

# STATE OF LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT TECHNICAL SPECIFICATIONS FOR

### CAB & CHASSIS, 19,500# GVWR, WITH 3-4 CY DUMP BODY & CRANE

## SERIES NO. 140-000 REV. 12/12/2024 EQUIPMENT SPECIFICATION 140-000E

#### **GENERAL**

This specification sets forth the minimum requirements for a 2 Wheel Drive Class 5 Truck (19,500 lb. GVWR) with 3-4 cubic yard dump body and crane.

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

An International CV Cab and Chassis with a Warren U-11 dump body and Davit OZ1000DAV-DCW crane, 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, bidders 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 not to 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.

### Attachment B - Specifications



EQ. SPEC. **140-000E** REV. **12/12/2024** 

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 AT TIME OF DELIVERY:

- 1. Notarized Bill of Sale
- 2. Original Certificate of Origin (MSO), (no photocopy)
- 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 written 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.

**1.3.4.4.** Turn Signal Indicator located in Mirror

1.3.5. Vinyl High Back Driver Seat with integral headrest and Fixed Lumbar

Note: All values listed bel	ow are minimums unless no	oted otherwise.	
1. Section 1			
<b>1.1.</b> Weight rating			
<b>1.1.1.</b> GVWR: 19,500	) lbs.		
<b>1.1.2.</b> GCWR: 30,000	Ibs.		
Comply:YesN	o		
<b>1.2.</b> Frame			
<b>1.2.1.</b> Center section and yield strength	· · · · · · · · · · · · · · · · · · ·	isting Bending Moment) - Bidder shou	ıld list section modulus
Sect	ion Modulus:	Yield Strength:	
<b>1.2.2.</b> Cab to axle (Cab)	A) and axle to end of frame (A	F)	
<b>1.2.3.</b> CA: 84"	,	,	
<b>1.2.4.</b> AF: 49			
1.2.5. All steel front	bumper with 2 frame mounte	d tow hooks	
Comply:YesN	o		
<b>1.3.</b> Cab			
<b>1.3.1.</b> Conventional	day cab		
<b>1.3.2.</b> Tilting Fibergla			
<b>1.3.3.</b> Tinted safety a			
	rs, driver & passenger side		
	Folding and Extending		
<b>1.3.4.2.</b> Power a	djustable		
<b>1.3.4.3.</b> Heated			



### **EQUIPMENT SPECIFICATIONS**

- **1.3.6.** Two-Man Passenger vinyl seat with integral Headrest in outboard position with fold down center console/arm rest
- **1.3.7.** Gauge package including the following:
  - 1.3.7.1. Coolant temperature
  - **1.3.7.2.** Fuel
  - **1.3.7.3.** Oil pressure
  - **1.3.7.4.** Speedometer
  - 1.3.7.5. Tachometer
  - 1.3.7.6. Gear indicator
  - 1.3.7.7. Odometer
  - 1.3.7.8. Trip odometer
  - 1.3.7.9. Automatic transmission oil temperature
- 1.3.8. In cab indicator light to indicate when bed is raised
- 1.3.9. Dual sun visors
- **1.3.10.** Two (2) cup holders, mounted in dash or center console
- 1.3.11. Climate control, including air conditioning, heater, & defroster
- **1.3.12.** Power windows & power door locks
- 1.3.13. Tilting steering column
- **1.3.14.** Driver and passenger airbags
- 1.3.15. Roof Mounted Side Curtain Air Bags
- 1.3.16. Running boards/cab entry steps

Comply:	Yes	No
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- 1.4. Engine & Fuel
  - 1.4.1. 6.6L, turbo diesel
  - 1.4.2. 350 HP, 700 lb-ft torque
  - 1.4.3. Engine Exhaust Brake
  - 1.4.4. Manual Regen Capability
  - 1.4.5. Aluminum 3 row radiator with in-tank oil cooler
  - 1.4.6. Fuel Tank: 40 gallon min. capacity

