

SHELBY TOWNSHIP

2018-2019 Emergency Rescue Ambulance Bid Specifications - Ford F450 4x4 Chassis

Notice of Bid

Shelby Township is requesting bids for One (1) new rescue ambulance on a 2019 or newer F-450 4X4 chassis, with a "Liquid Spring" suspension.

The bid responses shall be in the form of one (1) original hardcopy and one DVD/CD. No faxed or emailed bids will be accepted. Bids will be received in a clearly marked envelope with the words "**2018-19 EMERGENCY RESCUE AMBULANCE**" Bids will be accepted by the Township Clerks office until **3:00 P.M., local time, Thursday October 18, 2018 at 52700 Vandyke, Shelby Twp. MI 48316** at which time they shall be publicly opened and read. Shelby Township reserves the right to reject any or all bids and waive any irregularities in the best interest of the Township

Please contact the following by written form (email is acceptable) if you have questions:

Fire Chief Jim Swinkowski (jswinkowski@shelbytpw.org)



Shelby Township

- Chartered 1978 -

SHELBY TOWNSHIP

2018-2019 Emergency Rescue Ambulance Bid Specifications - Ford F450 4x4 Chassis

BID SPECIFICATION

GENERAL CONDITIONS

PURCHASER: The "Purchaser" who is hereinafter described as an individual, or a group of individuals who represent the interest of a City, Borough, County, Parish, State, or Private enterprise AND has been charged with the responsibility of purchasing one or more emergency medical ambulance(s).

BIDDER: The "Bidder" is hereinafter defined as the ambulance manufacturer and/or it's authorized Representative/Dealer.

PURCHASER'S INTENT

Y__N__

The intent of the specifications supplied herein is to purchase an ambulance with the highest level of quality and engineering excellence. The intent of this vehicle is centered on the patient's need for pre-hospital care, in conjunction with a safe working environment for the Emergency Medical Personnel. **It is the Township's intent to purchase an ambulance that has an interior constructed welded all-aluminum cabinets, a floor that is not constructed with any wood and an overall construction method that enables the ambulance module to be easily remounted at the end of the chassis' life.** It is also the Township's intent to purchase an ambulance from a dealer that represents a manufacturer that will be remounting their own product, using the same manufacturing processes and materials that are used in the original manufacturing process. **It is understood by the bidder that this is the Townships intent and the bidder 100% meets these requirements.**

BID BOND

Y__N__

All bids shall be accompanied by a Surety Bond in the amount of ten (10%) per cent of the bid amount payable to the purchaser and shall be provided by the Manufacturer of the ambulance bid. Bonds submitted by the Agent or Dealer will not be accepted.

The purchase contract/agreement after being awarded to the successful bidder shall be returned to the purchaser within thirty (30) days of the award. Failure to do so will result in the contract/agreement being deemed "no response" and the awarded contractor shall have no interest remaining in the pursuit of fulfilling the contract/agreement. The purchaser reserves the right at that time to pursue the bid bond amount, required at the time of bid.

SHELBY TOWNSHIP

2018-2019 Emergency Rescue Ambulance Bid Specifications - Ford F450 4x4 Chassis

Bidders failing to provide a bid bond will be considered a "no bid". No exceptions.

PERFORMANCE BOND

Y__N__

A performance bond in the amount of 100% {one hundred percent } of the contract price will be required to be provided by the contractor as a security of faithful performance of the contract, specifically meeting all of the specifications outlined in this bid (bond is specific to material, process, and construction). The Performance Bond shall be secured by a Guaranty or a Surety Company listed in the latest issue of the U.S. Treasury Circular 570.

LICENSED MICHIGAN VEHICLE DEALER

Y__N__

If the proposal is being offered through a manufacturer's Dealer, the dealer must be licensed in the State of Michigan and provide a copy of their dealer license in the proposal

BIDDER'S INSTRUCTIONS

Bidders shall thoroughly examine all drawings, specifications, schedules, instructions and any other documents supplied as part of this invitation to bid and shall make all investigations necessary to thoroughly inform themselves regarding the content of the written specifications, drawings, and instructions supplied herein. No plea of ignorance by the bidder pertaining to the content of the specifications, drawings, schedule, or instructions will be considered by the purchaser on the deadline, if bid submission has occurred. Failure or omission on the part of the bidder to make the necessary examinations and investigations into the content of the specifications AND make all clarifications or explanations of exceptions and conditions that exist or that may exist hereafter shall NOT be accepted as a basis for making variations to the requirements of the purchaser or compensation to the bidder.

The Purchaser's clarifications shall be documented in writing and distributed to all qualified bidders at least two business days prior to the deadline for bid submission.

EXPLANATION OF EXCEPTIONS

Y__N__

Bidders may take exceptions to any part of the bid contained herein with a written itemized schedule. The schedule shall include the page number, paragraph number(s), the text that the bidder feels he cannot comply with and an explanation why the bidder feels that the requirement is not in the best interest of the purchaser AND/OR an alternate bidder solution. Alternate bidder solutions may be considered by the purchaser, if the bidder can show the purchaser that the alternate solution is, in quality and quantity, equal to OR better than the

SHELBY TOWNSHIP

2018-2019 Emergency Rescue Ambulance Bid Specifications - Ford F450 4x4 Chassis

specified item. Explanations of exceptions taken must be documented and submitted with the bid proposal on or before the bid submission deadline.

NO ALTERNATE BIDS TAKING TOTAL EXCEPTION

BID PACKAGES SHALL NOT TAKE TOTAL EXCEPTIONS: Bidders are required under this bid invitation to give, for the consideration of the purchaser, a proposal that will comply with the written specifications, drawings, and schedules supplied herein. The specifications supplied represent a compilation of input from all disciplines of users, patients, maintenance and management personnel who are directly affected by the vehicle performance. All the personnel who have direct working contact with the vehicle specified herein base careful consideration pertaining to safety, configuration, construction, and workmanship on working experiences. The intent of this ambulance was created as a result of resolving issues and improvement suggestions that have originated from the personnel most QUALIFIED to make such input.

The purchaser makes no claim that potential issues or improvements are included in the specifications supplied herein. The purchaser will consider any valid concern by any bidder and will consider only minor specification exceptions or alternates of equal or better performance, provided that the exceptions are steered toward meeting the intent AND the exceptions are submitted with the final bid proposal on or before the bid deadline.

CAUTION: A bidder who submits a bid that takes "Total Exception" and makes an offering of some "Standard" or "Stock" unit will be viewed by the purchaser as a bidder who did not make, and is not prepared to make, a valid bid, and is not qualified to manufacture the ambulance as specified herein. Alternate bids shall NOT be considered.

INTER-AGENCY AGREEMENTS (PIGGY-BACK)

It is the intent of this bid document to make available to other government entities, by mutual agreement with the successful Bidder, the right to purchase the same or like equipment and or products, at the prices quoted for the period of the contract. Each Bidder shall indicate in the bid proposal, if the Bidder will honor other political subdivision's orders, in accordance with contract terms and conditions. This procedure is sometimes identified as a "Piggy-Back" Bid.

VENDOR QUALIFICATIONS

Y__N__

Regardless of chassis purchased, all bidders shall be members in good standing of the Ford Motor Company Qualified Vehicle Modifier Program (Q.V.M.). Certification verification shall be provided with the bid response. If for any reason the Q.V.M. Certification was withdrawn or suspended by Ford Motor Company within the past

SHELBY TOWNSHIP

2018-2019 Emergency Rescue Ambulance Bid Specifications - Ford F450 4x4 Chassis

five years, the bidder shall supply a full written explanation of the Q.V.M. withdrawal or suspension and any corrective actions taken to regain Q.V.M. Certification.

PRE-CONSTRUCTION CONFERENCE

Y__N__

The successful bidder shall be required, prior to manufacturing, to have a Pre-Construction conference with two (2) people designated by the purchaser. This meeting is to be held at the production facility of the manufacturer and if more than 350 miles from the purchaser's location, the transportation shall be by commercial air carrier and individual hotel rooms as well as meals will be supplied.

MID-POINT INSPECTION

Y__N__

A Mid-Point inspection shall be required. Accompanied by a Dealer Representative, two (2) people designated by the purchaser will travel to the manufacturer's facility for the purpose of inspecting the vehicle for compliance to the specifications and for the overall quality of the vehicle. Inspections shall be scheduled during weekdays, including travel time. If this inspection is to occur at a location more than 350 miles from the purchaser's location, the transportation shall be by commercial air carrier and individual hotel rooms as well as meals shall be provided.

FINAL INSPECTION

Y__N__

A Final inspection shall be required. Accompanied by a Dealer Representative, two (2) people designated by the purchaser will travel to the manufacturer's facility for the purpose of inspecting the vehicle for compliance to the specifications and for the overall quality of the vehicle. Inspections shall be scheduled during weekdays, including travel time. If this inspection is to occur at a location more than 350 miles from the purchaser's location, the transportation shall be by commercial air carrier and individual hotel rooms as well as meals shall be provided.

PRODUCT LIABILITY INSURANCE

Y__N__

A Certificate of current liability insurance, with a Ten Million Dollar minimum shall be supplied with the bid submission. The certificate of insurance shall bear the insurance carrier's name, address, and phone number. The Certificate shall also bear the name and address of the insured. This document shall contain the coverage

SHELBY TOWNSHIP

2018-2019 Emergency Rescue Ambulance Bid Specifications - Ford F450 4x4 Chassis

schedule, explaining the type of insurance, the policy number, the effective date of coverage, the policy expiration date, and the individual limits of liability.

DRUG FREE WORKPLACE

Y__N__

The bidder shall conduct business as a Drug Free Workplace. The bidder/manufacture shall provide notice to their employees as required under the Drug Free Workplace Act of 1988. A copy of the bidder's Drug Free Workplace policy shall be furnished to the purchaser upon request.

CHASSIS POOL

Y__N__

The bidder shall be a member of the Ford Motor Company's and/or the General Motor Company's Chassis Bailment Pool, regardless of the chassis specified within this specification. The bidder shall provide a current Ford Motor Company and/or General Motor Company's Pool account number to the purchaser upon request.

PRODUCT TESTING

AMBULANCE MANUFACTURER'S DIVISION: The Bidder shall be a member in good standing with the National Truck Equipment Association (N.T.E.A.) and the Ambulance Manufacturer's Division (A.M.D.) of N.T.E.A. The bidder shall supply a letter with the bid response to verify current membership in both the N.T.E.A. and the A.M.D.

AMD STANDARD 001: STATIC LOAD TEST

A.M.D. 001 - MANUFACTURERS' BODY STRUCTURE TESTING: The ambulance described herein shall be tested to the National Truck Equipment Association's Ambulance Manufacturer's Division, AMD Standard 001 - Static Load Test, except the test weight shall be at least 32,000 pounds. The test results shall be certified by an independent engineering firm not directly associated with the Ambulance Manufacturer. These certified test results shall be supplied to the purchaser upon request.

KKK-A-1822F TESTING CERTIFICATION

SHELBY TOWNSHIP

2018-2019 Emergency Rescue Ambulance Bid Specifications - Ford F450 4x4 Chassis

The bidder shall provide documentation within this bid proposal, which verifies that all KKK-A-1822F testing is current and certified by an independent engineering firm.

QUALITY ASSURANCE - SPECIFICATION COMPLIANCE

The manufacturer shall inspect and test all systems and electrical loads per Federal specification KKK-A-1822F Section 4. Testing results shall be documented and displayed in the oxygen compartment and supplied with the vehicle delivery handbook.

NOTE: The purchaser will have zero tolerance towards bidder/vendors who state compliance to specification, but delivers an incomplete product and/or substandard materials and workmanship.

MANUFACTURER OWNERSHIP

Y ___ N ___

It is the intent of the purchaser to work with an ambulance manufacturer that has a long-standing history of building the product that is being proposed. Bidder shall state number of years that the manufacturer has been building the specific make and model of ambulance being proposed, specifically in the manufacturer's current location:

NON-COLLUSIVE BID CERTIFICATION

By submission of this bid response, the Bidder and/or Bidder's authorized representative(s), certify under penalty of perjury, to the best of their knowledge and belief the following:

A. The prices in this bid response have been arrived at independently without collusion, consultation, communication, or agreement for the purpose of restricting competition, as to any matter relating to such prices with any other Bidder or with any competitor, and;

B. Unless otherwise required by law, the prices which have been quoted in the bid response have not knowingly been disclosed by the Bidder and will not knowingly be disclosed by the Bidder, prior to the public bid opening, either directly or indirectly to any competitor, and;

C. No attempt has been made or will be made by the Bidder, for the purpose of restricting competition, to induce any person, partnership, or corporation not to submit a bid response.

SHELBY TOWNSHIP

2018-2019 Emergency Rescue Ambulance Bid Specifications - Ford F450 4x4 Chassis

DEBARMENT STATUS

Y ___ N ___

By submission of this bid response, the Bidder and/or its authorized representatives, certify under penalty or perjury, that to the best of their knowledge and belief they are not currently debarred from submitting bids or bidding on contracts from any agency within the home state of the purchaser, nor are they an agent of any person or entity that is currently debarred from submitting bids on contracts by any agency within the home state of the purchaser.

DELIVERY STATEMENT

The bidder shall state the number of calendar days required for delivery of the completed ambulance, after receipt of an order and receipt of chassis by the manufacturer.

Delivery shall be within _____ calendar days after receipt of order and receipt of chassis. (State number of calendar days)

REQUIRED DELIVERY ITEMS

REQUIRED DELIVERY ITEMS: Upon a successful bid award, the vendor shall provide the following to the purchaser, upon ambulance delivery:

1. Manufacturer's Quality Assurance Vehicle Testing and acceptance documents.
2. One (1) copy of conversion parts, service, and operational manuals.
3. OEM Chassis Owner's Guide materials as provided by the chassis manufacturer.
4. Two (2) copies of "as built" customized electrical schematics for the ambulance conversion.

PURCHASER'S RIGHTS

ACCEPTANCE OR REJECTION: The Purchaser reserves the right to accept or reject any and all bids as deemed to be in the best interest of the purchaser and is not bound to accept the lowest bid.

