well quarter panel to the rear of the body in width and from the top of the body to the rub rail in height. The compartments approximate "clear door opening" is 33.5" wide by 57" high with a variable depth of 13.5"/22.5".

COMPARTMENT VENTILATION

A minimum 2-inch single "Weber" style polished stainless steel swivel vent with four (4) ¼-inch vent holes shall be provided. These vents shall have a stainless steel center bolt to lock the vent in either the open or closed position and be located in the compartment walls. All vents will contain fire resistant filters to minimize dust entering the compartment.

COMPARTMENT FLOOR DRAIN

The compartment shall be provided with rear corner floor drains to the underside of the body.

COMPARTMENT SILL PLATE

The compartment shall feature a polished stainless steel sill plate protecting the painted surface of the compartment when items are accessed.

AJUSTABLE UNISTRUT

Adjustable Uni-Strut equipment mounting tracks shall be installed inside the compartment with two (2) channels on the left wall and two (2) channels on the right wall. The tracks shall be positioned to provide support for equipment mounting. The length of the tracks shall be sized to allow for optimum use of the compartment interior.

Adjustable Uni-Strut equipment mounting tracks shall be installed inside the compartment with two (2) horizontal channels on the back wall of the compartment.

ADJUSTABLE SHELF

There shall be (1) adjustable shelf installed; and the shelf shall be constructed of .125" thick smooth aluminum plate and be mounted in the specified compartment with double bolt aluminum shelf brackets. The shelf shall have a broken front edge, and a broken rear edge for added strength and reinforcement.

The compartment shelf and or shelves shall have a red and white 3M Diamond Grade reflective stripe applied horizontally on the front edge. The stripe shall be a 1-1/2" minimum in width.

COMPARTMENT LIGHTING

The specified compartment shall have two vertical and one horizontal Code 3 800 series lights installed.

Boise Mobile Equipment

DOOR AJAR SENSOR

The Specified door shall feature a magnetic proximity switch to indicate when the compartment door is ajar.

RIGHT SIDE BODY COMPARTMENTS

COMPARTMENT P1

One compartment shall be provided on the passenger's side of the apparatus body above the rear wheels. This compartment shall span from just behind the pump panel to the back of the rear wheel well quarter panel in width and from the top of the body side to the wheel well in height. The compartments approximate "clear door opening" is 51" wide by 39" high with a depth of 12".

COMPARTMENT VENTILATION

A minimum 2-inch single "Weber" style polished stainless steel swivel vent with four (4) ¼-inch vent holes shall be provided. These vents shall have a stainless steel center bolt to lock the vent in either the open or closed position and be located in the compartment walls. All vents will contain fire resistant filters to minimize dust entering the compartment.

COMPARTMENT FLOOR DRAIN

The compartment shall be provided with rear corner floor drains to the underside of the body.

COMPARTMENT SILL PLATE

The compartment shall feature a polished stainless steel sill plate protecting the painted surface of the compartment when items are accessed.

AJUSTABLE UNISTRUT

Adjustable Uni-Strut equipment mounting tracks shall be installed inside the compartment with two (2) channels on the left wall and two (2) channels on the right wall. The tracks shall be positioned to provide support for equipment mounting. The length of the tracks shall be sized to allow for optimum use of the compartment interior.

Adjustable Uni-Strut equipment mounting tracks shall be installed inside the compartment with two (2) horizontal channels on the back wall of the compartment.

ADJUSTABLE SHELF

There shall be (1) adjustable shelf installed; and the shelf shall be constructed of .125" thick smooth aluminum plate and be mounted in the specified compartment with double bolt aluminum shelf brackets. The shelf shall have a broken front edge, and a broken rear edge for added strength and reinforcement.

The compartment shelf and or shelves shall have a red and white 3M Diamond Grade reflective stripe applied horizontally on the front edge. The stripe shall be a 1-1/2" minimum in width.

ALUMINUM ON BACK WALL OF COMPARTMENT

There shall be a 3/16" aluminum panel mounted to the back wall of the compartment for the purpose of mounting equipment. The equipment mounting board shall be mounted to unistrut.

Boise Mobile Equipment

SCBA MOUNTINGS

The apparatus shall be equipped with three (3) Ziamatic brand “EZ-Out” adjustable strap and release assembly. The assembly shall provide a smooth release without snagging.

COMPARTMENT LIGHTING

The specified compartment shall have two vertical and one horizontal Code 3 800 series lights installed.

DOOR AJAR SENSOR

The Specified door shall feature a magnetic proximity switch to indicate when the compartment door is ajar.

COMPARTMENT P2

One compartment shall be provided on the passenger's side of the apparatus body aft of the rear wheels. This compartment shall span from behind the rear wheel well quarter panel to the rear of the body in width and from below the walkway to the rub rail in height. The compartments approximate "clear door opening" is 34" wide by 58" high with a variable depth of 12"/22".

COMPARTMENT VENTILATION

A minimum 2-inch single “Weber” style polished stainless steel swivel vent with four (4) ¼-inch vent holes shall be provided. These vents shall have a stainless steel center bolt to lock the vent in either the open or closed position and be located in the compartment walls. All vents will contain fire resistant filters to minimize dust entering the compartment.

COMPARTMENT FLOOR DRAIN

The compartment shall be provided with rear corner floor drains to the underside of the body.

COMPARTMENT SILL PLATE

The compartment shall feature a polished stainless steel sill plate protecting the painted surface of the compartment when items are accessed.

AJUSTABLE UNISTRUT

Adjustable Uni-Strut equipment mounting tracks shall be installed inside the compartment with two (2) channels on the left wall and two (2) channels on the right wall. The tracks shall be positioned to provide support for equipment mounting. The length of the tracks shall be sized to allow for optimum use of the compartment interior.

Adjustable Uni-Strut equipment mounting tracks shall be installed inside the compartment with two (2) horizontal channels on the back wall of the compartment.

ADJUSTABLE SHELF

There shall be (1) adjustable shelf installed; and the shelf shall be constructed of .125" thick smooth aluminum plate and be mounted in the specified compartment with double bolt aluminum shelf brackets. The shelf shall have a broken front edge, and a broken rear edge for added strength and reinforcement.

Boise Mobile Equipment

The compartment shelf and or shelves shall have a red and white 3M Diamond Grade reflective stripe applied horizontally on the front edge. The stripe shall be a 1-1/2" minimum in width.

COMPARTMENT LIGHTING

The specified compartment shall have two vertical and one horizontal Code 3 800 series lights installed.

DOOR AJAR SENSOR

The Specified door shall feature a magnetic proximity switch to indicate when the compartment door is ajar.

COMPARTMENT B1

One compartment shall be provided at the rear of the apparatus body, below the hose bed and above the tailboard. This compartment shall span just center of the tank. The compartments approximate "clear door opening" is 27" wide by 34" high with a depth of 25".

COMPARTMENT VENTILATION

A minimum 2-inch single "Weber" style polished stainless steel swivel vent with four (4) 1/4-inch vent holes shall be provided. These vents shall have a stainless steel center bolt to lock the vent in either the open or closed position and be located in the compartment walls. All vents will contain fire resistant filters to minimize dust entering the compartment.

COMPARTMENT FLOOR DRAIN

The compartment shall be provided with rear corner floor drains to the underside of the body.

COMPARTMENT SILL PLATE

The compartment shall feature a polished stainless steel sill plate protecting the painted surface of the compartment when items are accessed.

AJUSTABLE UNISTRUT

Adjustable Uni-Strut equipment mounting tracks shall be installed inside the compartment with two (2) channels on the left wall and two (2) channels on the right wall. The tracks shall be positioned to provide support for equipment mounting. The length of the tracks shall be sized to allow for optimum use of the compartment interior.

Adjustable Uni-Strut equipment mounting tracks shall be installed inside the compartment with two (2) horizontal channels on the back wall of the compartment.

ADJUSTABLE SHELF

There shall be (1) adjustable shelf installed; and the shelf shall be constructed of .125" thick smooth aluminum plate and be mounted in the specified compartment with double bolt aluminum shelf brackets. The shelf shall have a broken front edge, and a broken rear edge for added strength and reinforcement.

The compartment shelf and or shelves shall have a red and white 3M Diamond Grade reflective stripe applied horizontally on the front edge. The stripe shall be a 1-1/2" minimum in width.

COMPARTMENT LIGHTING

Boise Mobile Equipment

The specified compartment shall have two vertical Code 3 800 series lights installed.

