

EQUIPMENT SPECIFICATIONS

STATE OF LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT TECHNICAL SPECIFICATIONS FOR

SEWER CLEANING TRUCK, COMBINATION VACUUM/JET

SERIES NO. 226-000 EQUIPMENT SPECIFICATION 226-000A

REV. 2/13/2024

GENERAL

This specification sets forth the minimum requirements for a Class 8 Single Unit Truck with a Combination Sewer Cleaning System.

Equipment shall be new, a production model of current manufacture, and must meet all state and Federal safety and emission standards in effect at time of order.

REPRESENTATIVE SPECIFICATIONS

A Freightliner 114SD with a VacTor 2100i Combination Sewer Vacuum/Jet Cleaning System with appropriate options and standard features, was used to develop these specifications and establish equivalency evaluation criteria.

Equipment of similar style, type, character, quality, features, and purpose conforming to the following detailed requirements/specifications will be considered. For evaluation purposes, bidder's proposing an exception/equivalent option/feature to those specified herein, may be required to provide manufacturer/product information (catalogue sheets, detailed specifications, pictures, etc.). This information will be evaluated against the minimum requirements of this specification. Proposed submittals that are determined to not be equivalent to the established criteria will be rejected.

LOUISIANA AUTHORIZED DEALER(S)

Proposed item(s) must be from a manufacturer who has at least one (1) authorized dealer within the State of Louisiana where parts and service can be obtained. Authorized dealer(s) must have properly trained technicians plus all other resources necessary to perform warranty and repair services in complete accordance with the manufacturer's requirements. A letter certifying the ability to meet this requirement, inclusive of the company name(s) and address(es) of the Louisiana authorized dealer(s), should be supplied with the bid submittal and may be required prior to award.

DELIVERY & ACCEPTANCE

Vendor shall perform a test run of each unit to verify that all features and capabilities are operating properly at time of delivery. Documentation of testing may be required prior to acceptance by the Department.

Unit(s) must be delivered completely assembled (including all components, accessories, etc.) and ready for operation without any additional preparation including, but not limited to, ensuring all fluid levels are at their full mark, fuel tank(s) is full, all necessary lubrication has been performed, etc. A Louisiana safety inspection shall be performed on each vehicle prior to delivery and a Louisiana safety inspection sticker properly affixed.



EQUIPMENT SPECIFICATIONS

Any unit delivered under this specification is subject to rejection if there is evidence of poor workmanship, by either the vendor or the original manufacturer. Noted defects and/or nonconformance findings may be corrected by the vendor. Corrections must be completed and approved by the Equipment Engineer or his representative prior to final acceptance.

Unit(s) shall be delivered "on the ground;" DOTD will not unload nor provide any unloading equipment to the vendor/delivery driver in order to offload the unit(s).

NOTE: The Department will have space available for equipment to be unloaded.

EACH UNIT MUST BE SUPPLIED WITH THE FOLLOWING DOCUMENTATION:

- 1. Notarized Bill of Sale
- 2. Certificate of Origin (MSO)
- 3. Dealer's Service Policy
- 4. Owner's/Operator's Manual(s)
 - a. One (1) Hardcopy
 - b. One (1) Digital Copy
 - i. Acceptable Formats: PDF delivered via USB "Flash Drive, or E-mail
- 5. Service Manual(s)
 - a. One (1) Hardcopy
 - b. One (1) Digital Copy
 - i. Acceptable Formats: PDF delivered via USB "Flash Drive, or E-mail
- 6. Build Sheet(s) as applicable
 - a. One (1) Hardcopy
 - b. Build sheets should be writing in plain language (not company specific codes) and include, at a minimum, all standard & optional features of the delivered unit.

NOTE: Invoices will not be processed for payment until the unit(s) have been inspected by the Equipment Engineer or their representative and deemed in compliance with the specifications.

BID SUBMITTALS

Any additions, deletions, or variations from the specifications should be noted in the "Bidder's Exceptions" page of this specification. Exceptions that are noted to be less than a minimum requirement will not be accepted.

