

Stony Brook University Hospital  
Emergency Medical Services

Responder Vehicle Specification

**VEHICLE**

The vehicle shall be a 2021 or newer Ford Expedition XL with the following factory specifications

- 3.5L v6 ECO boost with 6 speed select shift
- AM/FM Premium sound CD MP3 6 speakers
- Front and rear independent suspension
- Control TRAC2 4x4 system
- 4.10 axel ratio
- Class 5 hitch tow package with trailer sway control
- Keyless entry system
- Power mirrors w/sec lamp
- AC with dual climate control
- Electro chromatic mirror
- Advance TRAC with RSC
- Air bag-side impact canopy
- 4 wheel disc brakes with ABS
- Latch child safety fastening points
- PAS lock anti-theft keyless pad
- Perimeter alarm
- Tire pressure monitor system
- Front license plate bracket
- Running boards
- Luggage rack and cross bars
- Lift gate with flip up glass
- Rear wiper
- Fog lamps
- Auto head lamps with timer
- Daytime running lamps
- Tilt leather rap wheel
- Cruise control
- Cloth seats color black
- Oxford white exterior
- Ebony interior
- Fleet convenience package
- SSV upgrade package
- 275/55r20 at BSW
- 20" bright machined aluminum wheels

## **LIGHTING**

The light bar shall be model CODE 3 53" LED linear RX 2700cc multicolor red/white with 24 up modules or equivalent. The light bar should include LED alley lights wired to a separate switch on the controller. Lighting should be broken down into two stages rear and front warning. Lighting must have a separate switch to turn off all front facing white lights. Light bar should have service loop with removable water proof sealed grommet plug in roof.

(4) Grill lights should be installed. The model should be CODE 3-6 UP LED red/white split color or equivalent. The grill lights should be mounted behind the grill on aluminum brackets 5024 primed and painted flat black. All wiring connectors should be water/weather proof.

Dual CODE 3 Alternating headlight flashers should be wired to a switch on the console. A halogen insert should be installed into the existing headlight housings so not to interfere with the factory DRL and computer activated illumination circuits. No alternations should be made to the factory wiring.

(4) CODE 3-6 UP LED red/white split color or equivalent should be cut into front corners of the bumpers for intersection lights. All wiring connectors should be water/weather proof.

(2) 5.5" LED lights should be mounted under the lift up hatch illuminating the rear cabinetry without interference by anyone standing at the rear. A momentary cancel switch should be included that will reset when the doors or hatch is reopened.

(2) Additional 5.5" LED lights should be included to illuminate the inside cargo area

(1) CODE 3 LED head warning stick split color or equivalent should be mounted on the inside of the tailgate with separate programmable pattern selector including 28 cycle flash patterns.

(2) CODE 3 LED flush mount lights or equivalent should be mounted on the rear bumper. All wiring connectors should be water/weather proof.

CODE 3 HD 6 hide away blast LED drill stoke kit 6 or equivalent should be installed into rear tail lamps. The strobes must have a comet cycle flash for the six LED strobes and a built in diagnostic port for troubleshooting. All wiring connectors should be water/weather proof.

Front fog lamps should have CODE 3 LED hideaway blasters model 9 or equivalent with split color red/white. All wiring connectors should be water/weather proof.

Dual CODE 3 6" LED red/blue split lights or equivalent should be installed on the inner tailgate door mounted to be visible when the tail gate is open. All wiring connectors should be water/weather proof.

The lighting and siren controller should be a CODE 3 Z-3 or equivalent all in one controller with built in arrow stick controller and spot AUX functions with external dual tone 200 WATT amplifier. (1) CODE 3 100 W composite siren speakers with behind the grill mounting bracket kit should be installed OEM style on side of headlamps not to interfere with air cooling intake. All wiring connectors should be water/weather proof.

CODE 3 XT3084 red/blue LED lights or equivalent should be installed on the quarter glass. Lights should be thru bolstered to prevent rattling and hitting the glass.