DOOR AJAR SENSOR

The Specified door shall feature a magnetic proximity switch to indicate when the compartment door is ajar.

PUMP HOUSE COMPARTMENT (PH1)

There shall be an compartment located on the upper right side of the pump house. The compartment dimensions shall be approximately 21" wide x 23" high x 12" deep.

COMPARTMENT VENTILATION

A minimum 2-inch single "Weber" style polished stainless steel swivel vent with four (4) ¼-inch vent holes shall be provided. These vents shall have a stainless steel center bolt to lock the vent in either the open or closed position and be located in the compartment walls. All vents will contain fire resistant filters to minimize dust entering the compartment.

COMPARTMENT FLOOR DRAIN

The compartment shall be provided with rear corner floor drains to the underside of the body.

AJUSTABLE UNISTRUT

Adjustable Uni-Strut equipment mounting tracks shall be installed inside the compartment with two (2) channels on the left wall and two (2) channels on the right wall. The tracks shall be positioned to provide support for equipment mounting. The length of the tracks shall be sized to allow for optimum use of the compartment interior.

COMPARTMENT LIGHTING

The specified compartment shall have two vertical Code 3 800 series lights installed.

DOOR AJAR SENSOR

The Specified door shall feature a magnetic proximity switch to indicate when the compartment door is ajar.

PUMP HOUSE COMPARTMENT (PH2)

There shall be an compartment located on the lower right side of the pump house. The compartment dimensions shall be approximately 11.5" wide x 18" high x 18" deep.

COMPARTMENT FLOOR DRAIN

The compartment shall be provided with rear corner floor drains to the underside of the body.

COMPARTMENT LIGHTING

The specified compartment shall have two vertical Code 3 800 series lights installed.

DOOR AJAR SENSOR

Boise Mobile Equipment

The Specified door shall feature a magnetic proximity switch to indicate when the compartment door is ajar.

SLIDE-IN REAR LADDER COMPARTMENT - RIGHT SIDE

The right rear of the apparatus body shall have a vertically mounted slide-in ladder storage compartment. The compartment shall be **capable** of storing one (1) *20-foot three-section Duo Safety model #912 ladder, one (1) *backboard minimum dimensions 72" L x 16" W x 2" H (Ferno "Najo Light NB5500" or similar), one (1) *8-foot long pike pole and one (1) *5-foot digging bar, one (1) *8-foot rubbish hook, *New York Roof Hook with locking pins to secure each item.

*Items are to be purchased by the end user.

DOOR AJAR SENSOR

The Specified door shall feature a magnetic proximity switch to indicate when the compartment door is ajar.

SLIDE-IN REAR SUCTION HOSE COMPARTMENTS

Two (2) suction hose storage compartments will be located above the side storage compartments on both sides of the apparatus. The compartments will hold a combined total of three (3) eight (8) foot sections of four (4) inch hard suction hose and strainer.

Both compartments will be capable of holding two (2) eight (8) foot sections of hose if needed. The compartments will be constructed of step grade aluminum plate. Each compartment will have a stainless steel painted hinged door on the rear of the compartment. Each compartment door will have a locking positive latching door latch.

DOOR AJAR SENSOR

The Specified door shall feature a magnetic proximity switch to indicate when the compartment door is ajar.

HOSEBED DUNNAGE COMPARTMENT

The hose bed shall be provided with an equipment compartment or dunnage compartment down the center of the hosebed. The hosebed dunnage compartment shall have a one piece aluminum treadplate cover. Approximate "clear door opening" dimensions shall be 13" wide by 75" deep and 16" high.

ALUMINUM TREADPLATE DOOR

This compartment shall feature an embossed aluminum diamond plate lid. The lid shall be bare embossed aluminum diamond plate.

DOOR LATCH

The specified hinged door(s) shall be equipped with a sealed, black lever latch(es). Latch(es) shall be non-locking style.

The specified compartment shall have no compartment lighting.

DOOR AJAR SENSOR

Boise Mobile Equipment

The Specified door shall feature a magnetic proximity switch to indicate when the compartment door is ajar.

PAINTED ALUMINUM PANEL

There shall be a smooth aluminum panel bolted to the rear of the center dunnage storage box.

WHEEL WELL PANEL CONSTRUCTION

The outer wheel well panel shall be galvanized steel of the same gauge as compartment construction and an integral part of the overall body design. The exterior wheel well area shall be painted to match the body.

WHEEL WELL LINERS

Wheel well liners designed to protect the body from impact resulting from road debris thrown by the tires shall be installed. The removable liners shall be constructed from UHMW material to encompass the entire inner wheel well area. The liners shall be secured with stainless steel threaded fasteners.

REAR WHEEL FENDERETTES

Polished stainless steel fenderettes shall be installed at each rear wheel opening. The fenderettes shall be positioned outside of the wheel well panel to cover the tire area that extends past the body. The fenderettes shall be secured with stainless steel threaded fasteners.

LEFT SIDE BODY -- SCBA CYLINDER STORAGE PROVISIONS

A storage area for an SCBA cylinder shall be provided in the forward area of the driver's side wheel well. Dimensions shall be 8" diameter x 26" deep.

The SCBA door shall be a Cast Products door.

The SCBA door shall have a non-locking lever latch.

The SCBA cylinder storage tube shall be made from plastic.

SCBA CYLINDER STRAPS

There shall be a 1" nylon tether installed to secure the bottle in the storage tube.

LEFT SIDE BODY -- SCBA CYLINDER STORAGE PROVISIONS

A storage area for an SCBA cylinder shall be provided in the rearward area of the driver's side wheel well. Dimensions shall be 8" diameter x 26" deep.

The SCBA door shall be a Cast Products door.

The SCBA door shall have a non-locking lever latch.

The SCBA cylinder storage tube shall be made from plastic.

SCBA CYLINDER STRAPS

There shall be a 1" nylon tether installed to secure the bottle in the storage tube.

RIGHT SIDE BODY -- SCBA CYLINDER STORAGE PROVISIONS

A storage area for an SCBA cylinder shall be provided in the forward area of the passenger's side wheel well. Dimensions shall be 8" diameter x 26" deep.

Boise Mobile Equipment

The SCBA door shall be a Cast Products door.

The SCBA door shall have a non-locking lever latch.

The SCBA cylinder storage tube shall be made from plastic.

SCBA CYLINDER STRAPS

There shall be a 1" nylon tether installed to secure the bottle in the storage tube.

RIGHT SIDE BODY -- SCBA CYLINDER STORAGE PROVISIONS

A storage area for an SCBA cylinder shall be provided in the rearward area of the officer's side wheel well.

Dimensions shall be 8" diameter x 26" deep.

The SCBA door shall be a Cast Products door.

The SCBA door shall have a non-locking lever latch.

The SCBA cylinder storage tube shall be made from plastic.

SCBA CYLINDER STRAPS

There shall be a 1" nylon tether installed to secure the bottle in the storage tube.

RUB RAILS, CLEARANCE LIGHTS, AND REFLECTIVE TAPE

The sides of the lower body area fore and aft of the wheel well area shall be provided with 2" x 1.25" x .250" extruded aluminum rub rails, with end caps or angled corners. The rub rails shall be equipped with DOT type reflective striping, and clearance lights installed as specified.

FRONT OF BODY -- PROTECTIVE SURFACE

The entire front of the apparatus body shall include a protective surface, constructed of aluminum tread plate material.

FRONT CORNERS OF BODY -- PROTECTIVE SURFACES

The front corners of the apparatus body shall include a protective surface installed. The surface shall be constructed of stainless steel material.

REAR BODY PANELS

The entire rear of the apparatus body shall be painted apparatus color.

OUTER REAR BODY PANELS -- PROTECTIVE COVERING

The rear outer panels of the body shall have protective surfaces installed on the corners. The protective covering shall be constructed of stainless steel material.

TOP OF BODY COMPARTMENTS -- PROTECTIVE SURFACES

The top of the side compartments shall have a protective surfaces installed. The surface shall be constructed of aluminum tread plate material.

ANODIZED ALUMINUM DRIP RAIL

Boise Mobile Equipment

All enclosed compartment doors shall be provided with an aluminum drip rail above the doors.