BID PROPOSAL TIME LIMITS: All bids submitted to the purchaser shall remain in effect for a minimum period of (60) sixty calendar days.

SHELBY TOWNSHIP

2018-2019 Emergency Rescue Ambulance Bid Specifications - Ford F450 4x4 Chassis

BID WITHDRAWAL: Only written bid withdrawal requests will be accepted by the purchaser. Bid withdrawals received less than (3) three working days prior to the advertised bid opening will not be accepted.

FORCE MAJEURE

The bidder shall not be charged with liquidated damages or any excess cost when delay in delivery of goods is due to:

Any preference or priority of an allocation order duly issued by a government agency.

Unforeseeable cause beyond the control and without the fault, of the ambulance manufacturer, or acts of God or of the public enemy, acts of the purchaser, acts of another contractor in the performance of a contract with the purchaser, fire, flood, epidemics, quarantine restrictions, strikes, freight embargoes, and unusually severe weather; and;

Any delays of subcontractors occasioned by any of the causes specified in the two immediately preceding clauses.

MANUFACTURER "MAKES"

Y___N___

Does the manufacturer of the ambulance being offered build only one (1) ""make"/"brand" of ambulance/emergency vehicle in its manufacturing/production location? If the manufacturer of the ambulance being bid also produces other "makes" of ambulances ("make" being defined as a separate name, dealer network, or "BRAND"), bidder must supply a list of brands/makes along with a list of product and production differences between these brands/makes.

AMBULANCE BUILD LOCATION

All ambulance modules in this specification must be built in the United States of America.

ROLLOVER CRASH TEST

The manufacturer shall perform a dynamic rollover crash test with video documentation to be provided to the Purchaser upon request. Crash tests shall be performed within a controlled and repeatable environment. All testing shall be performed by an ISO/IEC 17025 accredited laboratory by an accreditation body that is recognized by the National Cooperation for Laboratory Accreditation (NACLA) or is a signatory to the

SHELBY TOWNSHIP

2018-2019 Emergency Rescue Ambulance Bid Specifications - Ford F450 4x4 Chassis

International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (MRA). Refer to the following publications for specifications:

- SAE J211-1 Instrumentation for Impact Test – Part 1: Electronic Instrumentation
- SAE J211-2 Instrumentation for Impact Test – Part 2: Photographic Instrumentation
- SAE J21733 Sign Convention for Vehicle Crash Testing
- SAE 3027 Ambulance Litter Integrity, Retention, and Patient Restraint

SIDE IMPACT CRASH TEST

The manufacturer shall perform a dynamic side impact crash test with video documentation to be provided to the Purchaser upon request. Crash tests shall be performed within a controlled and repeatable environment. All testing shall be performed by an ISO/IEC 17025 accredited laboratory by an accreditation body that is recognized by the National Cooperation for Laboratory Accreditation (NACLA) or is a signatory to the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (MRA). Refer to the following publications for specifications:

- SAE J211-1 Instrumentation for Impact Test – Part 1: Electronic Instrumentation
- SAE J211-2 Instrumentation for Impact Test – Part 2: Photographic Instrumentation
- SAE J21733 Sign Convention for Vehicle Crash Testing
- SAE 3027 Ambulance Litter Integrity, Retention, and Patient Restraint

BIDDER KKK-A-1822F CHANGE NOTICE 9 COMPLIANT

Bidder shall be KKK-A-1822F Change Notice 9 compliant to meet SAE J3043 - Ambulance Equipment Mounts; Interior Stowage Accommodations; Equipment Mounting Devices: Installed Oxygen cylinder, cardiac monitor, and fire extinguisher mounting devices shall meet the performance requirements of SAE J3043.

Y__N__

BIDDER KKK-A-1822F CHANGE NOTICE 10 COMPLIANT

Bidder shall be: KKK-A_1822F Change Notice 10 compliant to meet: SAE J3058 - Ambulance Interior Storage Compartment Integrity; SAE J3057- Ambulance Modular Body Evaluation-Quasi-Static Loading for Type I and Type III Modular Ambulance Bodies; SAE J3102- Ambulance Patient Compartment Structural Integrity Test to Support SAE J3027 Compliant Litter Systems; SAE J3043 - Ambulance Equipment Mounts, Interior Stowage Accommodations, Equipment Mounting Devices; Installed suction mounting; to conform to all applicable requirements.

Y__N__

SHELBY TOWNSHIP

2018-2019 Emergency Rescue Ambulance

Bid Specifications - Ford F450 4x4 Chassis

WEIGHT RATINGS SPECIFIED, INTERIOR, LABELS, CN10 COMPLIANT

Y__N__

All interior storage compartments and drawers shall have an affixed label that identifies weight rating specifications for each respective compartment / drawer. Specifications must be adhered to in order to comply with all applicable requirements of KKK-A 1822F Change Notice 10, J3058 storage compartment retention requirements.

TYPE I - AMBULANCE - 72" INTERIOR HEADROOM

Y__N__

SPECIFICATION INTENT: Type I 169-inch module, constructed with not less than a 72-inch interior module height, an overall length of 307-inches, an overall width of 98-inches and an overall exterior height not to exceed 112-inches.

**** IMPORTANT ** CHASSIS NOTIFICATION**

Y__N__

Manufacturer is not responsible nor can control the OEM chassis production build out dates and change of model years. Published model years and pricing are subject to change between data sets and may need to be updated during the quote and / or order process.

CHASSIS - FORD F-450 CHASSIS, 193" WB 4 x 4

Y__N__

F4H 2019 FORD F450 CHASSIS CAB, 193" WB 4X4 DRW (108 C.A.)

MECHANICAL

- Axle - Mono beam front axle w/coil spring suspension
- Rear-axle "Standard" width 4.10 Limited-slip w/DRW (*X4N*)
- Battery - Batteries Dual 750 CCA
- Brakes – Four-wheel Disc Brakes; Anti-lock Brake System (ABS)
- Emission 50-State Emissions System
- Engine — 6.7L 4V OHV POWER STROKE V8 TURBO DIESEL B20 (*99T*)
- Engine block heater (*41H*)
- Operator Commanded Regeneration (*98R*)
- Tires - 225/70R19.5G BSW A/S (*TFB*)
- Transmission – TorqShift® Six-Speed automatic w/SelectShift® automatic (6R140)

FUNCTIONAL

- Alternators: Dual extra heavy duty (*67B*)
- Ambulance Prep Package (*47L*)
- Hood release
- Horn - dual electric
- Oil minder system
- Shift - Electronic-Shift-On-the-Fly – 4X4 (ESOF *213*)
- Shock absorbers - heavy -duty gas
- Sirius XM® Radio (Note: Includes a 6-month prepaid subscription. Service is not available in Alaska or Hawaii).
- Spare Tire, Wheel and Jack (Excludes carrier; includes Hydraulic Jack (*512* *61J*))
- Springs, rear auxiliary
- Stabilizer bars – front & rear

SHELBY TOWNSHIP

2018-2019 Emergency Rescue Ambulance Bid Specifications - Ford F450 4x4 Chassis

- Trailer Brake Controller

EXTERIOR

- Back Panel, rear - solid, no sliding rear window
- Bumper – front, chrome
- Color - Oxford White (*Z1*)
- CLN IDLE Decal, CAL SER VEH EXP (*63B *936*)
- Fender vents – front
- Front License Plate Bracket
- Fuel Tank — 40 gallon aft axle (F-350 DRW/F-450/F-550)
- Glass – privacy
- Grille – two (2) bar, bright chrome
- Manual locking hubs
- Preferred Equipment Package, XLT Trim (*653A*)
- Scuff plates – front, color-coordinated
- Splash Guards/Mud Flaps – Front
- "Three Blink" Lane change signal
- Tow hooks – front (2)
- Trailer wiring – 7 wire harness w/relays, blunt cut & labeled
- Wheels – 19.5" Argent Painted Steel
- Windshield Wipers – intermittent

INTERIOR/COMFORT/CONVENIENCE

- 4.2" LCD Productivity Screen in IP Cluster w/Compass display
- 12V Power point, auxiliary
- Air conditioning – single-zone, manual
- Air conditioning vents – black w/chrome ring and knob
- AM/FM Stereo Single-CD/MP3 Player, Clk (*54k*) (speakers; four (4) with Regular Cab six (6) with SuperCab and Crew Cab)
- Auxiliary audio input jack
- Cabin Air Particulate Filter
- Carpet Delete (*166*)
- Coat hooks, LH/RH color-coordinated
- Cruise Control
- Dash top tray
- Dome lamp – LH/RH door activated & I/P switch operated w/delay
- Door locks w/ backlit switches
- Door-trim – soft armrest, grab handle, power window/lock switches and reflector; front map pockets on Regular Cab and SuperCab; front and rear map pockets on Crew Cab
- Floor Mats – all weather (*166*)
- Gauges & Meters - Fuel , Transmission temperature, Engine coolant temperature, Oil pressure (gas engine), and Turbo (diesel engine) gauges, Speedometer, Odometer, and Tachometer
- Handles, grab – driver & front-passenger Handles, roof ride – front-passenger (also over rear-doors on Crew Cab)

SHELBY TOWNSHIP

2018-2019 Emergency Rescue Ambulance Bid Specifications - Ford F450 4x4 Chassis

- Headrests - driver and passenger 4 way adjustable
 - Map lights – dual (front and rear w/Crew Cab)
 - Mirror – rearview 11.5" day/night
 - Outside Temperature Display
 - Power Equipment Group – 1ST row (front-seat) windows w/one-touch up/down, power 2ND row (rear-seat) windows (Super/Crew Cab); power/door-locks w/backlit switches & accessory delay
 - Seat –Front, high-series cloth 40/20/40 cloth medium earth gr (*3S*) split bench - 20% center under-seat storage, – w/center armrest, cup holder and storage (manual lumbar – driver’s side) — Four-way adjustable driver/passenger headrests
 - Steering – power
 - Steering wheel – Black urethane with tilt and telescoping steering wheel/column; includes three (3) button message control
 - Sun visors – color-coordinated cloth, driver w/pocket, both driver and passenger w/covered mirrors
 - Upfitter Interface Module (*18A*)
 - Upfitter switches – 6 located in Overhead Console
- SAFETY/SECURITY**
- AdvanceTrac® with RSC® (Roll Stability Control™)
 - AutoLamp – Auto On/Off Headlamps
 - Belt-Minder® (front safety belt reminder)
 - Driver and passenger frontal and side airbag/curtain; passenger side deactivation switch
 - Headlamps – Quad beam jewel effect halogen
 - Lamps – Roof marker/clearance – LED
 - Mirrors – manually telescoping/folding trailer tow with power/heated glass, heated convex spotter mirror, integrated clearance lamps/turn signals
 - MyKey® owner controls feature
 - Remote keyless entry and Perimeter anti-theft alarm
 - Safety Belts – color-coordinated w/height adjustment (front-outboard seating positions only)
 - Safety Canopy® System
 - SecuriLock® Passive Anti-Theft System (PATS)
 - Stationary Elevated Idle Control (SEIC)
 - SOS Post-Crash Alert System™
 - Underhood service light
- DRIVER ASSIST**
- AutoLamp (Auto On/Off Headlamps) with Rainlamp Wiper Activated Headlamps
 - Cruise control (steering wheel-mounted)
 - SYNC® with MyFord® – Voice-activated Communications and Entertainment System with 911 Assist® and AppLink™

SHELBY TOWNSHIP

2018-2019 Emergency Rescue Ambulance

Bid Specifications - Ford F450 4x4 Chassis

WEIGHT RATINGS

FRONT AXLE WEIGHT RATING	6000
REAR AXLE WEIGHT RATING	13660
GROSS VEHICLE WEIGHT RATING	18000

ALUMINUM WHEELS - INCLUDED WITH CHASSIS

Aluminum wheels shall be ordered with the chassis. These will include the hub, hat and lug covers.

Y__N__

CHASSIS PAINT - OPTIONAL PAINT COLOR

The chassis to be ordered with an optional paint color. Color to be determined at the pre-construction meeting.

Y__N__

FUEL TANK - FULL UPON FACTORY RELEASE

The chassis fuel tank of the completed unit shall be full at time of release from the ambulance manufacturer's facility.

Y__N__

SUSPENSION - LIQUID SPRING

A **CLASS®**, or Compressible Liquid Adaptive Suspension System, shall be provided and installed. Utilizing a strut, with a compressible fluid as the spring/damping medium, and its sophisticated on-board microprocessor, **CLASS®** adapts the entire vehicle's response to road variations and the driver. Unlike current steel and air sprung suspension systems, **CLASS®** can automatically and instantaneously change the spring stiffness and damping at each wheel over a very broad range with minimal power consumption while the vehicle is being driven and without driver intervention. The system shall include an automatic lowering feature, which is activated by opening the rear patient compartment doors. There shall be a switch near the rear doors which will defeat the lowering feature.

Y__N__

BATTERY - TWO SYSTEM - F SERIES CHASSIS

The vehicle shall have a 12 V two (2) battery system rated at 1500 cold cranking amps. Both batteries shall be securely installed in the Ford OEM locations, under the vehicle hood.

Y__N__

ENGINE BLOCK HEATER - OEM PLUG

An engine block heater shall be included in the chassis with the 125 VAC power cord, located under the hood.

Y__N__

FLOOR CONSOLE - ANGLED FACE REMOVABLE PLATES - ALUMINUM

A center floor console manufactured out of aluminum and covered in a black onyx scratch resistant, multi-use polychromatic coating with a clear epoxy finish shall be installed in the cab. The console shall include an angled face to accommodate (2) USB plugin(s), and the Weldon Vista display. The lower portion of the console shall consist of a flat area that shall contain the siren, two (2) drink holders, and then to the rear center a recessed storage area for maps and reports. The console face plates shall be removable for accessibility and serviceability.

Y__N__

HEAT SHIELDS, PROTECTIVE

Y__N__

SHELBY TOWNSHIP

2018-2019 Emergency Rescue Ambulance Bid Specifications - Ford F450 4x4 Chassis

Three (3) aluminized steel protective heat shields shall be installed to the upper laterals above the exhaust system to help protect the module from the chassis exhaust system heat. This shall meet OEM guidelines for heat shields.