Any additions, deletions or variations from the manufacturer's standard published specifications should be noted on the "Bidder's Exceptions" page of this specification. Unless otherwise noted, any items appearing in the manufacturer's standard published specifications furnished by the Bidder are assumed to be included in the Bidder's submittal.

Bidder should note on their submittal any installation(s) to the equipment that will be performed by the vendor instead of the manufacturer.

Failure to note any specification exceptions, manufacturer specification alterations, and/or vendor installations prior to award may result in rejection of the equipment at the time of delivery.



EQUIPMENT SPECIFICATIONS

NOTICE TO BIDDERS

Bidder should review the detailed "Equipment Specification" completely and respond to the compliance question at the end of each section by marking "X", in the space provided, for "Yes" or "No". Mark "Yes" to indicate that the equipment bid meets the section exactly as specified. Mark "No" if there are exceptions to any part of that section. Exceptions/deviations to any part of the specification are to be detailed on the "Bidder's Exceptions" page of this specification.

IN ORDER TO BE CONSIDERED FOR AWARD, BIDDER SHOULD RETURN THIS SPECIFICATION, COMPLETED IN FULL, WITH THEIR BID SUBMITTAL.

Note: All Values listed below are minimums unless noted otherwise.

_				
1	Cah.	and	Cha	CCIC
. .	Lau	anu	ulia	2212

- **1.1.** Chassis
 - 1.1.1. GVWR: 66,000 lbs.
 - **1.1.2.** Frame
 - 1.1.2.1. Frame Rails Heat Treated Alloy Steel (120,000 PSI Yield)
 - 1.1.2.2. 3,200,000 RBM, per rail Bidder should list section modulus and yield strength below

Section Modulus:	Yield Strength:
Comply:YesNo	

- 1.2. Cab & Axle Positions
 - **1.2.1.** Front axle: For the purposes of this solicitation, set-forward-axle (SFA) is considered equal to set-back-axle (SBA); however, SBA is the preferred option
 - 1.2.2. Cab to axle (CA): 190" clear*
 - 1.2.3. Center of axle to end of frame (AF): 96" *
 - **1.2.3.1.** *Values given here are minimums. Truck vendor and body manufacturer/upfitter shall coordinate in selecting a cab to axle dimension that works with the specified body and ensures the wheel well is aligned with the center of the axle. The required AF must be achieved with factory frame rails. Frame extensions to meet the required AF are not allowed. The AF must be sufficient to allow support of the full length of the body.
 - **1.2.4.** Must satisfy sewer cleaner requirements

Comp	ly:	Yes	No

- **1.3.** Cab
 - 1.3.1. Conventional cab with fully padded high quality interior
 - **1.3.2.** Tinted safety glass
 - 1.3.3. Full width exterior cab mounted sun shade with integral clearance lights
 - **1.3.4.** Cab entry handles, driver & passenger side
 - **1.3.5.** Outside mirrors, driver & passenger side