ALUMINUM – COMPARTMENT DOOR, HINGED OVERLAP

One (1) single, vertically hinged door shall be provide and fabricated from aluminum. The frame of the door shall be constructed of 1.75” x 1.75” x .125” aluminum tubing to prevent corrosion and provide structural support. The spacing created by the frame tubing shall filled with Styrofoam for added support, dent resistance, insulation and noise reduction. The exterior surface shall be .125” aluminum for durability. The interior surface shall be .080” aluminum. There shall be no mechanical fasteners, such as bolt heads or rivets on the inside or outside of the doors.

The exterior of the door shall overlap the opening of the compartment. A .75” lip shall be constructed around the opening of the compartment and the exterior of the door. A rubber seal shall be installed on the .75” lip on both the compartment and the door to provide for a double seal against water and dust. A rain gutter shall be mounted above the door creating a third layer of water protection.

The door shall be designed utilizing a D-ring style latch system. A 6” stainless steel D-ring latch, large enough to accommodate a gloved hand, shall be mounted on the exterior of the door. A stainless steel bezel shall be installed to house and protect the D-ring locking mechanism. The easily serviced bezel shall be mounted utilizing stainless steel screws. The D-ring locking mechanism shall be a double catch design. The first catch shall engage to secure the door in the event of improper closure. The second catch shall seal the door from water and other elements once the door has been properly closed.

The door shall be mounted using a stainless steel piano style hinge and a .25” diameter hinge pin for stability. The vertical hinge shall be mounted to the body frame with threaded inserts and stainless steel screws to preserve functionality and ease of maintenance in the event of damage.

Gas struts shall be utilized to hold the door in the open position and to prevent the door from slamming during closing. The gas struts shall be mounted directly to the door with a stainless steel bracket assembly for stability and ease of maintenance. The gas struts shall be mounted to the interior of the compartment with a fully adjustable assembly.

A polished stainless steel scuff plate shall be installed on the bottom of the compartment opening to prevent damage and wear to the paint and finish of the body.

The exterior of the compartment doors and the door frames shall be painted to match the body in quality and tone. The interior surface shall not be painted, it shall be sanded utilizing a dual orbital technique.

The specified door(s) shall have a Polished stainless-steel D-ring door handle.

The specified door(s) D-ring handles shall be equipped with manual key door locks keyed to use the 1250 key.

COMPARTMENT DOOR EDGE STRIPING

Boise Mobile Equipment

The hinged compartment doors shall have 3M Diamond Grade reflective stripe applied on the edges. The stripe shall be a 1-1/2" minimum in width.

ALUMININUM – COMPARTMENT DOOR, HINGED OVERLAP

There shall be five (5) double, vertically hinged sets of doors fabricated from aluminum and installed on the apparatus body. Each door shall feature exterior surfaces which overlaps the opening of the compartment. The exterior surface shall be .125" aluminum for durability and damage resistance. The interior surface shall be .080" aluminum for structural support and overall appealing appearance of the compartment. The frame of the doors shall be constructed of 1.75" x 1.75" x .125" aluminum tubing to prevent corrosion and provide structural support. The spacing created by the frame tubing shall be filled with Styrofoam for added support and dent resistance, temperature insulation, and noise reduction.

A .75" lip shall be constructed around the opening of the compartment and the exterior of the door. A rubber seal shall be installed on the .75" lip of both the compartment and the door to provide for a double seal against water and dust. A rain gutter shall be mounted above the latch type door for an added third layer of water protection.

The doors shall be designed utilizing a D-ring latch system. A 6 inch stainless steel D-ring latch, large enough to accommodate a gloved hand, shall be mounted on the exterior of the door to allow the door to seal and fasten in the closed position. A stainless steel bezel shall be installed to house and protect the D-ring locking mechanism. The easily serviced bezel shall be mounted utilizing stainless steel screws for added stability of the mechanism and ease of maintenance in the event of damage. The D-ring locking mechanism shall be of a double catch design. The first catch shall engage to secure the door in the event of improper closure. The second catch will seal the door to water and other elements once the doors has been properly closed.

The doors shall be mounted with a stainless steel hinges with .25" diameter hinge pin for stability. The vertical hinges shall be mounted to the body frame with threaded inserts and stainless steel screws to preserve functionality with use or age and ease of maintenance in the event of damage.

Gas struts shall be utilized to hold the door in the open position and to prevent the door from slamming during closing. The gas struts are mounted directly to the door with a stainless steel bracket assembly for stability and ease of maintenance. The gas struts shall be mounted to the interior of the compartment with fully adjustable assembly for ease of adjustment and maintenance while increasing stability.

A polished stainless steel scuff guard shall be installed on the bottom of the compartment opening to prevent damage and wear to the paint and finish of the body module due to the removal and storage to equipment in the compartment.

The exterior of the compartment doors and the door jambs shall be painted to match the body in quality and tone. The interior of the door shall not be painted due to lack of exposure and inherent resistance to corrosion. The interior of the door shall be sanded utilizing a dual orbital technique. The sanding shall provide for a

Boise Mobile Equipment

smooth, regular, scratch free surface on the interior of the door. The exterior skin to door frame joining seam shall be caulked and painted to provide a moisture proof seal.

The specified door(s) shall have a Polished stainless-steel D-ring door handle.

The specified door(s) D-ring handles shall be equipped with manual key door locks keyed to use the 1250 key.

COMPARTMENT DOOR EDGE STRIPING

The hinged compartment doors shall have 3M Diamond Grade reflective stripe applied on the edges. The stripe shall be a 1-1/2" minimum in width.

*** Rear Steps - Extruded Aluminum DIAMOND BACK ***

REAR STEP

The rear bumper shall be made from aluminum diamondback grip strut. The design of the grip strut will allow for no debris or dust buildup and will allow for easy clean out with just water.

The step will be of a three piece design each section to operate independently during body and chassis flexing. The step will be full body width X a minimum 8-inch deep stand off type. When mounted, the loaded rear departure angle will be no less than 22 degrees.

The drop step will have locking positions to allow for up position storage and rear compartment door opening access. The drop step will incorporate a stop in the down position to prevent movement when in use.

FOLDING STEP -- LEFT REAR

Three (3) 8" square folding steps of die cast aluminum with stainless steel springs shall be provided. The steps shall be installed on the rear left side of the body.

The folding step shall have a chrome plated backing plate with built in LED light.

FOLDING STEP -- RIGHT REAR

Three (3) 8" square folding steps of die cast aluminum with stainless steel springs shall be provided. The steps shall be installed on the rear right side of the body.

The folding step shall have a chrome plated backing plate with built in LED light.

HANDRAILS

Three (3) knurled type non-slip handrail, approximately 18" in length, shall be vertically installed.

HANDRAILS

Two (2) knurled type non-slip handrail, approximately 42" in length, shall be vertically installed.

HANDRAILS

Two (2) knurled type non-slip handrail, approximately 12" in length, shall be horizontally installed.

HANDRAILS

One (1) knurled type non-slip handrail, approximately 60" in length, shall be horizontally installed.

Boise Mobile Equipment

HOSE BODY CONSTRUCTION SPECIFICATIONS

The hose bed side sheets and floor shall be constructed from aluminum material. The hosebed shall provide two separate hose beds one on the left and one on the right side of the top loaded center dunnage. The hose body shall be free of sharp corners, bolts, or other obstructions that may catch hose and other equipment.

HOSE BED DIVIDER

Four (4) adjustable width hose bed divider constructed from no less than .250 (1/4") aluminum material shall be installed. The divider shall be secured to the hose bed by utilizing adjustable track type channels and fasteners. The divider shall be full length and depth of the hose bed.

HOSE STORAGE BRACKETS

Two (2) I-Zone hose brackets shall be provided on the rear of the apparatus body, rear-facing, one (1) on each side of the body.

ALUMINUM HOSEBED GRATING

The hose bed compartment deck shall be constructed entirely from maintenance-free, extruded aluminum slats. The slats shall feature an anodized, contoured, ribbed top surface. The slats shall be of widths approximately 3/4" high x 4.5" wide and shall be welded into a one-piece grid system to prevent the accumulation of water and allow ventilation to assist in drying hose.

ALUMINUM HOSEBED COVER

Two (2) separate aluminum tread plate hose bed covers shall be installed, 1/8-inch aluminum alloy diamond plate reinforced with a 1/8-inch aluminum alloy hat section as needed to support walking on the hose bed covers. The covers shall be hinged on the outboard side using full length polished stainless steel hinges with a minimum 3/8-inch pin and 1-inch joint length and installed to avoid any hindrance in walking on hose bed covers.