HIGH IDLE SYSTEM, AUTOMATIC

An aftermarket auto high-idle system shall be provided on the chassis. The high-idle shall be programmed to activate when the transmission is placed in the park position and the parking brake is activated. The system will automatically go to high idle, but will adjust itself as needed for higher or lower idle. If the module heat or a/c is activated the high idle will be over ridden to 1500 rpm.

Y__N__

MIRRORS, EXTERIOR OEM MANUAL TELESCOPING W/REMOTE & HEAT

The chassis shall have OEM telescopic trailer tow mirrors with power adjustable flat heated glass and manual adjustable convex glass.

Y__N__

OEM AUTO-LOCK DISABLED (cab & module doors do not auto lock or unlock)

The OEM auto-lock feature will be disabled.

Y__N__

RUNNING BOARDS - STAR PUNCHED DIAMOND PLATE

Aluminum diamond plate running boards with a star punched non-skid surface shall be provided on the cab. The running boards shall be bright dip anodized after they are formed to retain finish and increase corrosion resistance.

Y__N__

BUMPER, FRONT-BUCKSTOP UTILITY W/ WINCH RECESS

A Buckstop utility bumper with winch bumper mount shall be installed on the front of the chassis in place of the OEM chrome bumper IPOS, per dwg. #1. The winch mount shall support the mechanical Federal "Q" siren. (No winch is to be provided). Bumper to be painted Vermillion red to match the chassis. Per dwg. #1.

Y__N__

SIREN, FEDERAL MECHANICAL "Q" SIREN W/RUBBER BUMPERS

A Federal Mechanical "Q" siren shall be recessed installed in the Buckstop front bumper on the chassis IATS, Per dwg. #1. The front bumper shall be equipped with forward facing rubber dock bumpers to absorb contact with other vehicles and equipment. The Federal "Q" siren shall be activated through a foot pedal located on the drivers side as well as through the Vista in the cab.

Y__N__

ELECTRICAL SYSTEM - WELDON V-MUX, MICRO PROCESSOR BASED

A Weldon V-MUX 100% solid state microprocessor based multiplex system shall be installed to control the electrical functions. The system shall include load management, load shedding, power modulation, load sequencing capabilities and provide on-board diagnostics with real-time status reporting. The system shall consist of one (1) color control console (Vista) in the cab, one (1) color control console (Vista) in the patient compartment, a total of three (3) control nodes: two (2) High Content nodes and one (1) 8 X 16 node, and a module warning display with video input and monitoring capabilities.

Y__N__

The system must be a Weldon V-MUX. **No exception.**

Bidders who propose any other proprietary electrical system shall be considered as non-compliant.

Documentation required with bid submission

Bidder must supply with his/her bid proposal, a listing of not less than 500 ambulances produced with the Weldon V-MUX system within the past 5 years. The documentation shall include a

SHELBY TOWNSHIP

2018-2019 Emergency Rescue Ambulance

Bid Specifications - Ford F450 4x4 Chassis

production order number, the purchaser's agency name, and the date the ambulance was delivered.

Bids submitted without this documentation shall not be considered.

VISTA IV MCC - PUSH BUTTON

A Weldon V-MUX Vista IV interface module / display screen shall be provided and installed in the cab. The Vista module shall be operated through the use of push buttons.

Y__N__

VISTA IV ACP - PUSH BUTTON

A Weldon V-MUX Vista IV interface module / display screen shall be provided and installed in the patient compartment. The Vista module shall be operated through the use of push buttons.

Y__N__

WARNING DISPLAY - MULTIPLEX ELECTRICAL SYSTEM

A digital warning display shall be integrated into the cab display console and programmed through the multiplex system to provide visual and audible indications for:

Y__N__

Parking brake set condition

Parking brake release condition

Patient status alarm (four color with reset capability)

Individual outside storage compartment "door open" warnings in vehicle outline form.

Low voltage alarm

Low oxygen pressure alarm

DAYTIME RUNNING LAMPS - MULTIPLEX ELECTRICAL SYSTEM

Headlights shall be activated at 30% intensity, for day time operation, when transmission is placed in drive, as a feature of the multiplex system. (if not standard on the chassis)

Y__N__

MASTER CONTROL CONSOLE (MCC) - MULTIPLEX ELECTRICAL SYSTEM

A floor mounted Master Control Console (MCC) shall be located in the cab. The console shall house the siren and the color microprocessor display screen, which will control all the Emergency Warning functions as well as also being able to control the Patient Compartment lighting and module heat/ac functions.

Y__N__

ATTENDANT CONTROL PANEL (ACP) - MULTIPLEX ELECTRICAL SYSTEM

The Attendant Control Panel (ACP) shall contain a color micro processor screen, which will control all equipment installed in the patient compartment.

Y__N__

ELECTRICAL COMPARTMENT (PDQ) - MULTIPLEX ELECTRICAL SYSTEM

The Power Distribution Quarters (PDQ) shall hold electrical components, (i.e. power distribution nodes, circuit breakers, etc). The electrical compartment shall have a hinged door with (2) two chrome locking lever latches and be shall located on the partition wall behind the attendant seat.

Y__N__

SPARE CIRCUIT - MULTIPLEX ELECTRICAL SYSTEM

One (1) spare 15 amp circuit shall be provided.

Y__N__

SHELBY TOWNSHIP

2018-2019 Emergency Rescue Ambulance

Bid Specifications - Ford F450 4x4 Chassis

WIRING HARNESS CONNECTORS - MULTIPLEX ELECTRICAL SYSTEM

Y__N__

All wiring harnesses shall be connected via quick connect circular plug connectors.

RADIO TIE-IN POINT - (1) 12V/40 AMP - CAB CONSOLE AREA

Y__N__

One (1) set of 12 volt/40 amp radio tie-in points shall be installed in the cab console area of the unit. The set shall include one (1) "Battery Hot", one (1) "Ignition Hot", and one (1) "Grounded" 250 amp junction stud.

RADIO TIE-IN POINT - (1) 12V/40 AMP - PATIENT COMPARTMENT

Y__N__

One (1) set of 12 volt/40 amp radio tie-in points shall be installed in the patient compartment attendant control panel area of the unit. The set shall include one (1) "Battery Hot", one (1) "Ignition Hot", and one (1) "Grounded" 250 amp junction stud.

RADIO TIE-IN POINT - (1) 12V/40 AMP - PDQ

Y__N__

One (1) set of 12 volt/40 amp radio tie-in points shall be installed and mounted in the PDQ of the unit. The set shall include one (1) "Battery Hot", one (1) "Ignition Hot", and one (1) "Grounded" 250 amp junction stud.

EMERGENCY MASTER SWITCH - MULTIPLEX ELECTRICAL SYSTEM

Y__N__

A single emergency master switch shall be supplied for activating all the emergency warning lights and shall be provided on the master control console screen. The emergency master switch will activate the module power automatically. There shall also be an Emergency Master Menu button which shall allow access to individual warning light functions.

CONTROL PANEL SWITCHES - MULTIPLEX ELECTRICAL SYSTEM

Y__N__

The switches on the master control console and attendant control panel screens shall have dimmable perimeter backlighting for easy identification.

MODULE POWER SWITCH - MULTIPLEX ELECTRICAL SYSTEM

Y__N__

A module power switch for the electrical system shall be provided on both the master control console and the Attendant Control Panel screens.

MODULE DISCONNECT - MULTIPLEX ELECTRICAL SYSTEM

Y__N__

An In-Power 15 minute, nonadjustable disconnect shall be installed to keep the module power switch engaged, after the ignition is switched to the "off" position. This disconnect can also be activated from the side and rear doorways to turn on the check-out lights.

VOLTMETER - MULTIPLEX ELECTRICAL SYSTEM

Y__N__

One (1) digital voltmeter shall be provided on the master control console screen.

FLASHER - MULTIPLEX ELECTRICAL SYSTEM

Y__N__

The flasher shall be provided within and programmed by the multiplex electrical system.

FLASHING HEADLIGHTS - MULTIPLEX ELECTRICAL SYSTEM

Y__N__

The headlights (high beams) shall be programmed through the multiplex system to alternate flash (wig-wag), activated by a switch on the master control console screen labeled "Flashing Headlights", with the ignition on and module power and emergency master switches enabled. The flashing headlights are to be disabled when the low or high beams are activated. They are also disabled when the transmission is placed in the neutral/park position. The flashing headlights

SHELBY TOWNSHIP

2018-2019 Emergency Rescue Ambulance Bid Specifications - Ford F450 4x4 Chassis

shall have the capability to be reactivated with the "park override" switch in the "on" position if the low and high beams are off.

PARK OVERRIDE - MULTIPLEX ELECTRICAL SYSTEM

Y__N__

A park override switch, located on the master control console screen, shall reactivate all lights disabled when the transmission is placed in the neutral/park position.

LOAD MANAGER-SEQUENTIAL SWITCHING SYSTEM - MULTIPLEX ELECTRIC SYSTEM

Y__N__

The load manager-sequential switching system shall be controlled by the microprocessor based electrical system. The emergency master button shall control the sequential switching of the emergency lights and/or other warning devices. The load manager shall automatically shed not-critical electrical loads during low voltage conditions to help prevent electrical system overload when the vehicle is stationary and the transmission is in the park position.

WARNING LIGHTS FLASH PATTERN SIGNAL ALERT 75 - MULTIPLEX ELECTRICAL SYSTEM

Y__N__

The default flash pattern for the warning lights shall be Signal Alert 75. These warning lights will be operated from a single button labeled "flashers" via the Multiplex System on the master control console.

FRONT CLEAR DISABLE SWITCH - MULTIPLEX ELECTRICAL SYSTEM

Y__N__

Activation of the switch on the master control console screen shall disable all forward facing clear warning lights.

CURBSIDE SCENE LIGHTS "ON" WITH CURBSIDE DOOR - MULTIPLEX ELECTRICAL SYSTEM

Y__N__

The curbside scene lights shall be programmed to activate when the curbside door is in the open position.

REAR SCENE LIGHTS "ON" WITH REAR DOORS OPEN - MULTIPLEX ELECTRICAL SYSTEM

Y__N__

The rear scene lights shall be programmed to activate when the rear doors are in the open position.

DISABLE SWITCH FOR REAR SCENE LIGHTS - MULTIPLEX ELECTRICAL SYSTEM

Y__N__

A disable switch shall be installed at the rear door area to disable the rear scene lights.

DISABLE SWITCH FOR SIDE SCENE LIGHTS - MULTIPLEX ELECTRICAL SYSTEM

Y__N__

A disable switch shall be installed at the curbside door area to disable the curbside scene lights.

REVERSE (TRANSMISSION) FUNCTIONS - MULTIPLEX ELECTRICAL SYSTEM

Y__N__

Rear side and rear scene lights programmed in transmission reverse position only. (Not Warning Lights IPOS).

AIR HORNS - BUELL DUAL TRUMPETS 10" & 12" UNDR BUMPER W/ LANYRD

Y__N__

Air Horn - (Buell) dual trumpets, one (1) 10" and one (1) 12", mounted through the Buckstop bumper, one each side, compressor w/cover in OSS #2. The air horns shall be activated by a lanyard cable installed in the OEM cab headliner area. Per dwg. #1.

BACKUP ALARM

Y__N__

An (OSHA approved) back up alarm shall be installed with a disable control for silent backing. The disable control shall be located on the MCC (master control console). The back up alarm system shall automatically reset to the "on" mode when the transmission is taken out of reverse.

SHELBY TOWNSHIP

2018-2019 Emergency Rescue Ambulance

Bid Specifications - Ford F450 4x4 Chassis

**** NO MOBILEYE COLLISION AVOIDANCE SYSTEM ****

Y__N__

CAMERA REAR VIEW - SINGLE SYSTEM - VISTA SCREEN

Y__N__

A color camera system connected to the cab Vista display screen shall be installed, providing rear view monitoring to the rear exterior of the module. The camera shall be connected to the video input provided in the cab's Vista screen. This camera image shall automatically be displayed on the MCC Vista when the vehicle is placed in reverse. The Vista shall resume normal operation when the vehicle is taken out of reverse.

ELECTRICAL CIRCUITS

Y__N__

All electrical circuits shall have wiring and circuit protection suitable to the demand and must meet the national electric code (NEC) wiring requirements.

All added on wiring (18 GA through 10 GA) shall be color coded and stamped with code numbers and functions every 4" for easy identification (all other wiring shall be color coded). SLX high temperature thermoplastic cross link wire shall be used.

SGX insulated cable shall be used for all under hood / underbody battery and charging system cable. High temperature (375° f) thermoplastic loom shall be used on all harnesses.

GROUND FAULT CIRCUIT INTERRUPTER (GFCI)

Y__N__

A 125 VAC, 20 AMP circuit breaker with ground fault circuit interrupter (GFCI) electronic ground leakage detection shall be installed in the load center for the shoreline circuit.

INVERTER, VANNER - 1050 WATT, #20-1050CUL-DC CHARGER

Y__N__

A Vanner 20-1050CUL-DC, 1050 watt inverter with battery conditioner/charger, with remote switch, shall be provided and installed.

LIGHT, ATTENDANT CONTROL PANEL AREA - LED - WARM WHITE

Y__N__

A Tecniq Silho-X 2.75" round warm white LED light with SS trim ring, shall be mounted above the left wall forward action area counter. The light shall be operated through the a button on the ACP Vista screen labeled "Attendant Light"

LIGHT, LED ELECTRICAL COMPARTMENT (PDQ)

Y__N__

A 12 VDC light shall be located in the electrical compartment. The light shall be wired "battery-hot" to activate when the power distribution quarter's door is in the open position. The light shall be off when the door is in the closed position.

LIGHTS, OSS COMPARTMENTS - LED ROPE

Y__N__

Each outside storage compartment shall be equipped with LED rope lighting which shall be located across the top and down both sides of the door opening, activated by a magnetic switch.(This does not include battery compartment, standard OSS compartments only).