Comply: Yes	s No
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- 1.5. Transmission
  - 1.5.1. Allison 1750 RDS or equivalent
  - 1.5.2. 6-Speed with Double Overdrive
  - 1.5.3. Transmission with PTO provision
  - **1.5.4.** Transmission to shift to Neutral when service brake is depressed, return to drive when service brake is released
  - **1.5.5.** Transmission to have park pawl
  - **1.5.6.** To be filled with manufacturer approved synthetic lubricants

^	amo	lv.	Yes	No
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### **EQUIPMENT SPECIFICATIONS**

<ul> <li>1.6. Front Axle</li> <li>1.6.1. I beam type</li> <li>1.6.2. 6,250 lbs. GAWR @ ground capacity</li> <li>1.6.3. Front suspension to be parabolic taper leaf springs</li> <li>1.6.4. Shock absorbers</li> </ul>
Comply:YesNo
<ul> <li>1.7. Rear Axle</li> <li>1.7.1. Gear Ratio to be 4.30</li> <li>1.7.2. 13,500 lbs. GAWR @ ground capacity</li> <li>1.7.3. Shock absorbers</li> <li>1.7.4. Rear Axle to use synthetic oil</li> </ul>
Comply:YesNo
<ul> <li>1.8. Brake System</li> <li>1.8.1. Brake System to be Hydraulic Split System</li> <li>1.8.2. Brake System to be Four Channel with ABS</li> <li>1.8.3. Hydromax Brake Booster or equivalent</li> <li>1.8.4. High Speed Master Cylinder with Trailer Sway Control</li> <li>1.8.5. Parking Brake to be Differential mounted Foot Operated in cab</li> <li>1.8.6. Front Brakes to be disc type with 8,000-lb capacity</li> <li>1.8.7. Rear Brakes to be disc type with 15,500-lb capacity</li> </ul>
Comply:YesNo
<ul> <li>1.9. Wheels &amp; Tires</li> <li>1.9.1. 19.5 X 6.75" wheels, 8 bolt Hub Piloted</li> <li>1.9.2. First line, first quality tires</li> <li>1.9.3. Front – 225/70R19.5, Load range G, highway tread</li> <li>1.9.4. Rear – 225/70R19.5, Load range G dual wheel, on/off road tread</li> <li>1.9.5. Combined load ratings must be compatible with axle ratings and GVWR</li> </ul>
Comply:YesNo
<ul> <li>1.10. Chassis Electrical System &amp; Lights</li> <li>1.10.1. 12-volt system</li> <li>1.10.2. Single 12 volt alternator, 220 amp capacity</li> <li>1.10.3. Dual batteries with 1100 CCA Total</li> <li>1.10.4. Four (4) dash or overhead mounted, factory installed, body circuit switches (up-fitter 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; one (1) assigned to enable the convenience lighting</li> </ul>

circuits, and one (1) blank to be assigned by DOTD personnel.

**1.10.5.** Headlights:



### **EQUIPMENT SPECIFICATIONS**

- **1.10.5.1.** Automatic daytime running lights
- **1.10.5.2.** Warning buzzer/alarm when headlight switch is on and ignition switch is in off position
- 1.10.6. Roof mounted clearance marker lights
- **1.10.7.** Cruise control
- 1.10.8. Adjustable Electronic governor to control maximum road speed, to be set to 78 mph prior to delivery
- 1.10.9. Intermittent windshield wipers with washers
- 1.10.10. Backup alarm, 102 dba
- 1.10.11. Throttle hand control to adjust engine speed when PTO is engaged
- 1.10.12. AM/FM radio, Bluetooth/hands free function with 7" color display
- **1.10.13.** Two (2) 12V accessory power outlets with covers, mounted in dash (for cell phone chargers, GPS devices, etc.). One (1) 12V power outlet and one (1) USB charging outlet will also satisfy this requirement.
- 1.10.14. Integrated trailer brake controller
- 1.10.15. Body Builder wiring harness
  - **1.10.15.1.** Body Builder wiring harness to be located at back left side of cab
  - **1.10.15.2.** Separate wiring circuits in body builder harness to include
    - **1.10.15.2.1.** Ground circuit
    - 1.10.15.2.2. Backup light circuit
    - 1.10.15.2.3. left and right turn circuits
    - **1.10.15.2.4.** Tail light circuit
    - 1.10.15.2.5. Accessory 12 volt power circuit