The hose bed covers shall have full length handrails installed along the rear lip and one (1) additional grab handle mounted on the top side of the covers and two (2) mechanisms on each cover to assist with opening and closing of the hose bed covers. Each hose bed cover shall have a mechanism to hold the hose bed cover in the open position and will be substantial enough to prevent accidental closing in extreme wind conditions.

The covers shall be reinforced so that they will support the weight of a person walking on the cover and shall be sloped to the outboard side of the apparatus to aid in water run-off.

HOSEBED REAR ENCLOSURE

A vinyl end skirt with three (3) straps, and large quick release buckles (minimum 2-inch) shall be installed on each hose bed cover. Quick release buckles and nylon tie down straps shall be attached to the end skirts. The end skirts will be weighted at the bottom end with a full width flat strip of metal sewn into the hem of the skirt. The end skirts, straps, buckles, etc. will be exposed to direct sun light and shall be protected against UV rays. The flaps shall be red in color.

HOSEBED -- AREA LIGHTS

Boise Mobile Equipment

(4) Tecniq E10 lights shall be provided and installed on hosebed door(s).

DOOR AJAR SENSOR

The Specified door shall feature a magnetic proximity switch to indicate when the compartment door is ajar.

WATER TANK SPECIFICATIONS

A United Plastics Fabricating (UPF), 500 gallon booster tank (Poly Tank) shall be fabricated from a minimum of .500" polypropylene complete with a minimum of .375" polypropylene internal full height baffles that are raised 4" off the tank floor for maximum water flow between baffles. In addition, provisions for the main pump outlet, direct tank filler inlet, a pump to tank filler/churn valve inlet, a back pump filler outlet, a fitting for an electronic water level gauge sensor and clean outs for manual tank flushing shall be provided. The tank shall be structurally reinforced and restrained to prevent deformities or damage to the tank or apparatus body during stressed off road operations. The booster tank shall be a rectangular design, and shall be capable of being completely removable from the body without cutting or bending of any components. The tank and cradle assembly shall be mounted to the chassis frame in strict accordance to the tank manufacturer's installation guidelines.

The water tank shall be constructed of polypropylene, nitrogen-welded and tested inside and out. The tank manufacturer shall define the floor, top, sides, ends, and baffles material thicknesses. The tank shall carry a lifetime warranty. The water tank shall be manufactured by United Plastic Fabrication.

The transverse and longitudinal swash partitions shall be interlocked and welded to each other as well as to the walls of the tank. The partitions shall be designed and equipped with vent holes to permit air and liquid movement between compartments. The cover shall be recessed .375" from the top of the side walls. Hold down dowels shall extend through and be welded to both the covers and the transverse partitions, providing rigidity during fast fill operations. Drilled and tapped holes for lifting eyes shall be provided in the top area of the water tank.

The water tank manufacturer shall certify the capacity of the water tank prior to delivery of the apparatus. This capacity shall be recorded on the manufacturer's record of construction and the certification shall be provided to the purchaser when the apparatus is delivered. Tank construction shall conform to applicable NFPA standards.

The water tank shall be configured in a rectangular style with consistent widths on the sides from top to bottom.

TANK FILL AND OVERFLOW PROVISIONS

The water tank shall have a combination vent and manual fill tower. The fill tower shall be fabricated from 1/2" polypropylene and shall have a minimum outer perimeter dimension of 8" x 8". The tower shall have a 1/4" thick polypropylene screen and a polypropylene hinged cover. Inside the fill tower, halfway down from the top, shall be fastened a vent overflow pipe. The vent overflow shall be fabricated from Schedule 40 polypropylene pipe, with a minimum I.D. of 4". The vent overflow shall be designed to run through the tank interior and shall be designed to exit the water tank interior behind the rear wheels.

The tank cover shall be fabricated from 1/2" thick polypropylene and shall incorporate a three-piece design

Boise Mobile Equipment

which allows for the removal of each individual cover section for inspection or repair of the tank interior, if necessary. The tank cover shall be recessed 3/8" from the top of the tank sides and shall be welded to both the sides and the longitudinal baffles. Each of the three cover sections shall have hold downs to assist in keeping the cover rigid under fast filling conditions. These hold downs shall consist of 2" polypropylene dowels, spaced a maximum of 30" apart, fitted and then welded to the transverse partitions. The dowels shall extend through the cover sections and be welded to them. Two of the dowels shall be drilled and tapped to accommodate the tank lifting eyes.

The sump shall have a minimum dimension of 8" x 6" with a 3/4" thick bottom. On all tanks with a bulkhead suction inlet, a 3" Schedule 40 polypropylene pipe sweep shall be provided from the front of the tank to the sump location. The sump shall have a threaded plug located at the bottom of it for a tank drain and clean out.

There shall be two standard tank outlets: one for the tank to pump suction line, which shall be a minimum of a 3" NPTF coupling, and one for a tank fill line, which shall be a minimum of a 1-1/2" NPTF coupling. All tank fill couplings shall be backed with flow deflectors to break up the stream of water entering the tank.

The water tank shall rest on the body subframe cross members, which shall be spaced a maximum of 22" apart. The tank shall be insulated from those cross members by hard rubber insulators, with a minimum thickness of 1/4", glued and mechanically fastened to the cross members to protect the tank from direct contact with the steel body subframe. The tank shall be designed on a free-floating suspension principle and shall not require the use of additional hold downs. The tank shall be completely removable without disturbing or dismantling the apparatus body structure.

VENT AND OVERFLOW

The fill tower shall incorporate a vent and overflow system shall be designed into the water tank. The system shall include a 3" diameter PVC pipe that functions both as an air vent while emptying the tank and as an overflow when filling the tank. The overflow shall discharge excess water below the frame rails of the vehicle.

TANK SUMP AND DRAIN PROVISIONS

A one (1) cubic foot (minimum) polypropylene sump, with anti-swirl baffles shall be provided. The sump shall be located as close to the center of the tank floor as the chassis cross members, and differential driveline will allow.

One (1) 3-inch or 4-inch National Pipe Thread (NPT) outlet and plug shall be provided in the sump floor for flushing of the tank. A 1½-inch drain valve shall be provided in the tank sump for flushing of the booster tank. The valve will be located as to provide for adequate clearance from cross members and differential during extreme twisting motions of the chassis and buildup

The sump shall also be provided with a 1-inch NPT outlet for the back pump filler hose.

Boise Mobile Equipment

Due to space constraints, it may be necessary to locate the main pump suction outlet in the tank sump for maximum water usage. The main pump suction tube will be of an adequate size to supply the main pump with enough water to meet pump ratings.

A minimum 3-inch direct tank fill NPT inlet and internal manifold shall be provided on the left rear of the tank. If the direct tank fill inlet is located on the rear tank wall, the inlet manifold shall pass through the first baffle and feature a turn down to eliminate any possible damage to the tank or baffles while filling the tank.

WATER TANK DRAIN PROVISIONS

A 3" plugged drain provision shall be installed in the bottom of the water tank, sump, or plumbing for water tank draining and the flushing-out of debris.

CLASS A FOAM TANK SPECIFICATIONS

The Class A foam tank shall have a capacity of 20 gallons. The foam tank shall be manufactured by UPF and have a lifetime warranty.

The tank shall be equipped with a positive sealing pressure/vacuum vent type cap, a low foam concentrate sensor that turns off the foam pump at a pre-set level, a visual sight gauge, an easily accessible brass or stainless steel drain valve located at the lowest point of the foam tank and an accessible brass or stainless steel cleanable strainer installed in the supply line from the foam tank to the foam pump.

The foam tank shall be mounted on a removable sub-structure. The tank will have a positive tie down. The tie down will allow for easy removal of the foam tank.

The foam tank will have two (2) quarter turn brass or stainless shut off valves at the pump supply and fill lines to allow for the removal of the tank without loss of foam. The float switch harness and the foam concentrate supply and fill lines shall have connections located adjacent to the tank to facilitate foam tank removal.

FOAM TANK FILL AND VENTING PROVISIONS

The foam concentrate tank shall be provided with a fill pipe having a volume of not less than 2 percent of the total tank volume. The filler opening shall be capped with a sealed air-tight threaded cover. The fill opening shall be designed to incorporate a removable screen and shall be located so that foam concentrate from a five (5) gallon container can be dumped into the tank.