EQUIPMENT SPECIFICATIONS

- **1.3.5.1.** Power adjustable
- **1.3.5.2.** 90 sq. in. minimum
- 1.3.5.3. Two (2) adjustable spot mirrors, one (1) per outside mirror
- 1.3.6. Two (2) roof mounted air horns & one (1) standard electric horn
- **1.3.7.** Air ride: driver and passenger seat, cab suspension
- 1.3.8. High-back style seats with arm rests mounted on seats (both driver and passenger)
- 1.3.9. Manufacturer's highest-level sound insulation package
- 1.3.10. Wing dash, if available
- **1.3.11.** Gauge package including the following gauges:
 - 1.3.11.1. Air cleaner restriction
 - 1.3.11.2. Coolant temperature
 - **1.3.11.3.** DEF
 - 1.3.11.4. Fuel
 - **1.3.11.5.** Oil pressure
 - 1.3.11.6. Primary and secondary air pressure
 - 1.3.11.7. Speedometer
 - **1.3.11.8.** Tachometer
 - 1.3.11.9. Voltmeter
 - 1.3.11.10. Gear indicator
 - 1.3.11.11. Odometer
 - **1.3.11.12.** Total engine hours
 - **1.3.11.13.** Trip hours
 - **1.3.11.14.** Trip odometer
 - 1.3.11.15. Total PTO hours
 - **1.3.11.16.** Auto transmission oil temperature
 - 1.3.11.17. Engine oil temperature
- 1.3.12. Dual sun visors
- **1.3.13.** Two (2) cup holders, integral to dash
- **1.3.14.** 3-point seat belt for each seat. All seat belt webbing must be manufacturer's high visibility color (Orange, Red, Green, or Yellow).
- 1.3.15. Climate control, including air conditioning, heater, & defroster
- 1.3.16. Power windows & power door locks
- **1.3.17.** Tilting and telescoping steering wheel

Comply: _____Yes ____No

- 1.4. Engine and Fuel System
 - 1.4.1. Electronic diesel, 6-cylinder, gross HP 410 min. at 2100 RPM, 12.8L or larger
 - 1.4.2. Gross torque 1450 lbs-ft. min. @ 1200 RPM
 - **1.4.3.** To include:
 - 1.4.3.1. Heavy duty air cleaner
 - **1.4.3.2.** Jacobs engine brake, or equal
 - 1.4.3.3. Full flow oil filters
 - 1.4.3.4. Heavy duty radiator

EQUIPMENT SPECIFICATIONS

- 1.4.3.5. Automatic on/off fan
- **1.4.4.** Power down/shut down for high engine oil or coolant temperature
- 1.4.5. Aluminum 100-gallon minimum fuel tank(s)
- 1.4.6. 6 gallon minimum diesel exhaust fluid (DEF) tank located to the rear of chassis fuel tank
- 1.4.7. Davco fuel processor or equal mounted to outside of frame
 - **1.4.7.1.** Visual element change indication that is integral to and non-removable from unit (to be located on driver's side near fuel tank)
 - 1.4.7.2. Water-in-fuel sensor with indicator in cab
- **1.4.8.** Entire fuel system must be biodiesel compatible

Comply: ____Yes ____No

- 1.5. Electrical System & Lights
 - 1.5.1. 12-volt system
 - **1.5.2.** 240-amp brushless alternator
 - 1.5.3. Three (3) Batteries with 3375 CCA combined
 - **1.5.4.** Aluminum battery box
 - **1.5.5.** Remote jump start studs, with tethered protective caps, located outside of the battery box with easy access from the ground
 - **1.5.6.** Battery disconnect switch, located inside cab, near driver's seat, similar to the below picture.



- **1.5.7.** Four (4) dash mounted, rocker-style, factory installed, body circuit switches (upfitter switches) for simple on/off functions for accessories (PTO, warning lights, etc.; one (1) assigned to activate the PTO; one (1) assigned to operate the flashing warning lights; two (2) blank to be assigned by DOTD personnel.
- 1.5.8. All exterior lighting should be LED
- 1.5.9. Headlights:
 - 1.5.9.1. Automatic daytime running lights
 - 1.5.9.2. Automatic on with low ambient light levels
 - 1.5.9.3. Warning buzzer/alarm when headlight switch is on and ignition switch is in off position
- **1.5.10.** Cruise control
- 1.5.11. Intermittent windshield wipers with washers
- **1.5.12.** Self-cancelling directional signals
- **1.5.13.** Backup alarm, 97 dba
- 1.5.14. AM/FM radio with auxiliary front input, Bluetooth/hands free function and steering wheel controls