Comply:YesNo
<b>1.11.</b> Paint
1.11.1. Cab: Manufacturer's standard, white
<b>1.11.2.</b> Chassis: Manufacturer's standard, black
Comply:YesNo
1.12. FMCSA/DOT Mandated Safety Items
<b>1.12.1.</b> One (1) UL listed, 5 B:C rated, or higher, fire extinguisher securely mounted in cab
1.12.2. One (1) set of three (3) bidirectional reflective triangles conforming to FMVSS No. 125
1.12.3. At least one (1) spare fuse for each type/size used in the truck
Comply:YesNo

- 2. Attached Equipment: Dump Body Crane and Warning Lights
  - 2.1. Dump Body Design and construction
    - 2.1.1. Three (3) cubic yard water level
    - **2.1.2.** Understructure
      - **2.1.2.1.** Crossmembers to be 3" 4.1#/ft. channel
      - **2.1.2.2.** Longitudinals to be 5" 9.0#/ft. channel
    - **2.1.3.** Bed to be 11' 0" Long
    - 2.1.4. Bed to be 7'3" inside width, 8' outside width
    - **2.1.5.** Bed Sides



### **EQUIPMENT SPECIFICATIONS**

- **2.1.5.1.** Bed sides to be 12" high with 6" tall board pockets
- **2.1.5.2.** Front and rear gussets 6" high with sideboard pockets
- 2.1.5.3. 8" Full depth rear corner post and skirt
- 2.1.5.4. Boxed top rail
- 2.1.5.5. Rub rails to be sloped to allow dirt shedding
- 2.1.6. Front Bulkhead
  - 2.1.6.1. Constructed of 10 ga. steel
  - **2.1.6.2.** Bulkhead to be 6" higher than sides
  - **2.1.6.3.** Die-formed horizontal brace
  - **2.1.6.4.** Cab shield to be 24"
- 2.1.7. Floor
  - **2.1.7.1.** Floor plate to be 3/16" one piece steel floor plate
  - 2.1.7.2. Floor to have 2" side to floor radius.
- 2.1.8. Tailgate
  - **2.1.8.1.** To be 6" higher than sides
  - 2.1.8.2. To have boxed perimeter with vertical bracing
  - 2.1.8.3. Tailgate to be double acting with support chains
  - **2.1.8.4.** 1 ¼" diameter hinge and latch pins
  - **2.1.8.5.** Manual front lever latch control
- 2.1.9. Sides, front panel, tailgate, and all braces to be ASTM A1011 A-45 High Tensile Steel.
- **2.1.10.** All welds, except Crossmember to body floor, to be continuous

Comp	lv:	Yes	No

- 2.2. Dump Bed Hoist
  - 2.2.1. 8-ton capacity
  - **2.2.2.** Single 5" bore ram
  - 2.2.3. 16" stroke
  - 2.2.4. NTEA Class 20
  - **2.2.5.** scissor-type
  - **2.2.6.** In cab controls for easy operator access.
  - 2.2.7. Self-contained 12 VDC electric power unit
  - **2.2.8.** Double acting design (power up and power down)

Comply: \_\_\_\_\_Yes \_\_\_\_\_No

- 2.3. Crane, Davit OZ1000DAV-DCW or approved equal
  - 2.3.1. 12 Volt DC
  - 2.3.2. Maximum load capacity 1,000 lbs.
  - 2.3.3. Crane weight maximum 120 lbs.
  - 2.3.4. Wired control
  - **2.3.5.** Adjustable boom length minimum of 26 inches maximum of 42 inches
  - 2.3.6. 360 degrees of non-obstructed rotation
  - **2.3.7.** Steel Construction
  - **2.3.8.** Mast minimum diameter to be three (3) inches