The foam tank filler shall be equipped with a pressure/vacuum vent that enables the tank to compensate for changes in pressure or vacuum when filling or withdrawing foam concentrate from the tank. The pressure/vacuum vent shall not allow atmospheric air to enter the foam tank except during operation or to compensate for thermal fluctuations. The vent shall be protected to prevent foam concentrate from escaping or directly contacting the vent at any time. The vent shall be of sufficient size to prevent tank damage during filling or foam withdrawal.

A color coded label or visible permanent marking that reads "CLASS A -- FOAM TANK FILL" shall be placed

Boise Mobile Equipment

at or near the foam concentrate tank fill opening. An additional label shall be placed at or near any foam concentrate tank fill opening stating the type of foam concentrate the system is designed to use.

Any restrictions on the types of foam concentrate that can be used with the system shall also be stated, along with a warning message that states "WARNING: DO NOT MIX BRANDS AND TYPES OF FOAM."

A 3/4" diameter connection, piping, and gate type valve shall be installed for the foam tank for draining purposes.

DIRECT TANK FILL - LEFT REAR

A valve for direct filling of the tank shall be supplied. The 1/4 turn valve shall be configured with 2-1/2" NH female threads, debris screen, threaded plug with retention chain and lever handle. The valve shall be located on the left rear of the apparatus.

One (1) Akron 8825 series swing-out style valve(s) shall be supplied and installed. All valves shall be designed to operate under normal conditions up to 500 PSI and shall have dual seats to work in both pressure and vacuum environments. All valves and controls shall be easily accessible for service, repair or replacement.

The specified valve shall have a direct actuated 'local' control Akron Model TSC valve handle.

One (1) chrome brass 2-1/2" NH rocker lug plug with a securing chain or cable shall be installed on the intake.

(1) chrome plated brass 30 degree elbow with 2.5" swivel female NH x 2.5" male NH thread with rocker lugs shall be provided on the discharge.

BACK PACK FILL SYSTEM

There shall be one (1) back pack fill system provided and installed on the lower area of the pump panel. The valve plumbing shall be 3/4" I.D. hose.

12 VOLT ELECTRICAL SPECIFICATIONS

The following describes the low voltage electrical system on the apparatus including all panels, electrical components, switches and relays, wiring harnesses and other electrical components. The apparatus manufacturer shall conform to the latest Federal DOT standards, current automotive electrical system standards and the applicable requirements of the NFPA 1906.

Wiring shall be stranded copper or copper alloy conductors of a gauge rated to carry 125 percent of the maximum current for which the circuit is protected. Voltage drops shall not exceed 10 percent in all wiring from the power source to the using device. The wiring and wiring harness and insulation shall be in conformance to applicable SAE and NFPA standards. The wiring harness shall conform to SAE J-1128 with GXL temperature properties. Exposed wiring shall be run in a loom with a 290 degree Fahrenheit rating. Wiring looms shall be properly supported and attached to body members. Electrical conductors shall be constructed in accordance with applicable SAE standards, except when good engineering practice requires special construction.

All wiring connections and terminations shall provide positive mechanical and electrical connections and be installed in accordance with the device manufacturer's instructions. When wiring passes through metal panels, electrical connections shall be with mechanical type fasteners and rubber/plastic grommets.

Boise Mobile Equipment

Wiring between cab and body shall be split using Deutsche type connectors or enclosed in a terminal junction panel allowing body removal with minimal impact on the apparatus electrical system. Connections shall be insulated with heat shrink crimp-type tubing to resist moisture and foreign debris such as grease and road grime. Weather resistant connectors shall be provided throughout the system.

Electrical junction or terminal boxes shall be weather resistant and located away from water spray conditions. When required, automatic reset breakers and relays shall be housed in the main body junction panel.

There shall be no exposed electrical cabling, harnesses, or terminal connections located in compartments, unless enclosed in an electrical junction box or covered with a removable electrical panel. Wiring shall be secured in place and protected against heat, liquid contaminants and damage and shall be uniquely identified at least every six inches (6") by color coding or permanent marking with a circuit function code and identified on a reference chart or electrical wiring schematic per requirements of applicable NFPA 1906 standards.

Low voltage protective devices shall be provided for the electrical circuits. The devices shall be accessible and located in required terminal connection locations or weather resistant enclosures. Over current protection devices shall be automatic reset type suitable for electrical equipment and meet SAE standards. All electrical equipment, switches, relays, terminals, and connectors shall have a direct current rating of 125 percent of maximum current for which the circuit is protected. Electro-magnetic interference suppression shall be provided in the system as required in applicable SAE standards.

The electrical system shall include the following:

Electrical terminals in weather exposed areas shall have a non-conductive grease or spray applied. All terminal plugs located outside of the cab or body shall be treated with a corrosion preventative compound.

All electrical wiring shall be placed in a protective loom or be harnessed.

Exposed connections shall be protected by heat shrink material and sealed connectors.

Large fender washers shall be used when fastening equipment to the underside of the cab roof and all holes made in the roof shall be caulked with silicone.

Electrical components installed in exposed areas shall be mounted in a manner that will not allow moisture to accumulate inside.

A service loop shall be provided behind an electrical appliance to allow them to be pulled away from mounting area for inspection and service work.

Upon completion of the vehicle and prior to delivery, the apparatus shall be electrically tested and the electrical testing, certifications, and test results shall be submitted with delivery documentation per requirements of NFPA 1906.

ELECTRICAL WIRING HARNESS

Boise Mobile Equipment

The electrical system shall be divided into separate harnesses. The individual harness shall be connected with Deutsch type quick connectors. The wiring and appliances shall be protected by automatic reset type circuit breakers.

CUSTOM FABRICATED CONSOLE OPTION 3

A custom fabricated electrical console and enclosure shall be located between the driver's and the officer's seating positions. The flat console lid shall feature two side by side rows of havis sized plate mountings.

Final console layout shall be approved by customer.

CONSOLE MAP BOX

There shall be a map box attached to the rear of the console. The map box shall be painted to match the console.

BATTERY SWITCH - MASTER DISCONNECT

A battery cutoff switch shall be provided in the cab within easy reach of the driver; by the chassis manufacturer. The switch shall be rated for 300 amps.

IDENTIFICATION LIGHTS

All LED identification lights shall be installed on the vehicle as required by applicable highway regulations.

LICENSE PLATE MOUNTING AND LIGHT

A predrilled backing plate and LED light shall be installed on the rear for mounting of the license plate.

STOP AND TAIL LIGHT

Two (2) Tomar Model # R46L-STTC 4" x 6" LED stop and tail lights with clear lenses shall be provided.

TURN SIGNALS

Two (2) Tomar model# R46L-TURNC 4" x 6" LED turn signal lights with clear lenses shall be provided.

MAP LIGHT

One (1) Havis Shields #C-MAP-T-LED 12" LED map light, 12 volt, with a gooseneck arm an on-off switch located on the base of the light shall be installed on the dashboard.

FRONT BUMPER -- GROUND LIGHTS

two (2) Tecniq E10, LED ground light(s) shall be installed under the front bumper.

CAB GROUND LIGHTS

four (4) Tecniq E10, LED ground lights shall be installed under the cab door(s)

GROUND LIGHTS - PUMP PANEL

two (2) Tecniq E10, LED ground lights shall be installed under the pump panel running board(s)

GROUND LIGHTS - UNDER REAR STEP

Boise Mobile Equipment

two (2) Tecniq E10, LED ground lights shall be installed under the rear step area.

TOMAR LIGHTING

SCENE LIGHTS

Two (2) Tomar Revolution Model# R79I-13 7" by 9", clear L.E.D. scene light shall be installed. There shall be one on each side of the front of upper body. The light shall include a rubber gasket for surface mounting.

The specified Tomar 7" x 9" light(s) shall be equipped with a Tomar bezel Chrome in color. Model # R79-BZ

SCENE LIGHTS

Two (2) Tomar Revolution Model# R79LV13-RW 7" by 9", clear lens dual purpose, multi function warning and illumination. L.E.D. scene light shall be installed on each side of the upper rear of the body with included rubber gasket for surface mounting. The light shall be capable of emitting Red and White light.

TOMAR 3" FLOOD SCENE LIGHT

Two (2) Tomar TRX three inch (3") Flood pod lights shall be installed above the left and right pump panels . The specified Tomar 7" x 9" light(s) shall be equipped with a Tomar bezel Chrome in color. Model # R79-BZ

TOMAR 3" FLOOD SCENE LIGHT

There shall be a total of six (6) Tomar TRX-03W-F with White housing, flood scene lights installed on the apparatus.