## **INTERIOR**

Font console should be constructed of MDO grade plywood covered with a color coordinating marine grade vinyl. The console should have a cooling fan, vents and (2) 12 volt USB power outlets wired to ignition. Extra room in the console should accommodate open pockets for books, drink holders and arm rests. All radios shall be flush mounted in top portion of console. A plugin harness system with function coded GXL wiring shall be included.

A key override system should be installed to allow the key to be taken out of the ignition and the vehicle to stay running. The system shall have an emergency shut off when the brake is depressed.

## **EXTERIOR**

The vehicle shall have a full width front "push bar" to protect against animal strikes.

## **WIRING REQUIREMENTS**

All wiring must be located inside the console and be run off a 200 amp ignition Smart solenoid and be wired into separate fuse blocks and ground blocks. Radio wiring must be wired off its own fuse and ground block a minimum of 25 inches apart to avoid interference. All wires must be labeled at both ends. A color coded wire diagram must be supplied with delivery. Any holes or area that is drilled into on the exterior must be barrier coated with ECK product to prevent future corrosion and urethane filled to prevent water or air leaks.

A 200 amp battery disconnect unit will automatically disconnect all power features that will be programmed to activate on ignition.

(3) 12 volt power point, cigarette lighter style outlets should be mounted in each rear corner of the interior to constant power.

The vehicle shall have a second battery for accessories which is isolated from the vehicle's starting battery.

The vehicle shall have a shoreline plug with indicator light.

### **EMERGENCY LIGHTING REQUIREMENTS**

Each emergency light shall flash 75 to 125 times per minute. The chromaticity values of the lights shall conform to SAE J578, for their respective color, except for the red lights, which may conform to the following expanded boundary limits of:  $y = 0.34$ ;  $y = 0.32$ ;  $x = 0.62$ . All warning lights shall project a beam spread of at least  $5^\circ$  up and  $5^\circ$  down and at least  $45^\circ$  left and right of H-V. Each light shall produce flash energy, (Cd-s) per flash, measured from the H-V to all the extreme test point coordinates and shall be tested at all  $5^\circ$  increments. At no point shall the Cd-s values drop to less than the minimum values as shown in Table 1 when tested at 14.2 volts. Flash energy shall be determined in accordance with the SAE J845 method for determining the flash energy of a light. Testing shall be conducted on the device(s) as manufactured including use of the actual light source and all other related system components.

### **RADIOS**

Install (4) customer supplied radios and (2) portable radio chargers.

Install (1) customer supplied GPS/Data link radio.

### **ANTENNAS**

(4) Antenna bases should be installed on the roof with the leads terminating in the front control console.

(1) Customer supplied GPS/Cellular antenna shall be installed a minimum of 36" away from any other antenna.

### **REAR STORAGE AREA**

The rear storage area should be separated by a metal wire partition sufficient enough to stop any equipment from leaving the storage area during a collision.

A rear equipment storage box/cabinet shall be provided consistent with the existing boxes. Box design/layout must be approved prior to design.

A LED rechargeable stream list or equivalent shall be provided and installed in the rear storage area to be accessible when removing equipment from the rear of the vehicle.

### **LETTERING & GRAPHICS**

Vehicle lettering and graphics shall be completed as per current layout. Letting layout must be approved prior to installation. All reflective material should be 3M Scotchlite Scotchlite 680 series 7 year material.

### **SERVICE REQUIREMENTS**

The bidder must be a NYS dealer and shall have a local service center capable of performing all warranty service and repairs including all paint and collision repairs and must be a certified remount facility for more than one manufacturer they must have certified welders on staff. The dealer must be contracted with a 24/7 towing service and be capable of all repairs paint and collision lettering all under one roof no subletting for the ease of warrantee and regular maintenance. The bidder shall be an authorized Ford up fitter and comply with all Ford QVM certifications. The service center shall be located within twenty five (25) miles of Stony Brook Hospital.