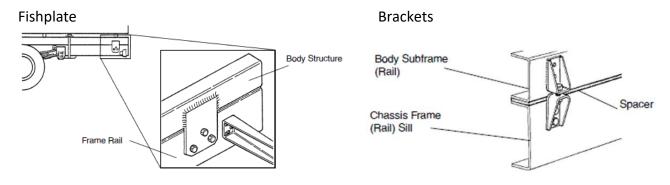
### **EQUIPMENT SPECIFICATIONS**

- 2.3.9. Crane pedestal, Davit OZPED2 or approved equal
  - 2.3.9.1. Crane pedestal to be rated for 1,000 lbs. load capacity, constructed of steel
  - 2.3.9.2. Pedestal to have a mount hole diameter to match the crane mast diameter
  - 2.3.9.3. Pedestal to have a minimum of four (4) mounting holes
  - 2.3.9.4. Crane and pedestal to be finished with rust preventive pint/coating
- 2.3.10. Pedestal and crane to be mounted in the right rear corner of the dump body (reference 2.3.10.3)
  - 2.3.10.1. Pedestal to be mounted with Grade 8 bolts
  - 2.3.10.2. Pedestal mounting to be reinforced with ¼" inch steel plate under floor of dump body



Comply: Yes No

- 2.4. Dump Body Installation
  - **2.4.1.** Body shall be bolted to chassis frame and body sub-frame using brackets or fishplates. U-BOLTS ARE NOT ALLOWED AND WILL NOT BE ACCEPTED.



Comply: \_\_\_\_Yes \_\_\_\_No

- **2.5.** Accessories
  - 2.5.1. Two shovel brackets



### **EQUIPMENT SPECIFICATIONS**

**2.5.2.** Rear mud flaps - Heavy duty 3/8" rubber rear wheel mud flaps with full width steel angle sandwich type anti-sail mounting brackets (plastic flaps not acceptable

Comply: \_\_\_\_Yes \_\_\_\_No

- 2.6. Rear Bumper & Trailer Hitch
  - **2.6.1.** To be chassis mounted to the end of frame
  - 2.6.2. Combination 7-pole & 4-pole trailer electrical connector included & mounted
  - **2.6.3.** A Buyers Products Co. P/N 1809070 or equal steel ICC bumper style hitch with a 2½" receiver tube and two (2) welded D-rings for safety chains. (pictured below) Bumper/hitch to be primed & painted black.



Comply: \_\_\_\_\_Yes \_\_\_\_\_No

- 2.7. Body Prep/Paint
  - 2.7.1. Remove all weld spatter and slag, round sharp corners, grind sharp edges, buff all surfaces
  - 2.7.2. Prepare all surfaces (under structure and body) per paint manufacturer's requirements
  - 2.7.3. Prime with high solids black epoxy primer compatible with finish coat, 3-4 mils DFT.
  - 2.7.4. Finish coat will be PPG Concept DCC No. 920247 gray or approved equal, acrylic urethane, 4 mils DFT.

Comply: \_\_\_\_Yes \_\_\_\_No

- **2.8.** Heading 2
  - **2.8.1.** Item 1
    - 2.8.1.1. Sub 1
    - **2.8.1.2.** Sub 2
    - **2.8.1.3.** Sub 3

Comply: \_\_\_\_\_Yes \_\_\_\_No

- 3. Lighting and Safety
  - 3.1. Lighting
    - **3.1.1.** Body lamps to be recessed rubber-mounted snap-in shock-proof type with plug in connectors. All body lighting must meet FMVSS Standard No. 108.