The lights shall be located:

- Two located under the middle steps on the back of the apparatus. They shall be operated by the "Rear Scene" switch.
- Two located under the rear compartments facing back wards. They shall be operated by a labeled back lit rocker switch located on the cab center console.
- Two located in pump panel on above right and left side.

DOOR OPEN WARNING LIGHT

The door ajar warning system shall be separated into four zones, a Front, Left, Right, and Rear zone. Each zone shall have an individually labeled warning light and also activate an audible alarm. The door ajar lights and audible alarm shall activate only when the apparatus parking brake has been released.

RADIO PRE-WIRE

There shall be a radio pre-wire provided in the cab center console. The prewire shall consist of a battery hot, battery switched, and a ground source.

RADIO ANTENNA INSTALLATION

Boise Mobile Equipment

There shall be four (4) radio antenna installed on the apparatus and routed to the cab center console.

BACK UP ALARM

One (1) solid state back up alarm shall be provided at the rear of the apparatus. The back up alarm shall be wired to the reverse circuit of the transmission, and shall provide an audible alarm to the rear of the apparatus when reverse gear is selected. The alarm shall have a volume of 87 to 112 db while in operation.

HEADLIGHT FLASHER

The wig wag feature shall be programmed through the chassis supplied Diamond Logic system.

ELECTRONIC SIREN

Tomar Model 948 Siren amp and electronic controller, shall be provided. The siren controller shall have a 4 position slide switch, along with 6 auxiliary switches to control outputs, also to contain siren controls. Model # 948L-SIREN-R.

SIREN SPEAKER

One (1) Tomar Model # SPK100 speaker shall be provided.

ZONE A -- UPPER FRONT -- LIGHTBAR

One (1) Tomar Scorpion 58" lightbar Model# 970L-58D1-0601 Shall be installed. The lightbar shall contain Full dual color front and sides (red/wht). Lightbar shall include CA flash rates and CA steady red. The front of the lightbar shall be fully populated with eight (8) 12-LED modules, High-power off-road TRX take downs, and four (4) 24-LED corner modules with alley lights.

ZONE A -- LOWER FRONT WARNING LIGHTS

Two (2) Tomar revolution dual color Model# R37D-W-RW LED lights shall be installed in the lower front of the cab. The dimensions of the lights shall be 3" x 7". The lights shall be equipped with a Clear lens, and Red and White LED.

The specified Tomar 3" x 7" light(s) shall be equipped with a Tomar bezel Chrome in color. Model # R37-BZ

ZONE B AND D- INTERSECTION LIGHTS

Two (2) Tomar Revolution multi-function Model # R46LLD-W-RAW LED lights shall be installed. The dimensions of the lights shall be 4" x 6". The lights shall be equipped with a Clear lens, and emit Red, white, and Amber light.

The specified Tomar 4" x 6" light(s) shall be equipped with a Tomar bezel Chrome in color. Model# R46-BZ

ZONE B AND D- LOWER MID BODY WARNING LIGHTS

Two (2) Tomar Revolution multi-function Model # R46LLD-W-RAW LED lights shall be installed. The dimensions of the lights shall be 4" x 6". The lights shall be equipped with a Clear lens, and emit Red, white, and Amber light.

The specified Tomar 4" x 6" light(s) shall be equipped with a Tomar bezel Chrome in color. Model# R46-BZ

Boise Mobile Equipment

ZONE B AND D- UPPER REAR CORNER WARNING LIGHTS

Two (2) Tomar revolution dual color Model# R79L-13-RW series LED lights shall be installed in the upper rear corner of the body. The dimensions of the lights shall be 7" x 9". The lights shall be equipped with a Clear lens, and Red and White LED.

The specified Tomar 7" x 9" light(s) shall be equipped with a Tomar bezel Chrome in color. Model # R79-BZ

ZONE C- UPPER REAR BODY WARNING LIGHTS

Two (2) Tomar Revolution multi-function Model # R79LVD-RAW LED lights shall be installed. The dimensions of the lights shall be 7" x 9". The lights shall be equipped with a Clear lens, and emit Red, white, and Amber light.

The specified Tomar 7" x 9" light(s) shall be equipped with a Tomar bezel Chrome in color. Model # R79-BZ

ZONE C- LOWER REAR WARNING LIGHTS

Two (2) Tomar Revolution multi-function Model # R46D-W-RW LED lights shall be installed. The dimensions of the lights shall be 4" x 6". The lights shall be equipped with a Clear lens, and emit Red, and white.

The specified Tomar 4" x 6" light(s) shall be equipped with a Tomar bezel Chrome in color. Model# R46-BZ

REAR TRAFFIC ADVISOR, SIX (6) LAMPS

A Tomar L stick traffic advisor model # LSTICK-14W6-B LED shall be provided and mounted at the rear of the body. The traffic advisor shall include a 40' cable.

BODY PAINTING SPECIFICATIONS

All exposed steel surfaces shall be thoroughly cleaned and prepared for finish painting.

All removable items, such as brackets and compartment doors, shall be removed and painted separately to insure finish paint behind them after they are reinstalled.

The apparatus body shall be masked as needed to prevent the painting of unwanted areas and overspray damage. Due to its modular design, the apparatus body shall be completely finish painted prior to its installation on the chassis.

All exterior surface scratches and blemishes shall be filled with body putty and sanded down, along with all primed surfaces.

The complete apparatus body shall be cleaned, blown free of dust; washed with thinner; and wiped with tack cloths. A non-sanding primer shall be applied and when dry, the apparatus body shall be sprayed with three (3) coats of finish paint. All loose body components shall be treated in the same manner.

Any irregularity in any painted surface shall be repaired prior to the application of the finish paint coats.

The apparatus body shall be painted to match the color of the chassis cab exterior. The chassis cab shall not be repainted.

Boise Mobile Equipment

INTERIOR COMPARTMENT FINISH

The interior wall, floor and ceiling surfaces of the body compartments shall be finished with PPG Brand, Amershiel Polyurethane industrial coating.

TOUCH-UP PAINT

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

VALVE PAINTING

All exposed valves shall be painted to match the color of the exterior body.
Striping Package, Model 34, Standard

CAB AND BODY STRIPING

The cab and body shall have a straight Scotchlite reflective stripe applied horizontally. The stripe shall be a 4" minimum in width and be applied horizontally around the cab and body in accordance with NFPA standards.

CHEVRON STRIPING

The back compartment doors shall have reflective red and yellow striping installed on them, The Chevron style stripe shall be applied at a 45-degree angle, pointing towards the center upper portion of the rear of the apparatus. The chevron shall be a single printed sheet on each door.

WHEEL CHOCKS

Two (2) Worden brand, Model #HWC-7WH wheel chocks shall be provided.

5# DRY CHEMICAL FIRE EXTINGUISHER

One (1) 5# ABC dry chemical fire extinguisher and mounting bracket shall be provided on the apparatus. The extinguisher shall have a pressure gauge and shall be filled with a dry chemical extinguishing agent.

HYDRAULIC JACK

One (1) hydraulic jack shall be provided. The jack shall be designed for lifting capacity of twelve (12) tons.

LUG WRENCH

There shall be one (1) lug wrench provided and shipped loose with the completed apparatus.

OPTIONAL EQUIPMENT

No optional equipment shall be included.

REFLECTOR

A set of three (3) triangular reflectors shall be provided.
Concession, Amount, Model 34, International, (Targee)



GOLDEN STATE
FIRE APPARATUS

DEALER
SUPPLIED
EQUIPMENT
AND/OR
SERVICES

DEALER SUPPLIED EQUIPMENT and/or SERVICES

The following items and/or services will be provided by Golden State Fire Apparatus Inc. (GSFA):

LICENSED MANUFACTURER

The State of California Vehicle Code, section 11701 requires “every manufacturer of a vehicle subject to registration shall make application to the Department of Motor Vehicles (DMV) for a license containing a general distinguishing number”. The manufacturer has a current license at time of proposal and shall provide a copy upon request. Temporary licenses are not acceptable.

LICENSED DEALERSHIP

The State of California Vehicle Code, section 11701 requires a “dealer in vehicles of a type subject to registration, shall make application to the Department of Motor Vehicles (DMV) for a license containing a general distinguishing number”. Golden State Fire Apparatus, Inc. has a current license at time of bid as outlined above and is available upon request. Temporary licenses are not acceptable.