EQUIPMENT SPECIFICATIONS

1.5.15. Two (2) 12V accessory power outlets with covers, mounted in dash (for cell phone chargers, GPS devices,

ctc.,	
Comply:YesNo	
1.6. Transmission and PTO	
1.6.1. Automatic, Allison 4500RDS or equivalen	nt with PTO Provision
1.6.2. Maximum cooling package for transmiss	
1.6.3. PTO and pump(s) to meet requirement of	
1.6.4. PTO Controls	6.7
1.6.4.1. Dash mounted switch	
1.6.4.2. Warning light to indicate when ur	nit is engaged
Comply:YesNo	
1.7. Front Axle	
1.7.1. Wide track, heavy duty, 20,000 lbs. capa	city min.
1.7.2. Taper leaf springs rated for 20,000 lbs.	·
1.7.3. Wet-type visible cap axle seals, Stemco of	or equal
1.7.4. Power steering	·
1.7.5. Axle to be filled with synthetic lubricant	
Comply:YesNo	
1.8. Rear Axle	
1.8.1. Heavy duty, tandem, single reduction spe	eed, 46,000 lbs. capacity min.
1.8.2. Driver controlled locking differential in fo	orward-rear and rear-rear axle
1.8.3. 54" axle spacing, Meritor RT-46-160	
1.8.4. Tandem, walking beam type, 46,000 lbs.	capacity min. rear suspension
1.8.5. Multi-leaf spring suspension	,
1.8.6. Axle to be filled with synthetic lubricant	
Comply:YesNo	
1.9. Gearing, Speed Governing & Performance	
1.9.1. Top gear road speed and cruise control s	shall be electronically governed at 70 mph maximum
1.9.2. Transmission and axle ratio shall be select	cted for performance to be optimized at 65 mph while permitting
truck to operate up to 70 mph on highway	without excessive engine speed. Bidder should list the RPM @ 6.
mph in the space below.	
Comply:YesNo	RPM @ 65 mph
1.10. Wheels and Tires	
1.10.1. Front Disc, 22.5x12.25 rims; Rear Dual [Disc, 22.5x8.25 wheels
1.10.2. Hub-piloted	



EQUIPMENT SPECIFICATIONS

1.10.3. (8) Tire, Rear 11R22.5 Load Range G 1.10.4. (2) Tire, Front 425/65R22.5 Load Range L
Comply:YesNo
1.11. Brakes
1.11.1. Bendix ADB22X-V or equal air disc brakes
1.11.2. Bendix Wingman Fusion or equal advanced driver assistance system to include:
1.11.2.1. Enhanced autonomous emergency braking
1.11.2.2. Enhanced stationary vehicle braking
1.11.2.3. Multi-lane autonomous emergency braking
1.11.2.4. Adaptive cruise control with braking
1.11.2.5. Highway departure warning and braking
1.11.3. Bendix or equal air disc long stroke parking brake
1.11.4. Parking brake on rear axle and cab controlled
1.11.5. Low air warning light and buzzer shall be supplied
1.11.6. Brake line air dryer with shield, heater and integral reservoir shall be provided
1.11.7. 18.7 CFM air compressor
1.11.8. Steel air reservoirs with drain valve
Comply:YesNo
1.12. Hydraulic System
1.12.1. Hydraulic system pump(s) to meet sewer cleaning system manufacturer specifications for flow and pressure
1.12.2. Hydraulic reservoir to have minimum capacity of 50 gallons
1.12.3. Hydraulic reservoir to have a sight glass visible when performing pre-trip inspections
1.12.4. Hydraulic filter with ten (10) micron filter located for easy access to inspect and replace filter
1.12.5. Shut-off valves to be installed on suction lines
1.12.6. Unit shall be equipped with an emergency 12-volt dc electric hydraulic power pack to bypass system the event of engine or hydraulic failure. Manual hand pump systems are acceptable.
1.12.7. Hydraulic oil cooler to be installed on hydraulic system
Comply:YesNo
1.13. Paint
1.13.1. Body to be manufacturer's standard white
1.13.2. Black, high solids polyurethane chassis paint
Comply:YesNo
1.14. FMCSA/DOT Mandated Safety Items
1.14.1. One (1) UL listed, 5 B:C rated, or higher, fire extinguisher securely mounted in cab