OUTLETS, 125VAC - THREE (3) INTERIOR DUPLEX

Y__N__

Three (3), 2-wire +plus ground 125 VAC hospital-grade duplex outlets shall be installed in the patient compartment with wiring connected to the shoreline. Two (2) outlets shall be installed in the street side cabinet action area, one (1) forward and one (1) rearward, to supply 125 VAC to the monitoring equipment. The third outlet shall be installed in the lower front wall cabinet. An indicator

SHELBY TOWNSHIP

2018-2019 Emergency Rescue Ambulance

Bid Specifications - Ford F450 4x4 Chassis

lamp shall be located within each 125 VAC outlet as a line monitor to indicate a live circuit. The outlets shall be labeled, "125 VAC".

OUTLETS, 12VDC - TWO (2) INTERIOR POWERPOINT

Y__N__

Two (2) 12 VDC power point outlets shall be installed in the patient compartment, One (1) 12V outlet is to be installed in the primary action area. Located per dwg. #5.
One (1) 12V outlet shall be installed in the lower front wall cabinet #3. Outlet has been relocated from lower front wall cabinet #2. Located per dwg. #7.
The outlets shall be labeled, "12 VDC". A Schottky diode medical isolator shall be provided to protect the 12 VDC outlets.

RADIO ANTENNA BASES - TWO (2)

Y__N__

Two (2) antenna bases with attached coax cables shall be installed on the module roof. One (1) shall terminate in the PDQ and one (1) shall terminate in the MCC. Access to the antenna bases shall be through adjacent module interior dome lights.

RECEPTACLE SHORELINE INLET-SUPER 20 AMP, AUTO EJECT

Y__N__

A Kussmaul super auto eject shoreline inlet receptacle with yellow cover shall be installed on the module exterior (forward street side) near the driver's door. The receptacle shall be equipped with an integral dynamic disconnect.

The 125 VAC, heavy duty 20-amp circuit breaker shall have GFCI protection and shall be connected to the lighted 125 VAC patient compartment outlet(s). A mating connector shall be shipped loose with the completed ambulance.

SIREN, WHELEN 295-HFSA7-REMOTE WITH MICROPHONE

Y__N__

A Whelen 295-HFSA7 remote dual siren amplifier shall be flush-mounted in the master control console located in the cab. The siren shall be capable of hands-free operation and shall be equipped with a noise canceling microphone. Some features of this siren include:

DUAL 200 WATT, FLUSH MOUNT SIREN with REMOTE SIREN AMPLIFIER

- Six function siren plus radio repeat and public address.
- Operates two 100-watt speakers.
- Operates in dual (outputs 2 independent siren tones creating rich harmonic dual tone sound) or mono sound modes.
- External dip switch programmable siren tones.
- PTT (push to talk) switch on microphone overrides all siren functions.
- Removable unidirectional microphone with adjustable microphone volume & adjustable preset radio repeat volume.
- SI TEST®, silent diagnostic test.
- Quick disconnect plug for ease of service or replacement.

12 Siren Tones

- Air horn • Wail • Yelp • Piercer • Manual Coast to Stop
- Manual • Mechanical Coast to Stop • Hi/Low • Yelp 249
- Warble • Whoop • Mechanical Tone

SIREN SPEAKERS, CAST PRODUCTS - IN FRONT BUMPER

Y__N__

Two (2) 100 watt siren speakers shall be installed behind the front bumper connected to the primary siren. Per dwg. #1.

SHELBY TOWNSHIP

2018-2019 Emergency Rescue Ambulance

Bid Specifications - Ford F450 4x4 Chassis

SYSTEM ACTIVE AND CHECK OUT LIGHTS - 15 MINUTES

Y__N__

A switch shall be located at the curb and rear entry doors that will allow activation of the V-MUX electrical system. There shall also be a check out light switch located at the curb and rear doors that will allow activation of the left LED angled lights prior to entering the module. The system shall be programmed to shut down automatically after 15 minutes unless the ignition is on. This shutdown delay shall be user adjustable.

LIGHTS, DOME SUPER LED (8) WHELEN

Y__N__

Eight (8) Super LED dome lights, Whelen #80C0EHCR, shall be provided in the patient compartment. The dome lights shall be controlled by separate switches for the left bank and right bank of lights. The dome lights shall be activated by switches on both the attendant control panel and the master control console. The dome lights shall be illuminated at 50% power whenever the patient compartment side or rear doors are opened.

LIGHTS, TECNIQ LED PANEL (3) STREETSIDE - ANGLED

Y__N__

Three (3) Tecniq (E30-L010-1) 21 LED lights shall be mounted on the angled panel above the streetside interior cabinets. These lights shall be three way switched from the attendant control panel and the master control console.

LIGHTS, ICC / LED CLEARANCE - ON MODULE FRONT - TECNIQ

Y__N__

The vehicle shall have five (5) amber Tecniq LED (S33-AA00-1) clearance / ICC lights on the front of the module near the roof line.

LIGHTS, ICC / LED CLEARANCE - ON MODULE REAR - TECNIQ

Y__N__

The vehicle shall have five (5) red TECNIQ LED (S33-RR00-1) clearance / ICC lights on the rear of the module near the roof line.

LIGHTS, UNDERBODY EIGHT (8) TECNIQ LED - LOCATED UNDER MODULE

Y__N__

There shall be eight (8) Tecniq E10 white LED lights mounted on brackets underneath the module. The lights shall turn on automatically when the vehicle is shifted into park. The lights may also be activated or disabled by a switch on the MCC Vista display screen labeled "Underbody Lights". Located per dwg. #2, #3 and #4.

LIGHTS, FRONT GRILLE - (2) WHELEN 500 SUPER LED - RED W/CLEAR LENS

Y__N__

Two (2) Whelen 500 series red super LED warning lights, with clear lens and waterproof connectors shall be installed in the grille area of the chassis. The lights shall operate from a switch on the master control console labeled "Flashers".

LIGHTS, FRONT MODULE - WHELEN (7)900 - (7)SPLIT RED/CLEAR

Y__N__

Seven (7) Whelen 900 series super LED warning lights with chrome flanges shall be installed on the module front. There shall be seven (7) split red/clear lights. All with clear lens IPOS Per dwg #1

LIGHTS, REAR TAIL - WHELEN 600 LED STOP, TURN, HALOGEN BK-UP

Y__N__

One (1) pair each of Whelen 600 series LED stop/tail lights, turn lights, and halogen back-up lights with chrome bezels shall be installed on the rear of the module.

LIGHTS, REAR WINDOW-LEVEL - WHELEN (2)900 LED - RED W/CLR LENS

Y__N__

SHELBY TOWNSHIP

2018-2019 Emergency Rescue Ambulance Bid Specifications - Ford F450 4x4 Chassis

Two (2) Whelen 900 series red super LED warning lights with clear lenses and chrome flanges shall be installed on the rear of the module at window level, one (1) on each side. These lights shall operate from a switch on the master control console, labeled "Flashers".

LIGHTS, REAR MODULE -WHELEN (5)900: (2)RED, (1)AMB LED, (2)LED SCN CLR LENS

Y__N__

Two (2) Whelen 900 series red super LED warning lights with clear lens, two (2) Whelen 900 series 24 diode LED scene/load lights, and one (1) Whelen 900 series amber super LED warning light with clear lens shall be installed on the rear of the module. The lights shall be installed with chrome flanges and shall be operated from switches on the master control console labeled "Flashers" and "Rear Scene Lights".

LIGHT, LICENSE PLATE LED

Y__N__

One (1) Whelen OACOEDCR LED license plate light with 45 deg angled chrome-plated bezel shall be installed on the rear of the module, lower left side.

LIGHTS, ICC / LED CLEARANCE - ON MODULE SIDE - TECNIQ

Y__N__

The vehicle shall have two (2) Tecniq (S330) red mini LED marker lights: one (1) red on each side at the rear of the vehicle which will also flash with turn signal.

LIGHTS, INTERSECTION FRONT - WHELEN 700 SUPER LED -SPLIT RED/CLEAR

Y__N__

Two (2) Whelen 700 series super LED split red / clear warning lights, with clear lens and water-proof connectors, shall be mounted, in 15 degree tilt housings on the front chassis fenders, one (1) on each side. The lights shall operate from a switch on the master control console labeled "Flashers".

NOTE: When vehicle is placed in park, the override switch must be on for intersection light(s) to remain on.

LIGHTS, SIDE MODULE SCENE - WHELEN 900 24 DIODE LED - CLEAR

Y__N__

Four (4) Whelen 900 series (clear 2-40° light spread) 24 Diode LED scene lights with chrome flanges shall be installed, two (2) each module side, inboard of the warning lights. These lights shall operate from switches on the master control console labeled "Left Scene Light" and "Right Scene Light".

LIGHTS, SIDE MODULE WARNING - WHELEN 900 SUPER LED - RED W/CLR LENS

Y__N__

Four (4) Whelen 900 series red super LED warning lights with clear lenses and chrome flanges shall be installed, two (2) each module side. Streetside shall have one (1) warning light outboard of the side module rear scene light, and one (1) warning light outboard of the module front scene light. Curbside shall have one (1) warning light outboard of the side module rear scene light, and one (1) warning light outboard of the module front scene light. These lights shall operate from a switch on the master control console labeled "Flashers".

LIGHTS, INTERSECTION REAR - WHELEN 700 SUPER LED -SPLIT RED/CLEAR

Y__N__

Two (2) Whelen 700 series super LED split red / clear warning lights with clear lenses, chrome bezels and water-proof connectors, shall be installed above the rear wheel wells, one (1) on each side. These lights shall operate from the master control console, labeled "Flashers", via the MasterTech Electrical System. NOTE: When vehicle is placed in park, the override control must be on for intersection light(s) to remain on.

SHELBY TOWNSHIP

2018-2019 Emergency Rescue Ambulance

Bid Specifications - Ford F450 4x4 Chassis

WHELEN PIONEER PLUS PFP2 SUPER LED, FRONT OF MODULE

Y__N__

Install a Whelen Pioneer Plus PFP2 Super LED light head on the front of the module under the front module warning lights. PFP2 light is to be installed in a PBA203 chrome housing. Per dwg. #1.

MOD POWER

Y__N__

Mod power is to come on with ignition.

MODULE BODY CONSTRUCTION - SEAMLESS

Y__N__

The module shall be fabricated entirely of parts cut and formed from .125" (minimum) thickness 5052-H32 flat aluminum sheet stock, using CNC machines capable of .0004" repeatability. This is the only alloy that may be used for body parts that are welded together.

The roll-cage type interior super-structure, aluminum partition and module shall all be welded together into a single unit to give optimum strength for patient and attendant protection. The module roof shall be designed with a minimum 1.5" crown to facilitate water run off.

The floor, roof, sides, and all exterior doors shall be fabricated from .125" (minimum) thick flat aluminum sheet stock. The exterior joints between the roof and side components shall be continuous full seam welded the entire length of the module. All exterior body panel joints shall be continuous full seam welded.

No VHB bonding tape or other adhesives shall be used in the construction of the ambulance module.

SOLE SOURCE MODULE BODY CONSTRUCTION

Y__N__

It is required that the manufacturer of this vehicle have the ability to manufacture a completed ambulance, with the exception of the chassis, within their own manufacturing facility. The modular body must be built in the manufacturer's facility and shall not be the product of a subcontractor or any company other than the manufacturer.

AWS ALUMINUM CERTIFIED WELDERS

Y__N__

AWS Aluminum Certified Welders shall construct the module.

AWS certificates shall be required to be part of the completed bid packet. Bids without AWS certificates shall be considered non-compliant (no Exception).

CONNECTIONS, MODULE

Y__N__

The module shall be bolted to the chassis frame rail with (12) 5/8" -11 grade 8 bolts through OEM rubber insulating spacers installed on outriggers at twelve (12) separate locations (six each frame rail), providing noise insulation and easy removal for chassis replacement. The frame mounting bolts shall be properly torqued and secured with locktite. The system used for fastening the module to the frame shall be that approved by the chassis manufacturer.

ALUMINUM PARTS - MODULE EXTERIOR

Y__N__

All unpainted exterior aluminum parts shall be bright dip anodized after fabrication to retain the finish and increase corrosion resistance.

CORROSION MINIMIZATION - MODULE

Y__N__

SHELBY TOWNSHIP

2018-2019 Emergency Rescue Ambulance Bid Specifications - Ford F450 4x4 Chassis

All module contact with dissimilar metals shall be minimized with the use of nylon screw-hole inserts to prevent fastener contact with the module body, nylon hinge strips, ceramic coated stainless steel hinge bolts, and ECK brand corrosion inhibitor spray.

DOOR SKINS, OUTSIDE STORAGE COMPARTMENTS - DIAMOND PLATE INTERIOR SKINS

Y__N__

The interior door skins for all outside storage compartments shall be constructed of .063" thick aluminum diamond plate.

DOOR CONSTRUCTION - GASKET PLACEMENT

Y__N__

All exterior hinged module doors shall be constructed in an inverted pan-formed design. The pan shall be constructed from .125" thick 5052-H32 flat sheet aluminum. The exterior door skin shall be constructed of .190" thick aluminum and welded to the pan.

Door gaskets shall be attached to the interior side of the door skin. Gaskets attached to interior door frames are not satisfactory and shall not be accepted.

EXTERIOR COMPARTMENTS DESIGN

Y__N__

All exterior compartments shall include these features:

- Sound absorbing slip resistant polyurethane material shall be sprayed on the inside of all compartments and compartment shelving, slide out trays and closeouts.
- Baffled seep holes shall be provided to prevent water from splashing or seeping into the exterior compartments.
- Full-length, two-way adjustable, stainless steel hinges on all exterior compartment doors with 3/16" stainless steel hinge pins.
- Compartment doors shall be installed, flush with the module body.
- When double doors are provided, each door shall have an exterior handle, but only the forward door shall be lockable. (rearward door is secured when forward door is locked). All exterior compartments and passage doors shall be keyed alike.
- Lockable, Eberhard "free-floating" type chrome plated handles with rotary locks. A gasket shall be installed under each handle to protect the paint.
- Drip rails shall be installed above all exterior compartment doors.