### **EQUIPMENT SPECIFICATIONS**

### **3.1.2.** LED oval warning lights

3.1.2.1. Two in front side of cab shield



**3.1.2.2.** Two in rear corner posts of the dump body



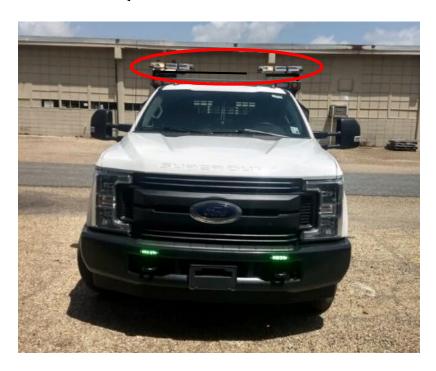
- **3.1.2.3.** 6" L x 2 1/4 " W, recessed, grommet, snap-in mount
- 3.1.2.4. Polycarbonate lens
- **3.1.2.5.** Dual color amber/green
- **3.1.2.6.** Capable of double or quad flash pattern
- **3.1.2.7.** 12 VDC
- **3.1.2.8.** Shall be SAE J595 Class 2 certified with plug in connector

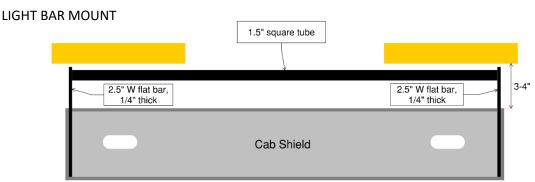
### Comply: \_\_\_\_Yes \_\_\_\_No

- 3.1.3. Mid-Size Light Bars
  - **3.1.3.1.** SoundOff Signal nRoads Mini/Mid-Size or equal light bars that satisfy the following requirements.
  - **3.1.3.2.** Two (2) mid-size (24") light bars shall be installed on a light bar mount in the locations shown in. Length is nominal and +/- 1" is acceptable.



### **EQUIPMENT SPECIFICATIONS**





- \*\*Image provided as a general concept of light mounting. Vendor designed mounting that achieves similar function will be acceptable\*\*
- 3.1.3.3. Dual color 12 diodes per module (equal number of green & amber)
- **3.1.3.4.** All modules shall be capable of fully displaying both colors.
- **3.1.3.5.** Flash pattern capable of alternating between an asymmetric, low-frequency, "wig-wag" pattern and a low-frequency double or quad flash.
- 3.1.3.6. UV resistant clear polycarbonate lens
- 3.1.3.7. 10-16 VDC
- **3.1.3.8.** Light bars shall meet all applicable federal/state laws and regulations
- 3.1.3.9. Shall be SAE J845 360-degree Class 1 certified

Comply: \_\_\_\_\_Yes \_\_\_\_No



### **EQUIPMENT SPECIFICATIONS**

**3.1.4.** Perimeter Lights – Mounted at bumper level or in grille



- **3.1.4.1.** Brooking Industries XT12D perimeter light head or equal that satisfies the following requirements.
- **3.1.4.2.** Size Length: 4.25-5.25 in., Width: 1.0-2.0 in., Height: 0.3-0.4 inches
- 3.1.4.3. 12-24 VDC
- **3.1.4.4.** UV resistant clear polycarbonate lens, black bezel trim
- **3.1.4.5.** 12 diodes dual color (equal number of green & amber)
- **3.1.4.6.** Light head shall be capable of displaying each color across full length.
- **3.1.4.7.** Capable of alternating between an asymmetric, low-frequency, "wig-wag" pattern and a low-frequency double or quad flash.
- **3.1.4.8.** Light head shall meet all applicable federal/state laws and regulations
- 3.1.4.9. Shall be SAE J595 Class 1 certified

Comply: \_\_\_\_\_Yes \_\_\_\_No

- 3.1.5. High Visibility Retroreflective Tape, see images below for locations
  - **3.1.5.1.** DOT C2 approved high visibility retroreflective conspicuity tape, 2" wide, with alternating 6" segments of red and white, shall be placed along the side of the truck and bed as referenced below





### **EQUIPMENT SPECIFICATIONS**

**3.1.5.2.** High visibility retroreflective conspicuity tape, 2" wide, with alternating 6" segments of red and white, shall be placed on the rear of the body as referenced below



Comply: \_\_\_\_\_Yes \_\_\_\_\_No



### **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: Engine has 325 horsepower 1.6 1.18.3 Batteries have 2000 CCA combined. Crossmembers are 4" channel on 12" centers. 2.2.8 Spec./Detail Reference **Exception**