1.14.2. One (1) set of three (3) bidirectional reflective triangles conforming to FMVSS No. 125



EQUIPMENT SPECIFICATIONS

1.14.3. At least one (1) spare fuse for each type/size used in the truck	

2. Combination Sewer Cleaner System

Comply: ____Yes ____No

- **2.1.** General
 - **2.1.1.** The systems described herein consist of one new mobile sewer and catch basin or manhole cleaning machine. The systems shall be capable of simultaneous high-pressure sewer line cleaning flushing and air-vac pick up of all liquids and solids from manholes and catch basins. Maximum water pressure and vacuum at an engine speed shall not exceed 1,800 RPM, allowing for adequate reserve HP from the engine.

Com	olv:	Yes	No

- 2.2. Debris Storage Tank
 - 2.2.1. Tank capacity 15 cu. yd.
 - 2.2.2. Debris tank shall be constructed from 3/16" steel with abrasion and corrosion resistance
 - **2.2.3.** Ejector unloading or hoist to dump systems are acceptable
 - **2.2.4.** If hoist dumping is used, the entire debris tank shall be hinged at the rear and designed for hydraulic raising to 50 degrees and dumping with one front mounted multiple stage hydraulic cylinder. The entire dumping system shall be designed to allow dumping of a full debris tank while the water tanks are full. A splash shield shall be permanently attached under the rear door to direct the debris away from the rear of the tank.
 - 2.2.5. The debris body door shall be full opening and hinged at the top and seal by means of hydraulic door locks
 - **2.2.6.** Liquid overfill protection system
 - **2.2.7.** A debris level indicator will be installed and will allow the operator to see debris level from the operator's position
 - **2.2.8.** If hoist to dump system is provided, a manual tank prop permanently hinged to the tank body frame must be provided to support the debris tank in a raised position for service and maintenance. The tank prop must be raised with a handle positioned so the operator will not have to reach under the tank. A second prop must be provided for the rear door.
 - **2.2.9.** Dump control and e-stop shall be mounted curbside forward of the rear axles so the operator is not exposed to sewage when dumping the debris body.

Comp	lv:	Yes	No
CULID	. v .	163	110

- 2.3. Water Tanks
 - **2.3.1.** Total capacity 1,500-gallons
 - **2.3.2.** Constructed of aluminum or stainless steel, cross-linked
 - 2.3.3. Water tanks to have baffles
 - **2.3.3.1.** Compartments created by the baffles shall not create an interior compartment larger than 200 gallons
 - **2.3.4.** Length and diameter of water tanks should be adjustable by body manufacturer to ensure proper fit and weight distribution
 - 2.3.5. Water tanks shall not rise with debris tank when debris body is dumped
 - **2.3.6.** Fresh water system to have a central drain to completely drain the water system from one location



EQUIPMENT SPECIFICATIONS

- **2.3.7.** A 2 ½" X 25' hydrant hose and wrench provided
- 2.3.8. A 4" anti-siphon air gap must be installed
- 2.3.9. Sight gauge to indicate water level should be visible from the operator station
- 2.3.10. Hand gun system shall be provided
- 2.3.11. Hand gun powered by the high pressure water system
- **2.3.12.** Flow and pressure at hand gun should be regulated at 20 GPM @ 700 psi.
- 2.3.13. Hand gun should include on/off control and spray pattern adjustment from a fine mist to a steady jet
- **2.3.14.** Hand gun should be mounted mid-ship and include 50' of high pressure hose on a spring loaded retractable reel with quick-connect couplings
- 2.3.15. Liquid level sight gauges shall be installed on the side of water tank to indicate liquid level