LICENSED SALES REPRESENTATIVE

The State of California Vehicle Code, section 11800 requires that it shall be “unlawful for any person to function as a vehicle salesperson without having first procured a license issued by the Department of Motor Vehicles (DMV)”. The representative has a current vehicle salespersons license at time of proposal and shall provide a copy upon request. Temporary licenses are not acceptable.

WEEKLY PROGRESS REPORTS

GSFA will provide weekly progress reports including photographs of the apparatus or the major components as they are being constructed. The reports will commence at the start of the manufacturing process and will continue through production by the manufacturer. The reports will show the progress of the apparatus through the course of each week. Special attention will be given to show the unique features and aspects of the apparatus as construction progresses.

VEHICLE REGISTRATION

The State of California Vehicle Code section 11739 requires that the “dealer of a new motor vehicle sale is responsible for applying for the title, securing vehicle registration, and obtaining license plates for the Customer” through the Department of Motor Vehicles (DMV). Golden State Fire Apparatus, Inc. is a factory-authorized dealer of the vehicle being sold and is authorized to register with the State of California as a new vehicle manufacturer.

GSFA will make all necessary applications and complete all transfer papers, including applying for California Exempt “E” license plates.

GRAPHICS PACKAGE ALLOWANCE

A graphics allowance of \$6,500.00 is included in the bid price. Any unused portion of this fund will be credited back on the final invoice or reimbursed in the form of a check to the Coastside Fire Protection District.

PRE-CONSTRUCTION, FACTORY TRIP

A pre-construction trip to the manufacturing facility will be provided for TWO (2) Customer representative(s). The intent of this trip is to review and finalize, in detail, the specifications prior to the start of production. The pre-construction trip will have a duration of two (2) days and one (1) night and be scheduled at times mutually agreed upon between GSFA and the Customer. Costs for airfare, lodging, meals, and ground transportation while at the manufacturer’s location will be the responsibility of GSFA. Air travel will be from one of the following airports: Sacramento, San Francisco, or San Jose.

Costs such as Customer ground transportation in California, Customer airport parking, Customer luggage fees and Customer incidentals while traveling to the factory will be the responsibility of the Customer. Flight reservations are non-refundable and in the event of a cancellation after booking, the Customer will be responsible for all costs associated with this cancellation, which may include not only the original ticket cost but also any change or cancellation fees imposed by the airline and/ or travel agency. Flight reservations are also non-transferable.

FINAL INSPECTION, FACTORY TRIP

A final inspection trip to the manufacturing facility will be provided for TWO (2) Customer representative(s). The intent of this trip is to ensure that the apparatus is built to specification and to detect any deficiencies that require correction. The final inspection trip will have a duration of two (2) days and one (1) night and be scheduled at times mutually agreed upon between GSFA and the Customer. Costs for airfare, lodging, meals, and ground transportation while at the manufacturer's location will be the responsibility of GSFA. Air travel will be from one of the following airports: Sacramento, San Francisco, or San Jose.

Costs such as Customer ground transportation in California, Customer airport parking, Customer luggage fees and Customer incidentals while traveling to the factory will be the responsibility of the Customer. Flight reservations are non-refundable and in the event of a cancellation after booking, the Customer will be responsible for all costs associated with this cancellation, which may include not only the original ticket cost but also any change or cancellation fees imposed by the airline and/ or travel agency. Flight reservations are also non-transferable.

DELIVERY TO AUTHORIZED SERVICE FACILITY

GSFA will, at their expense, deliver the apparatus (including any applicable equipment, spare parts, and supplies) to their Northern California facility in Sacramento for a dealer preparation inspection.

To ensure proper break in of all components while still under warranty, the apparatus shall be delivered under its own power - rail or truck freight shall not be acceptable.

PRE-DELIVERY SERVICE

After transportation from the factory and prior to delivery, the apparatus will receive a pre-delivery service to confirm proper operation and correction of any issues found as a result of said inspection. The Golden State Fire Apparatus, Inc. pre-delivery service consists of the following:

- Engine Compartment and Undercarriage – Check for any broken mounting brackets and inspect for correct capacities of the following (if applicable): engine oil, coolant, power steering fluid, washer reservoir fluid, transmission fluid, rear end fluid, pump transmission oil, and primer oil.
- Interior – Operate all doors, windows, and locks for proper adjustment. Check upholstery.
- Exterior – Repair reasonable paint scratches or chips. Tighten any loose hardware and inspect tires and wheels for proper pressure and lug torquing.
- Road Test – With the water tank (if applicable) full, the apparatus will be driven approximately twenty miles which allows the drive train components to get up to operating temperature. Road test will be on both city and highway roads. A DOT compliant brake test will be conducted to ensure the system is holding air. The brake condition and wheel seals will also be inspected.
- Electrical - Operate all lights, sirens, and other electrical accessories to verify operation.

- Pump - If applicable, vacuum test the pump to hold for 15 minutes. After vacuum test, operate the relief valve, transfer valve and check pump shift. Check water tank for leaks and inspect water level gauge for calibration. With discharge caps loose, rapid test all individual gauges and main gauges for calibration. Lubricate valve rods.
- Foam System – If applicable, tighten caps and connect foam lines. Test selector, valves, metering valve and operation of foam system (including flush).
- Fuel Tank - Fuel tank will be filled at the dealership location prior to final delivery.
- DEF Tank - DEF tank will be filled at the dealership location prior to final delivery.
- Wash - The apparatus will be thoroughly washed at the dealership location prior to final delivery.

FINAL DELIVERY (CUSTOMER LOCATION)

GSFA will, at their expense, deliver the Product (including any applicable equipment, spare parts, and supplies) to the Customer specified address once completed. Prior to delivery of the Product, Customer agrees to provide proof of liability and physical damage insurance to GSFA. GSFA will not release the Product to the Customer until such proof of insurance is provided.

It is the responsibility of the Customer to have any outstanding balance due, paid in full to GSFA, prior to or at the time that the Product is complete and ready to deliver. If payment is late or delivery is delayed pending payment, a daily finance charge of \$150.00 and a daily storage fee of \$50.00 may apply until such payment is received.

Due to insurance liability, the Product will not be delivered without full acceptance and full payment (or prior written agreement between the Customer and GSFA).

END



FIRE TRUCKS

PRODUCT
WARRANTIES

Exhibit "C"



FIRE TRUCKS

STANDARD WARRANTY

BASIC COVERAGE:

BME Fire Trucks LLC. warrants each new piece of Fire and Rescue Apparatus to be free from defects in material and workmanship under normal use and service and will at it's option repair or replace any part of this vehicle which proves defective in material and/or workmanship with new or re-newed parts for the first 12 months from new vehicle delivery date. This warranty shall not apply to any new product, which has been subjected to misuse, neglect, modification, alteration, accident, and lack of normal maintenance or items used in routine maintenance.

COMPONENT COVERAGE:

Certain components are given additional warranty coverage of variable time periods and distance traveled limitations. Component examples are frame rails, chassis cab components, engines, transmissions, driveline systems, water tank, etc. and are warranted by their respective manufacturers. Extended warranties are also available on many other specified chassis and body components and can be purchased as needed with the vehicle. Additional warranty coverage and extended warranties will vary depending on components specified and supplied. You may obtain more information regarding additional and extended coverage by contacting BME Fire Trucks LLC. or your local Boise Mobile Equipment Dealer.

DISCLAIMER:

NO WARRANTIES ARE GIVEN BEYOND THOSE DESCRIBED HEREIN. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. THE COMPANY SPECIFICALLY DISCLAIMS WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ALL OTHER REPRESENTATIONS TO THE USER/PURCHASER, AND ALL OTHER OBLIGATIONS OR LIABILITIES. THE COMPANY FURTHER EXCLUDES LIABILITY FOR INCIDENTAL AND CONSEQUENTIAL DAMAGES, ON THE PART OF THE COMPANY OR SELLER. No person is authorized to give any other warranties or to assume any liabilities on the Company's behalf unless made or assumed in writing by the seller; and no other person is authorized to give any warranties or to assume any liabilities on the seller's behalf unless made or assumed in writing by the seller.

OBTAINING SERVICE:

Return the vehicle to any BME Fire Trucks LLC. dealer/authorized service center; return the vehicle to BME Fire Trucks LLC.; or contact BME Fire Trucks LLC. When contacted, BME Fire Trucks LLC. will authorize repair or replacement of parts as outlined above; will authorize a return



WE ARE WILDLAND

www.bmefire.com | 800.445.8342

of parts for inspection/repair or replacement if required; will direct you to the nearest Boise Mobile Equipment authorized service center if necessary.