EXTERIOR COMPARTMENTS, VENTING

Y__N__

A minimum of nine (9) square inches of venting shall be provided inside the #1, #2, #3, & #4 exterior storage compartments to provide for easier closure of the compartment doors.

EXTERIOR COMPARTMENTS, VENTING - OXYGEN STORAGE

Y__N__

A minimum of nine (9) square inches of venting shall be provided in the exterior oxygen storage compartment, to dissipate any leaking oxygen gas.

EXTERIOR COMPARTMENTS - SWEEP-OUT

Y__N__

SHELBY TOWNSHIP

2018-2019 Emergency Rescue Ambulance

Bid Specifications - Ford F450 4x4 Chassis

Exterior module compartments shall be of a sweep-out design to aid in facilitation of the purchaser's routine care and cleaning of the vehicle.

All exterior compartment floors, with the exception of the front ALS compartment shall be constructed to be flush with the bottom door frame.

HANDLES, EBERHARD - CHROME FREE FLOATING TYPE

Eberhard #EMC-1-2110 chrome "free-floating" handles shall be installed on each exterior module door. The handles shall be large enough to accommodate a gloved hand.

Y__N__

INSULATION - POLYURETHANE SPRAY FOAM

The walls, ceiling, passage doors, outside storage doors, the entire underside of the module floor (except for mounting pads), the underside of the outside storage compartments, the wheel wells, and the underside of the curbside step area shall be completely foam - in - place insulated with nominal 3/4" thick sprayed on Class I, urethane foam for thermal and acoustical insulation. The insulation shall comply with FMVSS #302 flame spread requirements. The underside of the body shall be properly prepared to ensure adhesion before the spray insulation is applied.

Y__N__

THRESHOLD, STAINLESS STEEL - ALL OSS STORAGE COMPARTMENTS

Each exterior storage compartment with a hinged door shall have a stainless steel lower threshold at the door opening to protect the paint as equipment is installed and removed from the compartment.

Y__N__

ZICO SCBA HOLDERS KD-UH-6-SF (#23891) TWO (2)

Two (2) Zico SCBA KD-UH-6-SF (#23891) holders shall be provided and installed in a fixed location on the lower back wall of the #3 outside storage compartment per dwg. #3.

Y__N__

DOCK BUMPERS, REAR

Formed hard rubber dock bumpers shall be attached to the rear bumper.

Y__N__

DOOR SLIDING - MODULE CURBSIDE PASSAGE

The module body shall include a sliding side entry door to access the curbside of the patient compartment. The door shall slide out and towards the rear of the module body. The door design must meet FMVSS 206 for sliding doors and shall have been cycle tested in excess of 100,000 cycles. The door shall not extend out more than 5 1/4" from the module when in the open position and shall be flush in the closed position. The door shall operate on a total of nine (9) casters and three (3) tracks for ease of operation. The door shall be held closed with two (2) rotary latches and two (2) locking tabs. The door must have a system to prevent the door from self closing, when unit is parked on an incline. A measured force of ten (10) pounds maximum shall be required to release the door from the open to closed position. A chrome locking handle shall be installed on the exterior of the door. The door shall be lockable from the inside and outside and shall shut on molded air-core, automotive type door seals to prevent any water from leaking into the vehicle interior. A drip rail shall be installed above the door.

Y__N__

Documentation required:

The bidder must submit with this bid proposal a listing of not less than 200 ambulances produced with curbside sliding doors in the past four years. The listing is to include a production order number, the purchaser's agency name, and date the ambulance equipped with the curbside sliding door was delivered.

SHELBY TOWNSHIP

2018-2019 Emergency Rescue Ambulance

Bid Specifications - Ford F450 4x4 Chassis

Failure to provide the required documentation shall be considered as non-responsive.

LOWERED MODULE SIDES

Module sides to be as low as possible and still comply with KKK-1822-F ramp break over angle. Lowered sides will allow easier entry into the module as well as increased compartment storage.

Y__N__

DOORS - REAR PASSAGE

There shall be a 47.50" wide x 59" high rear door opening in the patient compartment. The doors shall be flush without a protruding flange or lip. The right rear passage door shall have a lockable, chrome exterior handle. The left rear door shall have a non-locking, chrome exterior handle. All handles shall be installed with a gasket to protect the paint. The hinge shall be full length stainless steel with a 3/16" stainless steel hinge pin and shall be two-way adjustable. Each rear door shall have a two point slam action automotive type rotary latching system to the body. The right rear door shall lock to the body at the top and bottom, not to the left rear door. The doors shall have .213" steel door latch activator rods with clevis adjusters. The doors shall be lockable from the inside and outside. All doors shall shut on molded, air-core, automotive type door seals to prevent any water from leaking into the vehicle interior.

Y__N__

FENDERETTES - POLISHED ALUMINUM

Polished aluminum fenderettes shall be installed around the rear wheel well openings.

Y__N__

HOLD-OPEN - REAR DOORS - GRABBERS

Door grabbers (1 pair) with hard rubber inserts shall be installed on the rear doors, permitting a door hold open position of 180 degrees.

Y__N__

EMERGENCY RELEASE LEVER, EXPOSED, REAR PATIENT PASSAGE DOORS

An emergency release lever with a ball knob shall be attached to each rear passage door latch and shall be operated with a sliding motion within a slotted track located towards the edge of the door frame. These levers shall provide an externally mounted means of actuating the latches from the patient compartment without the use of the interior door handles.

Y__N__

SWITCH UNLOCK, WATERPROOF - HIDDEN IN FRONT GRILLE AREA

An exterior waterproof hidden door unlock switch shall also be included.

Y__N__

LOCKS POWER - PASSAGE, COMPARTMENTS, KEY FOBs

Power door locks shall be included on module passage doors and five (5) outside storage compartments. The locks shall be activated from the interior of the rear door and the curbside doorway, as well as the OEM chassis cab door switches. A keyless entry system shall be installed. The system shall operate with the OEM key fobs to lock/unlock all chassis and module doors.

Y__N__

MUD FLAPS, REAR - BLACK RUBBER FIBERGLASS REINFORCED - THREE COLOR

Black rubber, fiberglass reinforced mud flaps with a minimum 1/4" thickness shall be bolted to the underside of the module behind the rear wheels. The width and length of the flaps shall provide adequate coverage of the rear dual wheels of the chassis. The mud flaps shall be three color with the bidder's logo.

Y__N__

REAR STEP/BUMPER -FLIP-UP CENTER SECTION - STAR PUNCHED AND ANODIZED

The rear bumper shall be affixed to the chassis frame. The bumper shall be constructed with a hinged center section. Two (2) steel braces shall secure the step to the chassis frame. The outer

Y__N__

SHELBY TOWNSHIP

2018-2019 Emergency Rescue Ambulance

Bid Specifications - Ford F450 4x4 Chassis

17" on each end of the bumper shall be constructed from heavy gauge stamped polished stainless steel bumper parts and shall provide smooth rounded corners. The step shall be constructed of star punched .125" thick aluminum diamond plate. Two (2) rear LED step illumination lights shall be provided. All diamond plate surfaces shall be bright dip anodized. Rear step installation shall comply with AMD standard 018. A strip of black PVC shall be installed on the face of the step to protect the patient cots during loading.

RUB RAILS, ANODIZED ALUMINUM

Bright dip anodized polished aluminum rub rails shall be installed on the lower sides of the body below the outside compartment sill areas. The rub rails shall be offset 3/16" from the body to facilitate wash down of road debris.

Y__N__

STEPWELL, CURBSIDE DOORWAY - MID STEP AREA

An aluminum diamond plate step well and mid-level step shall be installed in the curbside doorway threshold area.

Y__N__

STONE GUARDS, MODULE FRONT - ANODIZED DIAMOND PLATE

Bright dip anodized aluminum diamond plate stone guards shall be installed on the module front, one (1) each side.

Y__N__

KICKPLATE/THRESHOLD, REAR DOORWAY - ANODIZED DIAMOND PLATE

A bright dip anodized aluminum diamond plate kick plate shall be installed at the rear exterior doorway, providing a kick / scuff plate at the rear of the vehicle above the rear step.

Y__N__

TOW HOOKS, MODULE REAR

Two (2) tow hooks shall be provided in the rear step area and shall be securely fastened to the vehicle frame.

Y__N__

WINDOWS, PASSAGE DOOR - (CURB SLIDING, REAR FIXED)

The curbside passage door shall have a 16" x 23" openable (*sliding*) window with removable screen. Each rear passage door shall have a 19" x 18" non-openable window. The distance between the rear window glass shall not exceed 6" to assure maximum vision to the rear. The windows shall have a 69% dark tint and shall be secured with black oxide coated fasteners. No warning lights shall be blocked from view when the curbside or rear doors are open.

Y__N__

OUTSIDE STORAGE #1 - STREETSIDE FORWARD - OXYGEN STORAGE

#1 (forward street side compartment) shall have an 77.00" high x 18.25" wide clear door opening with 86.75" high x 24.50" wide x 20.75" deep interior dimensions. This compartment shall provide storage for one (1) "M" or "H" oxygen cylinder. The compartment door shall be held open with a spring loaded gas cylinder. A locking handle shall be installed on the exterior of the door keyed the same as all other exterior compartments. A spring-loaded, hinged acrylic door shall be provided to allow access from inside the patient compartment to the oxygen cylinder valve. A 9-square inch vent shall be provided in the oxygen storage compartment to permit leaking gas to dissipate to the exterior of the vehicle. The oxygen cylinder shall be secured with a minimum of four (4) restraining devices, meeting AMD standard 003, *oxygen tank retention system requirements*. A cylinder changing wrench shall be provided and secured inside the oxygen cylinder compartment. The oxygen cylinder shall be provided by the purchaser.

Y__N__

OUTSIDE STORAGE #2 - STREETSIDE CENTER

Y__N__

SHELBY TOWNSHIP

2018-2019 Emergency Rescue Ambulance

Bid Specifications - Ford F450 4x4 Chassis

#2 (street side center compartment) shall have a 44.25" high x 39.50" wide clear door opening with double doors and shall have 47.75" high x 45.50" wide x 20.75" deep interior dimensions. One (1) fusee holder shall be installed on the inner door skin of the forward compartment door. The compartment shall have double doors held open with a spring loaded gas cylinders. An exterior handle shall be installed on each door. A locking handle shall be installed on the forward door.

SHELF TRACK - EXPOSED - OSS #2

Unistrut 1-1/4" x 3/4", 19 gauge "T" grooved track channel shall be installed in outside storage compartment #2. Exposed tracks will be welded in place and coated with Gatorhyde material for a cleaner look and no exposed fasteners.

Y__N__

SHELF ONE (1) IN OSS #2

One (1) adjustable shelf with sprayed on polyurethane material shall be provided and installed in outside storage compartment #2.

Y__N__

OUTSIDE STORAGE #3 - STREETSIDE REAR - TALL DOOR-EXTERIOR ACCESS ONLY

#3 (street side rear compartment) shall have a 63.50" high x 28.75" wide clear door opening with 65.25" high x 32.50" wide x 20.75" deep interior dimensions. This compartment shall have outside access only. The compartment door shall be held open with a spring loaded gas cylinder. A locking handle shall be installed on the exterior of the door.

Y__N__

SHELF TRACK - EXPOSED - OSS #3

Unistrut 1-1/4" x 3/4", 19 gauge "T" grooved track channel shall be installed in outside storage compartment #2. Exposed tracks shall be welded in place and coated with Gatorhyde for a cleaner look and no exposed fasteners.

Y__N__

SHELF ONE (1) IN OSS #3

One (1) adjustable shelf with sprayed on polyurethane material shall be provided and installed in outside storage compartment #3.

Y__N__

OUTSIDE STORAGE #4A BOARD/SCOOP, #4B W/INSIDE/OUTSIDE ACCESS

#4 (rear curbside compartment) shall have split compartments (**#4A** / **#4B**), with a 73.00" high x 24.75" wide clear door opening: compartment **#4A** shall have 82.75" high x 15.00" wide x 20.75" deep interior dimensions. This compartment shall provide storage for backboards and a scoop stretcher.

Y__N__

Compartment **#4B** shall have 82.75" high x 13.50" wide x 20.75" deep interior dimensions. The compartment door shall be held open with a spring loaded gas cylinder. A locking handle shall be installed on the exterior of the door.

SHELF TRACK - EXPOSED - OSS #4

Unistrut 1-1/4" x 3/4", 19 gauge "T" grooved track channel shall be installed in outside storage compartment #4. Exposed tracks will be welded in place and coated with Gatorhyde material for a cleaner look and no exposed fasteners.

Y__N__

SHELVES THREE (3) IN OSS #4

Three (3) adjustable shelves with sprayed on polyurethane material shall be provided and installed in outside storage compartment #4.

Y__N__

OUTSIDE STORAGE #5 - CURBSIDE FORWARD

Y__N__

SHELBY TOWNSHIP

2018-2019 Emergency Rescue Ambulance

Bid Specifications - Ford F450 4x4 Chassis

#5 (forward curbside compartment) shall have a 69.50" high x 17.50" wide clear door opening. The compartment shall be split into two (2) compartments. #5A provides inside/outside storage and shall have two (2) adjustable shelves. (Reference the lower front wall cabinet in patient compartment specification for interior dimensions). #5B shall have 19.00" high x 20.25" wide x 18.00" deep interior dimensions. The compartment door shall be held open with a spring loaded gas cylinder. A locking handle shall be installed on the exterior of the door.

ROUNDED INTERIOR CORNERS

Interior vertical edges shall have rounded corners in the following locations: forward and aft edges of the CPR seat, the wall at the aft end of the squad bench, the partition opening cabinet edges and the upper front wall cabinet.

Y__N__

LATCHES, CABINET, CN10 COMPLIANT AS APPLICABLE

The ACP (attendant control panel) door, the PDQ (power distribution quarters) door, and the radio cabinet door shall be secured with chrome locking lever latches; all remaining interior hinged cabinet doors shall be secured with center squeeze latches. All interior drawers shall be secured with locking flush pull latches. Cabinet(s) shall be KKK-A-1822F Change Notice 10 compliant and conform to all applicable SAE J3058 requirements.