Comply:	Yes	No

- 2.4. Air-Vac System
 - 2.4.1. An automatic vacuum breaker assembly located inside the debris body
 - **2.4.2.** An automatic full load shut down system
 - 2.4.3. Controls to completely shut down vacuum system shall be located at the hose reel control station
 - **2.4.4.** Vacuum provided by a positive displacement rotary lobe blower capable of 4500 CFM inlet volume and 244" negative water pressure (18" HG)
 - 2.4.5. Blower shall achieve the maximum rated performance at no more than 1800 RPM.
 - 2.4.6. The vacuum system shall operate independently of the high pressure water system
 - 2.4.7. A means of engaging/disengaging the blower and varying the vacuum suction from the operator's station
 - 2.4.8. Final filter
 - **2.4.8.1.** It must be positioned between the outlet of the debris body and inlet of the vacuum blower and contain a removable stainless steel micro screen
 - 2.4.8.2. Screen is to be no larger than 20 mesh
 - 2.4.8.3. Filter shall be vertically mounted
 - 2.4.9. A tapered, vertical, cyclone separator constructed of abrasion resistant steel shall be provided
 - 2.4.9.1. Capable of removing particles larger than 50 microns
 - 2.4.9.2. Rubber sealed access door
 - 2.4.9.3. Separator shall be an independent component, separate from the debris body and vacuum source
 - **2.4.10.** System must be capable of producing 100% rated vacuum pressure with no air flow through vacuum tubes

_		
Comply:	Yes	Nο
COHILINA.	162	14()

- 2.5. High Pressure Water Pump
 - 2.5.1. High pressure pump to be capable of delivering 80 GPM at 2500 PSI continuous duty
 - **2.5.2.** Pump shall be capable of delivering rated flow at the nozzle while generating rated pressure at the hose reel
 - 2.5.3. Dual acting single piston design powered by a direct hydraulic flow with 1:1 oil input to water output ratio
 - 2.5.4. High Pressure water pump to be hydraulically driven by a direct mount variable displacement oil pump
 - **2.5.5.** Variable flow control from 30 80 GPM while maintaining full pressure without affecting vacuum performance
 - 2.5.6. Pump should be capable of running dry at full speed for a minimum 30 minutes



EQUIPMENT SPECIFICATIONS

- 2.5.7. Water pump shall include smooth and pulsation operation mode without altering pump flow
- **2.5.8.** Controls for starting and stopping the water pump and varying flow and pressure should be located at the operator station
- **2.5.9.** Emergency electric safety stop switch located at operator station

2.5.10. Gravity flooded, no priming required, mounted below water supply
Comply:YesNo
2.6. High Volume Debris Tank Flush-Out System2.6.1. A nozzle system shall be installed in the debris tank in a manner so as not to become buried in the debr2.6.2. The system shall clean the tank without the need to tip the body above 15 degrees
Comply:YesNo
2.7. Power Source 2.7.1. The high-pressure water pump and air-vac exhauster will be powered from the single chassis engine via transfer case, transmission mounted PTO, engine mounted PTO or a combination of the three is acceptabe this system shall allow independent or simultaneous operation of all systems.
Comply:YesNo
 2.8.1. Located at the front or rear of the vehicle 2.8.2. 400 ft. capacity of 1" diameter hose rated for 2500 psi 2.8.3. Hydraulically powered in both directions by means of a double chain and sprocket drive 2.8.4. The controls for operating the motor shall have a flow control device to regulate the rotational speed of the reel in both directions 2.8.5. All hydraulic hoses shall have protective housing to shield operator from hydraulic hose failure 2.8.6. 270 degrees rotation on a bearing mounted on the hose reel sub-frame 2.8.7. A control mounting station to mount the wireless remote control shall be located on either side of the hose reel 2.8.8. Automatic wind guide, corrosion and wear resistant 2.8.9. An air operated, preloaded, aluminum pinch roller with self-lubricating polyethylene ends for reel protection will maintain hose placement on the reel 2.8.10. The wind guide shall have a freewheeling provision for quick adjustment to compensate for hose length changes and/or repair and should be equipped with dual polyurethane hose guide rollers 2.8.11. The hose reel is to be equipped with a footage counter
Comply:YesNo
2.9. Vacuum/Boom System2.9.1. Vacuum hose and tubing shall be 8" inner diameter