WE ARE WILDLAND

www.bmefire.com | 800.445.8342



FIRE TRUCKS

10-YEAR BODY STRUCTURE WARRANTY

BODY STRUCTURAL WARRANTY

BME Fire Trucks LLC. (hereafter known as BME) warrants the fire body shall be free of structural or design failure or workmanship for a period of ten (10) years from the date the apparatus is put into service by the end user. This warranty is extended to the original purchaser only and terminates upon transfer of ownership or possession to any other entity.

A body is defined as the structure, which fabricated from steel, stainless steel or aluminum sheet metal and the associated framework that comprises fire body separate of the chassis cab area where the driver, passengers and controls are located. This warranty is strictly limited to that part of the body manufactured by BME and as defined above, exclusive of all hardware, purchased components, mechanical items, electrical items, or paintwork.

This warranty is expressly limited to the repair and/or replacement of defective items as BME may elect upon examination of any defects in material or workmanship. This warranty covers only labor for repair or replacement, which is reasonably necessary as determined by BME. All repairs must be expressly approved in writing by the BME warranty department prior to any work being performed. The failure to obtain approval for repairs from BME or to have the body repaired or replaced at BME or a place designated by BME shall void this warranty. Any repair or replacement performed by BME pursuant to this warranty shall be warranted under this warranty only for the duration of the original warranty.

BME's obligation to render any repairs under this warranty is subject to the following conditions in their entirety:

1. The claimed failure must be reported to BME, Inc within the above stated warranty period.
2. The claimed defective body must be returned to BME or an authorized BME warranty service center immediately after notification of BME. Transportation costs will be the responsibility of the purchaser, as will any charges for drivers, loading, unloading, or other costs associated with the transportation of the chassis.
3. BME will then have the unconditional right to examine the body to determine if the claimed defect falls within the scope of this warranty.



WE ARE WILDLAND

www.bmefire.com | 800.445.8342

This warranty shall not cover the following:

1. Damage caused by fire, misuse, neglect, or accident.
2. Damage caused by theft, vandalism, riot, or explosion.
3. Damage caused by acts of God such as lightning, flood, hurricane, etc.
4. Damage that may or may not, at BME's discretion, be caused by or associated with unauthorized repairs or modifications.
5. Damage that may or may not, at BME's discretion, be caused by or associated with lack or improper maintenance procedures.
6. Loss of time, loss of use of the chassis, inconvenience, lodging, food, or other consequential loss that may result from the claimed failure of the repair and claim procedure.

This warranty is expressly in lieu of all other warranties, expressed or implied.



WE ARE WILDLAND

www.bmefire.com | 800.445.8342



FIRE TRUCKS

STAINLESS STEEL & BRASS PLUMBING WARRANTY

BASIC COVERAGE:

BME Fire Trucks LLC. warrants to the original purchaser that the stainless-steel plumbing components and ancillary brass fittings used in the construction of the water/foam plumbing system are structurally sound, free of structural defects in design, material and workmanship and will not fail due to perforation caused by corrosion. BME Fire Trucks LLC. will at its option repair or replace any portion of the plumbing system, covered under this warranty, that proves to be defective in design, material and/or workmanship for a period of ten (10) years from the date the apparatus is first placed in service.

NOT COVERED:

This warranty shall not apply to any new apparatus that has been subjected to misuse, neglect, overloading, remounting, modification, alteration, accident, or lack of normal maintenance practices. The plumbing warranty shall terminate upon transfer of possession or ownership by original purchaser.

DISCLAIMER:

NO WARRANTIES ARE GIVEN BEYOND THOSE DESCRIBED HEREIN. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. THE COMPANY SPECIFICALLY DISCLAIMS WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ALL OTHER REPRESENTATIONS TO THE USER/PURCHASER AND ALL OTHER OBLIGATIONS OR LIABILITIES. FURTHER, THE COMPANY EXCLUDES LIABILITY FOR CONSEQUENTIAL AND INCIDENTAL DAMAGES, ON THE PART OF THE COMPANY OR SELLER. No person is authorized to give any other warranties or to assume any liabilities on the Company's behalf unless made or assumed in writing by the seller; and no other person is authorized to give any warranties or to assume any liabilities on the seller's behalf unless made or assumed in writing by the seller.

OBTAINING SERVICE:

Return the vehicle to any BME Fire Trucks LLC. dealer/authorized service center or contact BME Fire Trucks LLC. BME Fire Trucks LLC. shall be solely responsible for determining the extent of repair under the terms of the warranty. Transportation costs shall be the responsibility of the purchaser.



WE ARE WILDLAND

www.bmefire.com | 800.445.8342



FIRE TRUCKS

PAINT WARRANTY

BASIC PAINT COVERAGE:

BME Fire Trucks LLC. PPG Paint Company warrants to the original purchaser the paint finish applied to each new piece of Fire and Rescue Apparatus to be free from defects in material and workmanship under normal use and service and will at its option repair or replace the paint of the damaged area. The warranty coverage shall be for a period of seven (7) years from the new vehicle delivery date. This warranty shall not apply to any new apparatus that has been subjected to misuse, neglect, modification, alteration, accident, and lack of normal maintenance practices.

SPECIFIC COVERAGE:

The paint finish applied to the BME Fire Apparatus is guaranteed to the original purchaser for a period of seven (7) years against the following:

- Peeling or delaminating of the topcoat and/or other layers of paint
- Cracking or checking
- Loss of gloss caused by cracking, checking, or chalking
- Any paint failure caused by defective paint materials covered by this guarantee

EXCLUSIONS:

A paint failure resulting from any of the following conditions is excluded from coverage:

- Paint deterioration caused by bubbles, blisters, or other film degradation due to rust or corrosion originating from the substrate
- Corrosion due to design/engineering (i.e., electrolysis dissimilar metals)
- Hazing, chalking or loss of gloss caused by improper care, abrasive polishes, cleaning agents, or heavy-duty pressure washing
- Paint deterioration caused by abuse, accidents, acid rain, chemical fallout, or other acts of nature
- Accidents, scratches, chips, or stone bruises due to normal vehicle use
- Repairs done over previously refinished areas unless stripped to bare metal
- Claims presented without proper guarantee documentation



WE ARE WILDLAND

www.bmefire.com | 800.445.8342

OBTAINING SERVICE:

Return the vehicle to any BME Fire Trucks LLC. dealer/authorized service center or contact BME Fire Trucks LLC. When contacted, BME Fire Trucks LLC. will authorize and will direct you to the nearest authorized paint repair facility if necessary.



WE ARE WILDLAND

www.bmefire.com | 800.445.8342



FIRE TRUCKS

GRAPHICS WARRANTY

BASIC COVERAGE:

BME Fire Trucks LLC. warrants to the original purchaser that the graphics process installed by BME Fire Trucks LLC. shall be warranted to be free from defects in material and workmanship. BME Fire Trucks LLC. will at its option repair or replace any part of the graphics on the apparatus that proves to be defective in material and/or workmanship for a period of three (3) years from the date the apparatus is first placed in service.

NOT COVERED:

This warranty shall not apply to any new apparatus that has been subjected to misuse, neglect, alteration, accident or lack of proper maintenance practices. The graphics process warranty shall terminate upon transfer of possession or ownership by original purchaser.

BASIC COVERAGE:

NO WARRANTIES ARE GIVEN BEYOND THOSE DESCRIBED HEREIN. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. THE COMPANY SPECIFICALLY DISCLAIMS WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ALL OTHER REPRESENTATIONS TO THE USER/PURCHASER AND ALL OTHER OBLIGATIONS OR LIABILITIES. FURTHER, THE COMPANY EXCLUDES LIABILITY FOR CONSEQUENTIAL AND INCIDENTAL DAMAGES, ON THE PART OF THE COMPANY OR SELLER. No person is authorized to give any other warranties or to assume any liabilities on the Company's behalf unless made or assumed in writing by the seller; and no other person is authorized to give any warranties or to assume any liabilities on the seller's behalf unless made or assumed in writing by the seller.

OBTAINING SERVICE:

Return the vehicle to any BME Fire Trucks LLC. dealer/authorized service center or contact BME Fire Trucks LLC. BME Fire Trucks LLC. shall be solely responsible for determining the extent of repair under the terms of the warranty. Transportation costs shall be the responsibility of the purchaser.



WE ARE WILDLAND

www.bmefire.com | 800.445.8342