Y__N__

CABINET - LEFT WALL, UPPER REAR #1 - RESTOCKING HINGE (UP)

The left wall, upper rear interior cabinet (#1) shall be enclosed by one (1) set of sliding polycarbonate doors attached to a flip-up restocking frame with gas filled hold-open shocks. The doors shall have full length handles with the outer most sliding door to have handles on both ends. The cabinet shall contain a center divider with one (1) adjustable shelf, each side.

Y__N__

LEFT WALL - ATTENDANT CONTROL PANEL - HINGED PANEL

A WELDON Vista Control Screen mounted on an angled flip – down panel secured with locking chrome lever latches. The panel will be located to the immediate right of the attendant's seat. The forward portion of the panel will contain a flat area that may be used for future radio mounting, etc.

Y__N__

CABINET - LEFT WALL, UPPER OVER PANEL #2 RESTOCKING HINGE

The left wall, upper interior cabinet (#2) above the attendant control panel shall be enclosed by one (1) set of sliding polycarbonate doors attached to a flip-up restocking panel frame with gas filled hold-open shocks. The doors shall have full length handles with the outer most sliding door to have handles on both ends. The cabinet shall contain a center divider with one (1) adjustable shelf, each side.

Y__N__

CABINET # 4 - LEFT WALL - REAR ACTION AREA

An interior cabinet unit (#4) shall be installed under the second action area on the interior left wall of the module. The compartment shall be enclosed by one (1) set of sliding polycarbonate doors with full length handles and the outer most sliding door to have handles on both ends. The cabinet shall be equipped with one (1) adjustable shelf.

Y__N__

PRIMARY ACTION AREA EXTENDED

Primary action area has been extended to 82"

Y__N__

DRAWER - SLIDE-OUT / WRITING TABLE STREETSIDE INTERIOR

Y__N__

SHELBY TOWNSHIP

2018-2019 Emergency Rescue Ambulance

Bid Specifications - Ford F450 4x4 Chassis

A slide-out drawer with a hinged acrylic writing surface shall be provided in the street side wall beside the attendant seat. The drawer shall be constructed of .090" thick aluminum and shall be secured with one (1) stainless steel flush pull latch. The writing surface shall be installed on top of the drawer with a hinge. The drawer interior dimensions shall be 4.50" high x 14.50" wide x 13.25" deep.

CABINET - FRONT WALL, UPPER #1-MODIFIED

Upper front wall cabinet #1 has been modified (width) due to the FT454 Heat/A.C. unit. Cabinet is to be built per [dwg. #7](#) dimensions. Cabinet is to be built per [dwg. #7](#) dimensions. Cabinet is to have one (1) adjustable shelf. Cabinet is to be enclosed by a top hinged aluminum door with a [polycarbonate](#) insert and be secured with a center squeeze latch. Per [dwg. #7](#).

Y__N__

CABINET - FRONT WALL, LOWER #2 & #3 - INSIDE/OUTSIDE ACCESS-MODIFIED

The front wall lower cabinet (#2) shall have a door opening of 11.50" high x 25.25" wide with interior dimensions of 13.25" high x 31.50" wide x 21.50" deep IPOS, per [dwg. #7](#). This cabinet shall provide inside access only and be enclosed with solid aluminum doors, secured with a Simplex combination lock on the right door and a center squeeze latch on the left door. One (1) clear light mounted in a removable panel will provide illumination in this compartment. There shall be no shelving or partitions within this cabinet.

Y__N__

The front wall lower cabinet (#3) shall have a door opening of 30.50" high x 25.25" wide with interior dimensions of 32.25" high x 31.50" wide x 21.50" deep IPOS, per [dwg. #7](#). This cabinet shall provide inside/outside access and shall have two (2) adjustable shelves on [Unistrut](#) adjustable track brackets. Two (2) clear lights mounted in a removable panel will provide illumination in this compartment. There shall be aluminum beveled ramp edging installed on two edges of each shelf. This compartment shall be enclosed by one (1) pair of [polycarbonate](#) doors. Each door shall have a full length hinge, a full length handle, and a center squeeze latch.

CABINET - FRONT WALL, LOWER BELOW PDQ (SINGLE VENTED DOOR)

The compartment below the power distribution cabinet (PDQ) shall have a vented, hinged aluminum door secured by a chrome locking lever latch. Door to open towards rear of the ambulance module.

Y__N__

PASS THROUGH - CAB TO MODULE, WINDOW OPENING

A window opening shall be provided in the rear of the cab to accommodate pass-through communications to the patient compartment. A bellows shall be provided to connect the cab to the module.

Y__N__

COMPARTMENT - RIGHT WALL, REAR WITH (1) DOOR, INSIDE/OUTSIDE

A storage compartment (#1) shall be provided to the rear of the squad bench. The compartment shall face the patient compartment aisle with access to the rear outside storage compartment. The compartment shall be enclosed by a hinged polycarbonate door and with full length handles and center squeeze latch.

Y__N__

CABINETS - RIGHT WALL, UPPER #3- #4 NO ANGLED PANEL WITH LIGHTS

Two (2) cabinets shall be installed on the curbside above the squad bench. The cabinets shall be enclosed by one (1) set of top hinged polycarbonate doors which shall have center squeeze latches. There shall be a minimum of 43" of headroom below the cabinet.

Y__N__

SHELBY TOWNSHIP

2018-2019 Emergency Rescue Ambulance Bid Specifications - Ford F450 4x4 Chassis

** THIS OPTION WILL NOT ALLOW ANGLED LIGHTS ABOVE SQUAD BENCH; MUST USE DELETE OPTION, ALSO RELOCATES THE IV HANGER FROM ABOVE THE SQUAD BENCH **

HEAT/AIR CONDITIONING, HOSELINE FT454 HEAT/A.C. SYSTEM

Y__N__

A Hoseline FT454 heater/air conditioner system with 56,000 BTU heating capacity and 38,000 BTU cooling capacity utilizing a 4x4 AC/Heat core and with a 10-speed blower controlled through, the pulse-width-modulated output of the microprocessor based electrical system, shall be provided for high volume air movement with minimal noise. The heater/air conditioner air return shall be filtered to minimize contamination of the heater/air conditioner cores. The cab and module environmental systems shall be simultaneously capable of heating in the front while cooling in the rear and vice-versa. A thermostatically controlled rear system shall be provided for heating and air conditioning the patient compartment.

The temperature, whether heating or cooling, shall be controlled by a thermostat built into the attendant control panel screen, located in the street side cabinet and from the cab master control console screen. Heating and cooling may be selected automatically or manually. The heater/air conditioner system shall function only when the ignition system and the module power switch are on. The rear heater shall have EPDM/Nomex heater hoses. The rear air conditioner shall have barrier air conditioner hoses for R-134A refrigerant. Full module HVAC controls shall be located on both the rear ACP screen and the cab MCC screen.

The module heat and ac system shall be installed in the upper portion of the front wall. Four (4) adjustable heat/ac vents shall be located above the heater/ac.

SEATING - SQUAD BENCH BASE W/ STORAGE CN8 COMPLIANT EVS

Y__N__

A Squad bench seat with two (2) individual seating positions will be installed on the curb side of the patient compartment. The squad bench seat shall be KKK-A-1822F Change Notice 8 compliant with (2) V4 harness style shoulder / seat belts and conform to all applicable FMVSS and SAE J3026 requirements. Documentation from a certified independent testing facility shall be required stating the seat has passed SAE J3026 requirements and tested in accordance with SAE J2917, Occupant Restraint and Equipment Mounting Integrity – Frontal Impact System-Level Ambulance Patient Compartment and SAE J2956, Occupant Restraint and Equipment Mounting Integrity – Side Impact System-Level Ambulance Patient Compartment. The seat bottom, backrest, and headrest of the seat shall be padded and covered with color coordinated, cushioned vinyl. A storage area shall be provided in the squad bench base. The squad bench base shall be constructed of .090" thick aluminum for maximum storage capacity and minimum weight. The interior dimensions of the storage area shall measure 14.25"h x 77.00"w x 21.00"d. The interior of the squad bench shall be sprayed with sound absorbing polyurethane material.

ATTN SEAT - EVS HiBAC, INTEGRAL CHILD, SWIVEL BASE CN8 COMPLIANT

Y__N__

A rear facing EVS HiBAC attendant seat shall be installed at the head of the patient cot. The seat shall be equipped with a SB-2, two position, sliding swivel base and incorporate an integral child safety restraint system. The seat shall be KKK-A-1822F Change Notice 8 compliant with V4 harness style shoulder / seat belt and conform to all applicable FMVSS and SAE J3026 requirements. Documentation from a certified independent testing facility shall be required stating the seat has passed SAE J3026 requirements and tested in accordance with SAE J2917, Occupant Restraint and Equipment Mounting Integrity – Frontal Impact System-Level Ambulance Patient Compartment and SAE J2956, Occupant Restraint and Equipment Mounting Integrity – Side Impact

SHELBY TOWNSHIP

2018-2019 Emergency Rescue Ambulance Bid Specifications - Ford F450 4x4 Chassis

System-Level Ambulance Patient Compartment. The seat shall be padded and covered with color coordinated, cushioned vinyl.

DELETE CPR SEAT

CPR seat has been deleted due to the extended primary action area..

Y__N__

SQUAD BENCH LID - SPLIT w/ NO SHARPS/TRASH CONFINEMENT

Install a split squad bench lid IPOS. without recessed sharps/waste containment, per dwg. 6.

Y__N__

HOLD OPENS - SQUAD BENCH LID - GAS CYLINDERS

Two (2) gas cylinders hold -opens shall be provided and installed to hold the cushioned lid in the open and closed position.

Y__N__

CABINET CONSTRUCTION - INTERIOR - ALUMINUM

All interior cabinets shall be constructed of .090" thick welded aluminum. Wood products shall not be used in the construction of any interior cabinet. All cabinet exteriors, interiors, drawer fronts, drawer interiors, and aluminum doors shall be sealed with a washable sprayed-on multi-use polychromatic coating.

Y__N__

RECESSED ADJUSTABLE SHELF TRACK - CABINETS

Unistrut 13/16" x 13/32", 19 gauge channel shall be installed in the interior cabinets that contain adjustable shelves. The track shall be welded in and recessed to reduce the number of fasteners and provide a cleaner look.

Y__N__

HOLD OPENS FOR INTERIOR DOORS

All interior cabinets with doors less than 6" tall shall have friction hinges as hold opens for door(s). Doors 6" and taller shall be designed using gas shocks as hold opens for the door(s).

Y__N__

CATCH, MAGNETIC - ADHESIVE BACK FOR INTERIOR DOOR(S) OVER 36 INCHES

All interior doors that are over 36" inches tall with a latch on the top of the door shall have an adhesive back magnetic catch installed on the bottom of the door.

Y__N__

CABINET DOORS - BRONZE POLYCARBONATE IPOS

All cabinet doors shall be bronze polycarbonate material in place of clear polycarbonate.

Y__N__

CABINETS/ WALLS - POLYCHROMATIC COATING - MARBLE STONE

All exposed side walls, the partition wall (on the patient compartment side only), the headliner, along with the cabinet and drawer fronts, aluminum doors, cabinet and drawer interiors shall be covered with a washable #99-7371 Marble Stone sprayed-on multi-use polychromatic coating, to create a laminate-free interior.

Y__N__

COUNTER TOP - SOLID ACRYLIC - NIGHT STARS (BLACK)

A solid acrylic counter top, Night Stars, with a 1/2" lip shall be installed to prevent equipment from sliding off. The solid acrylic counter top shall be provided on both the primary and secondary action area counters, fore and aft of the CPR seat.

Y__N__

UPHOLSTERY - PATRIOT PLUS CHARCOAL #8605

Y__N__

SHELBY TOWNSHIP

2018-2019 Emergency Rescue Ambulance Bid Specifications - Ford F450 4x4 Chassis

All cushions, head pads and seats shall be covered with Patriot Plus Charcoal #8605 expanded vinyl upholstery material. The vinyl and all foam cushion material shall comply with FMVSS #302 flame spread requirements.

LONPLATE II, NON-SLIP EMBOSSED SM. GRID - GUNMETAL #424

The floor in the patient compartment shall be covered with Lonseal brand "Lonplate II" non-slip; small grid (embossed) Gunmetal #424, resilient sheet vinyl flooring material, which shall be covered 3-inches up the wall on the street side, and to the top of the squad bench base on the curbside. The flooring material shall be stripped and waxed before delivery.

Y__N__

COT MOUNT FASTENERS

Y__N__

COT MOUNT / FASTENER FEATURES **CN8 COMPLIANT STD**

Y__N__

ASPIRATOR / SUCTION - SSCOR - WITH ELECTRIC PUMP - RECESSED

An SSCOR suction system shall be recessed into the street side lower interior wall near the attendant's seat. The system shall be activated by a switch on the attendant control panel. The 12 VDC electric vacuum pump shall be mounted in the standard outside storage compartment. The SSCOR vacuum pump exhaust shall be vented to the exterior of the vehicle.

Y__N__

ASSIST HANDLES, (2) 'V' STAINLESS STEEL, (4) BLACK URETHANE

A total of six (6) assist handles shall be provided: two (2) 1-1/4" diameter stainless steel 'V' handles, one (1) on each rear passage door; and four (4) 10-7/8" black vulcanized rubber with steel core assist handles, two (2) handles at the rear doorway, one (1) at the curbside doorway, and one (1) on the curbside sliding door.

Y__N__

BAR - "A" - AT HEAD OF SQUAD BENCH w/ SHARPS/WASTE CONTAINMENT

Install A-Bar at the head of the squad bench, with sharps and waste containment, per dwg. # 6 & # 8.

Y__N__

CLOCK - TRIN TEC, 8" 12/24 HR, QUARTZ BATTERY - REAR HEADPAD

A Trin Tec 8" diameter, 12/24 hour battery operated quartz clock shall be installed in the headpad above the rear module passage doors.