- **2.9.2.** 180 degrees rotation to allow work off of either side of machine
- 2.9.3. Left and right swing movements actuated by a hydraulic cylinder
- 2.9.4. 17' of vertical lift utilizing one large diameter hydraulic cylinder



EQUIPMENT SPECIFICATIONS

- **2.9.5.** Lift capacity at bumper 600 lbs.
- 2.9.6. Provide 24' reach off the centerline of the unit
- 2.9.7. 8' Telescoping without affecting the height of the pick-up hose and tubing
- **2.9.8.** 4" X 6" rectangular boom shall extend to support boom vacuum tube through the entire length of extension
- 2.9.9. The hydraulic cylinder used for telescoping action shall be enclosed inside the rectangular boom
- 2.9.10. Joystick controlled boom function mounted at front of operator station
- **2.9.11.** A six-way remote pendant with vacuum breaker switch shall also be supplied
- **2.9.12.** Pipe extensions to clean 35' shall be supplied with the unit
- **2.9.13.** Truck to be equipped with 9 pipe storage capacity that allows the operator to access pipe from ground level
- **2.9.14.** A nozzle storage rack to be mounted in a curbside toolbox

Comply:N

- 2.10. Gauges and Instruments
 - **2.10.1.** A portable control pendant permanently attached to the unit shall have controls to operate the boom power rotation with up/down, in/out, and vacuum relief functions
 - 2.10.2. A radio remote control for vacuum boom control shall be provided
 - **2.10.3.** Hydraulic controls to lock and unlock the rear debris tank door as well as raise and lower the debris tanks will be located mid-ship curbside of the unit
 - **2.10.4.** The following gauges and controls shall be mounted at an angle on the hose reel assembly, shall include: Tachometer for chassis engine, vacuum gauge, hose reel speed control valve, water pressure gauge, adjustable engine throttle shall be located at the front of the operator's station

Comply:	Yes	No

- **2.11.** Storage
 - **2.11.1.** One 96 X 12 X 24 (or as large as space permits), locking aluminum box with shelves shall be provided. Two 36 X 18 X 18 locking aluminum toolboxes shall be provided.

Comply: ____Yes ____No

- **2.12.** Lights
 - **2.12.1.** Two (2) stop, turn, tail lights (LED D.O.T.)
 - **2.12.2.** Two (2) backup lights
 - 2.12.3. License plate light
 - 2.12.4. All required ICC lights and reflectors.
 - 2.12.5. Work area lights

Comp	ly:	Yes	N	lo

- 2.13. Warranty
 - 2.13.1. Bidder must indicate warranty offered, which shall be no less than one (1) year parts and labor
 - **2.13.2.** Any special extended warranty coverage on specific items must be indicated.



EQUIPMENT SPECIFICATIONS

Comply:tesNo
2.14. Training
2.14.1. Minimum of 24 hours "hands-on" training for each unit sold to be provided directly to the crews which will be utilizing the equipment shortly after delivery and acceptance.
2.14.2. Follow-up "hands-on" training review approximately 90 days after initial training to verify safe and proper operation of the equipment.
2.14.3. Training should be coordinated with the DOTD Equipment section at 7686 Tom Drive, Baton Rouge, LA 70806, Ste. 42F
Comply:YesNo



BIDDER'S EXCEPTIONS

Instructions: Bidder should note all exceptions in space provided below. List the detail number from the aforementioned specification in the column to the left and the exception in the column to the right. Responses may be typed or hand-written. Handwritten responses must be legible. If additional space is needed, please print a duplicate copy of this sheet. "Bidder's Exceptions" page(s) should be returned with the bid submittal. Examples: 1.6 Engine has 325 horsepower 1.18.3 Batteries have 2000 CCA combined. Crossmembers are 4" channel on 12" centers. 2.2.8 Spec./Detail Reference **Exception**