Y__N__

COT FASTENER - STRYKER PERFORMANCE LOAD SIDE POSITION W/ INDUCTIVE CHARGER CN8

A Stryker Performance - LOAD (sidemount) fastener system shall be installed on the module floor to accommodate a Stryker cot. 0.625" thick aluminum tapping plate(s) shall be installed below the aluminum floor to secure the cot floor mounting plate. A transfer relay and breakers shall be installed to allow system to charge only when the Shoreline is plugged in or when the system is active. Install a mass casualty locking bar per dwg. #9.

Y__N__

EMBLEMS / SIGNS - REAR PATIENT COMPARTMENT

Two (2) "No Smoking / Oxygen Equipped / Fasten Seat Belts" signs shall be provided. One (1) sign shall be installed in the cab and one (1) above the oxygen outlets in the patient compartment street side cabinet.

Y__N__

EXHAUST VENTILATOR, 3-SPEED - MULTIPLEX ELECTRIC SYSTEM

Y__N__

SHELBY TOWNSHIP

2018-2019 Emergency Rescue Ambulance Bid Specifications - Ford F450 4x4 Chassis

A three-speed, 300 CFM (minimum) exhaust fan meeting KKK-A-1822F requirements shall be provided and located in the street side cabinet in the patient compartment. The exhaust fan shall be pulse width modulated from a switch on the attendant control panel vista screen. The exhaust system shall have a louvered grille inside and a chrome vent outside. The exhaust system shall vent through the side of the vehicle, not through the roof.

F W #521 STORAGE BRACKET FOR "D", OR JUMBO "D" CYLINDER (2) - OUTSIDE STORAGE #1

Y__N__

Two (2) Ferno Washington #521 crash stable storage brackets shall be installed, each for one (1) "D", or Jumbo "D" oxygen cylinder on the forward wall of the #1 outside storage compartment, per dwg. # 3.

FIRE EXTINGUISHER - (1) ABC DRY CHEM 5 LB. WITH BRACKET

Y__N__

One (1) ABC Dry-Chemical, 5 lb. fire extinguisher and mounting bracket shall be installed in the #1 outside storage compartment and located below the Ferno 521 oxygen tank brackets, per dwg. # 3 notation.

FLOOR CONSTRUCTION- PATIENT COMPARTMENT, NON-WOOD COMPOSITE

Y__N__

The sub-floor in the patient compartment shall be constructed of .125" thick aluminum over .125" and .190" thick reinforcing hat sections and mounting laterals. The aluminum sub-floor shall be covered with a single piece of 3/4" **non-wood composite material**. All corner molding, edging and trim shall be anodized aluminum or stainless steel and shall be sealed to prevent fluids from seeping under the cabinets.

Wood floors are not satisfactory and shall not be accepted by the purchaser.

FLOORING - COVE

Y__N__

The patient compartment floor radius shall be covered with pre-formed floor coving material. The coving shall be installed behind the vinyl floor covering, along both the street side and curbside walls.

GLOVE DISPENSER - (3) BOX - ABOVE ENTRY DOOR - CURBSIDE (ABS)

Y__N__

A three (3) - box glove dispenser unit, with a clear polycarbonate hinged access panel with three (3) cut-outs, shall be recessed above the curbside entry door. The dispenser shall be 8.25" high x 33.50" wide with interior dimensions of 5.38" high x 30.25" wide x 3.25" deep. A 1/4" turn latch will be installed on the face of the glove box access panel.

GRAB RAILS, 1-1/4" DIAMETER, (96") OVER COT & (64") SQ BENCH

Y__N__

Two (2) 1-1/4" diameter stainless steel grab rails shall be installed on the ceiling of the patient compartment. One (1) 64" rail shall be installed over the squad bench area and one (1) 96" rail shall be installed over the patient cot area for attendant/patient balance control. The 96" grab rail will be attached to the ceiling with three (3) mounting brackets that secure it to the super structure of the module. Installation of each grab rail shall comply with AMD-008 requirements.

HEADLINER - REAR PATIENT COMPARTMENT

Y__N__

The headliner in the patient compartment shall be one-piece, seamless, .090 thick aluminum finished with sprayed-on multi-use polychromatic coating.

I V HANGERS - CEILING RECESSED - CAST PRODUCTS #IV2008-1 (2)

Y__N__

SHELBY TOWNSHIP

2018-2019 Emergency Rescue Ambulance

Bid Specifications - Ford F450 4x4 Chassis

Two (2) Cast Products #IV2008-1 recessed, dual, ceiling I.V. hangers shall be provided. One (1) installed near the street side above the cot area, and one (1) near the curbside above the squad bench area.

OXYGEN OUTLETS (2) WALL/(1)CEILING - OHIO MEDICAL TYPE

Y__N__

Three (3) Ohio Medical flush mounted, quick release outlets shall be installed. One (1) in the forward street side cabinet action area, one (1) shall be installed in the wall above the squad bench and one (1) shall be installed in the ceiling above the head end of the cot.

OXYGEN OUTLET (1) ADDITIONAL - OHIO MEDICAL TYPE STREETSIDE W/ ANALOG GAUGE

Y__N__

One (1) additional Ohio Medical flush mounted, quick release oxygen outlet shall be installed in the patient compartment for a total of two (2) on the streetside (1) IATS, per dwg. # 5. An analog gauge shall be provided on the streetside to regulate the O2 flow levels IPOS, per dwg. # 5.

FLOW METERS, OXYGEN - THORPE STYLE

Y__N__

One (1) Thorpe style oxygen flow meter (15LPM) shall be shipped loose with the completed vehicle.

OXYGEN SYSTEM, ELECTRIC - MULTIPLEX ELECTRIC SYSTEM

Y__N__

A 12 VDC controlled electric O2 system operated through the v-mux multiplex electrical system shall be provided and installed.

The oxygen system shall be completely installed and include a pre-set oxygen regulator with a cylinder pressure gauge and a 200 PSI safety valve with all necessary piping and connections. The oxygen system shall be completely low pressure, and the regulator shall be fastened directly to the cylinder. The regulator shall be set to operate at approximately 50 PSI. The oxygen cylinder shall be installed so the system may be easily turned on and off at the main cylinder valve from the patient compartment. The oxygen cylinder shall be provided by the purchaser.

The oxygen system monitor shall be readily available to the attendant while seated at the head of the cot as part of the microprocessor based electrical system. Flexible conductive oxygen hose with a minimum 900 lbs. burst rating shall be installed between the regulator and the oxygen receptacles. The system shall be tested and tagged in conformance with NFPA-56-F and KKK-A-1822F.

The electric oxygen system shall be provided with an on/off switch on the attendant control panel screen. The emergency manual bypass valve shall be located near the oxygen storage compartment in the patient compartment.

PADDED EDGING PROTECTION

Y__N__

Padded corner edging shall be installed where necessary on exposed corners and edges in the patient compartment for patient and attendant protection.

PADS, HEAD AND BACK

Y__N__

Vinyl upholstered, foam cushioned head/back pads shall be installed as follows: the lower edge of the upper front wall cabinet (above the partition doorway or window), above the rear doors, above the side door, and on the street side wall behind and each side of the CPR seat. The pads shall be covered with a flame retardant color coordinated vinyl upholstery material.

SHELBY TOWNSHIP

2018-2019 Emergency Rescue Ambulance

Bid Specifications - Ford F450 4x4 Chassis

RADIO SPEAKERS, REAR HEADPAD (OEM RADIO & ACP FADER CONTROL)

Y__N__

Two (2) stereo speakers shall be installed in the rear head pad. The fader control for the rear speakers shall be provided through the OEM radio and a fader control located in the ACP.

SHARPS AND TRASH CONTAINERS - ACCESS THRU SQUAD BENCH LID-DELETE

Y__N__

A 6.9 qt. #BD5489 sharps container, and a 8 qt. trash container shall be installed in the forward end of the squad bench base. The containers shall be access through the squad bench lid, and covered with a 3/8" thick clear acrylic hinged lid with a biohazard warning label.

SQUAD BENCH FACE - VINYL FLOORING MATERIAL

Y__N__

The face of the squad bench shall be covered with vinyl flooring material.

DOOR PANELS - MODULE PASSAGE DOORS - FULL LENGTH ALUMINUM - W/ACCESS PANELS

Y__N__

The inner door panels shall be manufactured from aluminum, and covered with a washable sprayed-on multi-use polychromatic coating. The panels shall run the full length of the door and will contain a removable latch access panel.

STAINLESS STEEL WALL PROTECTION - INTERIOR STREETSIDE

Y__N__

A brushed stainless steel panel shall be provided on the street side wall from the bottom of the CPR seat cushion down to the flooring material to protect this area when the cot is taken in or out of the vehicle.

TURTLE TILE - SKID-RESISTANT MAT, CURBSIDE STEPWELL

Y__N__

Skid resistant charcoal gray turtle tile matting shall be installed in the curbside step well.

LEFT WALL CABINET #1A-RESTOCKING FRAME

Y__N__

Install left wall cabinet #1A per [dwg. #5](#) dimensions and location. Cabinet is to have fixed center divider with one (1) adjustable shelf each side of the divider. Cabinet is to be enclosed by a set of sliding [polycarbonate](#) doors that are attached to flip-up restocking frame. Per [dwg. #5](#).

LEFT WALL CABINET #3

Y__N__

Install left wall cabinet #3 the end of the extended primary action area per [dwg. #5](#) dimensions and location. Cabinet is to have one (1) adjustable shelf. Cabinet is to be enclosed by a left hinged [polycarbonate](#) door that will be secured with a center squeeze latch. Per [dwg. #5](#).

LEFT WALL CABINET #5

Y__N__

Install left wall cabinet #5 at the forward end of the primary action area per [dwg. #5](#) dimensions and location. Cabinet is to have two (2) adjustable shelves and be enclosed by a set of sliding [polycarbonate](#) doors. Per [dwg. #5](#).

LEFT WALL CABINET #6

Y__N__

Install left wall cabinet #6 under the extended primary action area per [dwg. #5](#) dimensions and location. Cabinet is to have a fixed center divider with one (1) adjustable shelf each side of the divider. Cabinet is to be enclosed by a set of sliding [polycarbonate](#) doors. Per [dwg. #5](#).

CABINET - FRONT WALL, LOWER CENTER # 4 UNDER PASS THROUGH w/ COUNTER

Y__N__

The #4 lower center front wall cabinet shall have a door opening of 18.00"h x 16.25"w and inside dimensions of 18.00"h x 16.25"w x 20.00"d IATS, per [dwg. # 7](#). Cabinet shall be enclosed with dual hinged solid aluminum doors, each secured with one (1) center squeeze latch and equipped

SHELBY TOWNSHIP

2018-2019 Emergency Rescue Ambulance Bid Specifications - Ford F450 4x4 Chassis

with one (1) adjustable shelf. Cabinet shall be topped with a solid acrylic counter top, color(s) to match the streetside counter tops.

PAINT PROCEDURE

All non-anodized aluminum module body surfaces shall be completely chemically steam cleaned, filled with premium body filler as needed, sanded smooth and primed with an epoxy primer and then primed again with a high solid primer.

The cured primer surfacer shall be DA sanded with 320 grit and cleaned. A high solid primer shall then be applied, where needed, as a sealer.

Y__N__

CLEAR COATING - MODULE PAINT

The entire module shall be clear-coated, using an Axalta Process, sprayed over the final paint coat.

Y__N__

BUFFING, PAINT - MODULE

The paint on the module sides shall be buffed to a high shine using a recommended paint buff system.

Y__N__

STANDARDS AND SPECIFICATIONS FOR VEHICLE PAINT APPEARANCE

Standards and Specifications for Vehicle Paint Appearance

Y__N__

1. **PURPOSE:** To provide cosmetic standards that represent a common language and set of shared expectations of the appearance quality the Bidder's vehicle. This and associated documents define the appearance acceptability and non-acceptability criteria for the Bidder's Ambulance. These standards represent a realistic balance between our Customer expectations and the derived output from our current manufacturing process. Any output required beyond these objectively based requirements requires extraordinary means and comes with associated costs and timing.
2. **SCOPE:** These standards apply to all of the Bidder's vehicles being produced beginning in calendar year 2016.
3. **DEFINITIONS:**
 - 3.1 Class A Surfaces are defined as:
 - A. Highly Visible or reflective surfaces that cause the viewer's eye to focus on that area of the vehicle.
 - B. The exterior of the vehicle from 36 inches off of the ground to 96 inches off of the ground.

SHELBY TOWNSHIP

2018-2019 Emergency Rescue Ambulance Bid Specifications - Ford F450 4x4 Chassis

- C. Areas that passengers of the vehicle would view in a normal viewing direction of (+/- 45 degrees) and a distance of (24 Inches – 36 inches).
- 3.2 Class B Surfaces are defined as;
- A. Less visible area that is viewed as a general area. This would include areas beyond the normal viewing direction as specified in Class A surfaces including those higher than 96 inches off of the ground or lower than 36 inches off of the ground.
 - B. Another description would include areas seen peripherally.
 - C. Any area that must be viewed at an unusual angle.
- 3.3 Class C Surfaces are defined as;
- A. Any area that must be viewed by close inspection.
 - B. This would include the roof area of a cab.
 - C. Any area that would be visible less than 1% of the time such as door jams or the back of doors including those on the module
- 3.4 Class D Surfaces are defined as;
- A. Areas that the consumer will be unable to evaluate without removal of other component parts.
 - B. Any area that must be viewed at an abnormal or unusual angle.
 - C. Any area that can only be seen when lying on the ground, from under the vehicle, or require a ladder to see, such as the roof.

4. PROCEDURE:

- 4.1 General Inspection Requirements:
- A. Cosmetic inspection by the Bidder or its suppliers shall use the TIME and DISTANCE method of inspection as described in different sections of this document.
 - B. The Cosmetic standards defined in this document shall be used for training personnel, checking surface quality produced by any process and used in making “Accept/Reject” decisions.
- 4.2 Viewing Conditions:
- A. All visual inspection will be made under normal artificial lighting, unaided and viewed in a manner that duplicates the typical end use of the vehicle. During cosmetic inspection, only visual qualities (appearance) of the part surface shall be considered. Surfaces shall be viewed without the aid of magnification, at an angle approx. 45° to normal of the surface to be inspected.

SHELBY TOWNSHIP

2018-2019 Emergency Rescue Ambulance Bid Specifications - Ford F450 4x4 Chassis

- 4.3 The following are Inspection criteria:
- A. Inspection shall be conducted using the unaided eye.
 - B. Viewing distance shall be 18" or 24" as specified by surface class.
 - C. Viewing angle shall be at a minimum of 45° to the surface.
 - D. Light source shall be fluorescent light; the light source shall provide optimal viewing and minimized glare and shadowing of the vehicle.
 - E. Where subjectiveness intervenes in the assessment, form/fit/function shall take precedent.

4.4 The following table shall be used to determine viewing distance and duration:

Codes:	Class A	Class B	Class C	Class D
Viewing Distance:	18 inches	18 inches	24 inches	24 inches
Viewing Time:	10 seconds	5 seconds	3 seconds	3 seconds
Viewing Area: SQD	50 Inches SQD	50 Inches SQD	50 Inches SQD	50 Inches

4.5 Conditions and Acceptance Criteria

- A. The total number of defects per surface shall not exceed the acceptable limit.
- 4.6 Specific boundary samples are logged in the Bidder's Database and reviewed annually at a minimum for applicability.
- 4.7 These standards do not apply to an OEM chassis in which cased, OEM acceptance standards apply unless it has been quoted to meet the Bidder's Appearance Standards.
- 4.8 Any OEM chassis painted by the Bidder will conform to the original OEM acceptance standards unless it has been quoted to meet the Bidder's Appearance Standards.

Specification Limits For Vehicle Appearance (Exterior)

ITEM	"A" Surface	"B" Surface	"C" Surface	"D" Surface
Bare Substrate	NOT ALLOWED	NOT ALLOWED	NOT ALLOWED	NOT ALLOWED
Pin Hole/Solvent Pop	.5 mm max. size/1 per 50 inches Squared /must be a minimum of 50 inches apart - MUST NOT BE DEEPER THAN THE CLEAR COAT	1.0 mm max. size/1 per 50 inches Squared /must be a minimum of 50 inches apart - MUST NOT BE DEEPER THAN THE CLEAR COAT	1.5 mm max. size/2 per 50 inches Squared /must be a minimum of 25 inches apart - MUST NOT BE DEEPER THAN THE CLEAR COAT	2.0 mm max. size/3 per 25 inches Squared / must be 12 inches apart - MUST NOT BE DEEPER THAN THE CLEAR COAT
Chips/Damage	NOT ALLOWED	NOT ALLOWED	NOT ALLOWED	NOT ALLOWED
Cracking	NOT ALLOWED	NOT ALLOWED	NOT ALLOWED	NOT ALLOWED
Fish Eyes	NOT ALLOWED	NOT ALLOWED	NOT ALLOWED	Must match Boundry Sample
Dings	NOT ALLOWED	NOT ALLOWED	NOT ALLOWED	NOT ALLOWED
Dirt - Must "feel" flat	.5 mm max. size/1 per 50 inches Squared /must be a minimum of 50 inches apart	1.0 mm max. size/1 per 50 inches Squared /must be a minimum of 50 inches apart	1.5 mm max. size/1 per 50 inches Squared /must be a minimum of 25 inches apart	2.0 mm max. size/ 3 per 25 inches Squared / must be 12 inches apart
Dry Spray	NONE ALLOWED	NONE ALLOWED	NONE ALLOWED	Must match Boundry Sample

SHELBY TOWNSHIP

2018-2019 Emergency Rescue Ambulance Bid Specifications - Ford F450 4x4 Chassis

Mottling - Color Specific	Must match Boundry Sample	Must match Boundry Sample	Must match Boundry Sample	Must match Boundry Sample
Off Color to Cab or other Module elements	Visually acceptable to the Master Plaque or the Delta E is not greater than 1.5	Visually acceptable to the Master Plaque or the Delta E is not greater than 1.5	Visually acceptable to the Master Plaque or the Delta E is not greater than 1.5	Visually acceptable to the Master Plaque or the Delta E is not greater than 1.5
Orange Peel	Equivalent to # 10 panel MIN.	Equivalent to # 10 panel MIN.	Equivalent to # 10 panel MIN.	Equivalent to # 7 panel MIN.
Overspray	NONE ALLOWED	NONE ALLOWED	NONE ALLOWED	Must match Boundry Sample
Paint Drops/Drips	NONE ALLOWED	NONE ALLOWED	NONE ALLOWED	NONE ALLOWED
Pits/Porosity	NONE ALLOWED	NONE ALLOWED	NONE ALLOWED	NONE ALLOWED
Crooked Mask Lines	NONE ALLOWED	NONE ALLOWED	NONE ALLOWED	NONE ALLOWED
Burn Through	NONE ALLOWED	NONE ALLOWED	NONE ALLOWED	NONE ALLOWED
Sags/Runs	NONE ALLOWED	NONE ALLOWED	NONE ALLOWED	NONE ALLOWED
Scratches	NONE ALLOWED	NONE ALLOWED	NONE ALLOWED	NONE ALLOWED
Polishing Swirls (Scratches)	Minimal amount of micro scratches from polishing are acceptable, must not be felt or able to be seen from 24 inches	Minimal amount of micro scratches from polishing are acceptable, must not be felt or able to be seen from 24 inches	Minimal amount of micro scratches from polishing are acceptable, must not be felt or able to be seen from 24 inches	Minimal amount of micro scratches from polishing are acceptable, must not be felt or able to be seen from 24 inches
Shrinking	NONE ALLOWED	NONE ALLOWED	NONE ALLOWED	NONE ALLOWED
Thin Paint	NONE ALLOWED	NONE ALLOWED	NONE ALLOWED	NONE ALLOWED
Water Spots/Rinse Blisters	NONE ALLOWED	NONE ALLOWED	NONE ALLOWED	NONE ALLOWED
Wet Mark	NONE ALLOWED	NONE ALLOWED	NONE ALLOWED	NONE ALLOWED
Wrinkling	NONE ALLOWED	NONE ALLOWED	NONE ALLOWED	NONE ALLOWED

Specification Limits For Vehicle Appearance (Interior)

ITEM	"A" Surface	"B" Surface	"C" Surface	"D" Surface
Bare Substrate	NOT ALLOWED	NOT ALLOWED	NOT ALLOWED	NOT ALLOWED
Pin Hole/Solvent Pop	NOT ALLOWED	NOT ALLOWED	NOT ALLOWED	N/A
Chips/Damage	NOT ALLOWED	NOT ALLOWED	NOT ALLOWED	N/A
Cracking	NOT ALLOWED	NOT ALLOWED	NOT ALLOWED	N/A
Dirt - Must "feel" flat	NOT ALLOWED	NOT ALLOWED	1mm in diameter or 1.5mm surface area (L x W) at a minimum of 400 mm apart.	N/A
Dry Spray	NOT ALLOWED	NOT ALLOWED	ALLOWED	N/A
Off Color to other Module elements	NOT ALLOWED	NOT ALLOWED	NOT ALLOWED	N/A
Overspray	NOT ALLOWED	NOT ALLOWED	ALLOWED	N/A
Paint Drops/Drips	NOT ALLOWED	NOT ALLOWED	1mm in diameter	N/A
Pits/Porosity	NOT ALLOWED	NOT ALLOWED	NOT ALLOWED	N/A
Crooked Mask Lines	NOT ALLOWED	NOT ALLOWED	NOT ALLOWED	N/A
Sags/Runs	NOT ALLOWED	NOT ALLOWED	SAG - 2mm Wide by 2mm Long by .5mm High MAX / RUN - 3mm WIDE by 2mm Long by .5mm High MAX	N/A
Scratches	NOT ALLOWED	NOT ALLOWED	NOT ALLOWED	N/A
Shrinking	NOT ALLOWED	NOT ALLOWED	NOT ALLOWED	N/A
Thin Paint	NOT ALLOWED	NOT ALLOWED	NOT ALLOWED	N/A
Wrinkling	NOT ALLOWED	NOT ALLOWED	NOT ALLOWED	N/A

ITEM	"A" Surface	"B" Surface	"C" Surface	"D" Surface
Bare Substrate	NOT ALLOWED	NOT ALLOWED	NOT ALLOWED	NOT ALLOWED
Pin Hole/Solvent Pop	.5 mm max. size/1 per 50 inches Squared /must be a minimum of 50 inches	1.0 mm max. size/1 per 50 inches Squared /must be a minimum of 50 inches	1.5 mm max. size/2 per 50 inches Squared /must be a minimum of 25 inches	2.0 mm max. size/3 per 25 inches Squared / must be 12 inches apart -

SHELBY TOWNSHIP

2018-2019 Emergency Rescue Ambulance Bid Specifications - Ford F450 4x4 Chassis

	apart - MUST NOT BE DEEPER THAN THE CLEAR COAT	apart - MUST NOT BE DEEPER THAN THE CLEAR COAT	apart - MUST NOT BE DEEPER THAN THE CLEAR COAT	MUST NOT BE DEEPER THAN THE CLEAR COAT
Chips/Damage	NOT ALLOWED	NOT ALLOWED	NOT ALLOWED	NOT ALLOWED
Cracking	NOT ALLOWED	NOT ALLOWED	NOT ALLOWED	NOT ALLOWED
Fish Eyes	NOT ALLOWED	NOT ALLOWED	NOT ALLOWED	Must match Boundary Sample
Dings	NOT ALLOWED	NOT ALLOWED	NOT ALLOWED	NOT ALLOWED
Dirt - Must "feel" flat	.5 mm max. size/1 per 50 inches Squared /must be a minimum of 50 inches apart	1.0 mm max. size/1 per 50 inches Squared /must be a minimum of 50 inches apart	1.5 mm max. size/1 per 50 inches Squared /must be a minimum of 25 inches apart	2.0 mm max. size/ 3 per 25 inches Squared / must be 12 inches apart
Dry Spray	NONE ALLOWED	NONE ALLOWED	NONE ALLOWED	Must match Boundary Sample
Mottling - Color Specific	Must match Boundary Sample	Must match Boundary Sample	Must match Boundary Sample	Must match Boundary Sample
Off Color to Cab or other Module elements	Visually acceptable to the Master Plaque or the Delta E is not greater than 1.5	Visually acceptable to the Master Plaque or the Delta E is not greater than 1.5	Visually acceptable to the Master Plaque or the Delta E is not greater than 1.5	Visually acceptable to the Master Plaque or the Delta E is not greater than 1.5
Orange Peel	Equivalent to # 10 panel MIN.	Equivalent to # 10 panel MIN.	Equivalent to # 10 panel MIN.	Equivalent to # 7 panel MIN.
Overspray	NONE ALLOWED	NONE ALLOWED	NONE ALLOWED	Must match Boundary Sample
Paint Drops/Drips	NONE ALLOWED	NONE ALLOWED	NONE ALLOWED	NONE ALLOWED
Pits/Porosity	NONE ALLOWED	NONE ALLOWED	NONE ALLOWED	NONE ALLOWED
Crooked Mask Lines	NONE ALLOWED	NONE ALLOWED	NONE ALLOWED	NONE ALLOWED
Burn Through	NONE ALLOWED	NONE ALLOWED	NONE ALLOWED	NONE ALLOWED
Sags/Runs	NONE ALLOWED	NONE ALLOWED	NONE ALLOWED	NONE ALLOWED
Scratches	NONE ALLOWED	NONE ALLOWED	NONE ALLOWED	NONE ALLOWED
Polishing Swirls (Scratches)	Minimal amount of micro scratches from polishing are acceptable, must not be felt or able to be seen from 24 inches	Minimal amount of micro scratches from polishing are acceptable, must not be felt or able to be seen from 24 inches	Minimal amount of micro scratches from polishing are acceptable, must not be felt or able to be seen from 24 inches	Minimal amount of micro scratches from polishing are acceptable, must not be felt or able to be seen from 24 inches
Shrinking	NONE ALLOWED	NONE ALLOWED	NONE ALLOWED	NONE ALLOWED
Thin Paint	NONE ALLOWED	NONE ALLOWED	NONE ALLOWED	NONE ALLOWED

SHELBY TOWNSHIP

2018-2019 Emergency Rescue Ambulance Bid Specifications - Ford F450 4x4 Chassis

Water Spots/Rinse Blisters	NONE ALLOWED	NONE ALLOWED	NONE ALLOWED	NONE ALLOWED
Wet Mark	NONE ALLOWED	NONE ALLOWED	NONE ALLOWED	NONE ALLOWED
Wrinkling	NONE ALLOWED	NONE ALLOWED	NONE ALLOWED	NONE ALLOWED
Gaps in Diamond Plate at intersection of Cab Steps	N/A	NONE ALLOWED	N/A	N/A

CAB - OEM PAINT

Y__N__

PAINT MODULE ALL ONE SOLID COLOR, PLUS CLEAR COAT

Y__N__

Module is to be painted red to match the chassis.

BLACK REFLECTIVE MATERIAL IN RUB RAILS

Y__N__

Rub rails shall incorporate a 5/8" wide black reflective scotchlite safety accent stripe.

DOOR REFLECTIVITY

Y__N__

Reflective material (25" x 2.5" red/silver chevron style) meeting FMVSS 108 requirements shall be installed on the lower interior stainless steel panel of each rear door and hinged side door.

If a sliding side door is provided, it shall have a 1.50" x 40.00" white reflective stripe installed on the rear facing edge.

KKK-A-1822F COMPLIANCE

Y__N__

A KKK-A-1822F compliance sticker, electrical load analysis sticker, and payload sticker shall be installed in the oxygen compartment. Any deviations from KKK-A-1822F shall be listed in the vehicle delivery packet with a notation on the-compliance sticker.

VEHICLE MANUALS (1) PACKAGE SET

Y__N__

One (1) Delivery Manual Package shall be supplied with the vehicle, and shall include the following items:

- Ambulance manufacturer parts, service and operation manuals
- OEM chassis owner's guide
- Complete 12 VDC and 125 VAC wiring schematics for all included standard and optional systems
- Multiplex Electrical system programming - electronic media