

## Lot 4 - Slope Front Dump Bodies

		Estimated Quantity	Unit Price	Estimated Extended Price	Days ARO
<b>1</b>	<b>Body, Slope Front Dump, 6.5 Cubic Yard</b>	<b>40</b>	<b>\$22,560.00</b>	<b>\$902,400.00</b>	<b>30</b>
	<b>Vendor Product Number</b>	<b>LEESC6.5</b>			
	INSTALLATION OF BODY AND HOIST SYSTEMS	Add:	\$3,885.00		
	ELECTRIC DRIVE TARP ASSEMBLY (DONOVAN MODEL 7000ELD)	Add:	\$1,385.00		
	ELECTRIC DRIVE TARP ASSEMBLY (DONOVAN MODEL 7000ELD) WITH INSTALLATION	Add:	\$1,978.00		
	CRANK TARP ASSEMBLY (ONLY)	Add:	\$944.00		
	CRANK TARP ASSEMBLY WITH INSTALLATION	Add:	\$1,443.00		
	3 STEP "EZ-STEP" (ONLY)	Add:	\$325.00		
	3 STEP "EZ-STEP" WITH INSTALLATION	Add:	\$375.00		
	ASPHALT SPREADER APRON WITH INSTALLATION	Add:	\$425.00		
	TOOL BOX, UNDER BODY, 36" X 18" X 18", WITH INSTALLATION	Add:	\$495.00		
	SLOPING REAR TAILGATE	Add:	\$280.00		
	BARNDORR REAR SWING GATE CURB SIDE	Add:	\$1,585.00		
	DEDUCT - CABLE SHIFT P.T.O. IN-LIEU-OF AIR SHIFT	Deduct:	\$675.00		
		<b>Estimated Quantity</b>	<b>Unit Price</b>	<b>Estimated Extended Price</b>	<b>Days ARO</b>
<b>2</b>	<b>Body, Slope Front Dump, 12 Cubic Yard</b>	<b>60</b>	<b>\$24,980.00</b>	<b>\$1,498,800.00</b>	<b>30</b>
	<b>Vendor Product Number</b>	<b>LEESC12</b>			
	INSTALLATION OF BODY AND HOIST SYSTEMS	Add:	\$3,885.00		
	ELECTRIC DRIVE TARP ASSEMBLY (DONOVAN MODEL 7000ELD)	Add:	\$1,518.00		
	ELECTRIC DRIVE TARP ASSEMBLY (DONOVAN MODEL 7000ELD) WITH INSTALLATION	Add:	\$2,120.00		
	CRANK TARP ASSEMBLY	Add:	\$944.00		
	CRANK TARP ASSEMBLY WITH INSTALLATION	Add:	\$1,444.00		
	3 STEP "EZ-STEP"	Add:	\$325.00		
	3 STEP "EZ-STEP" WITH INSTALLATION	Add:	\$375.00		

	ASPHALT SPREADER APRON WITH INSTALLATION	Add:	\$425.00		
	TOOL BOX, UNDER BODY, 36" X 18" X 18", WITH INSTALLATION	Add:	\$495.00		
	SLOPING REAR TAILGATE	Add:	\$280.00		
	BARNDOOR REAR SWING GATE CURB SIDE	Add:	\$1,585.00		
	DEDUCT - CABLE SHIFT P.T.O. IN-LIEU-OF AIR SHIFT	Deduct:	\$675.00		
		<b>Estimated Quantity</b>	<b>Unit Price</b>	<b>Estimated Extended Price</b>	<b>Days ARO</b>
<b>3</b>	<b>Body, Slope Front Dump, 16 Cubic Yard</b>	<b>8</b>	<b>\$28,875.00</b>	<b>\$231,000.00</b>	<b>30</b>
	<b>Vendor Product Number</b>	LEESC16			
	INSTALLATION OF BODY AND HOIST SYSTEMS	Add:	\$3,885.00		
	ELECTRIC DRIVE TARP ASSEMBLY (DONOVAN MODEL 7000ELD)	Add:	\$1,731.00		
	ELECTRIC DRIVE TARP ASSEMBLY (DONOVAN MODEL 7000ELD) WITH INSTALLATION	Add:	\$2,314.00		
	CRANK TARP ASSEMBLY (ONLY)	Add:	\$944.00		
	CRANK TARP ASSEMBLY WITH INSTALLATION	Add:	\$1,444.00		
	3 STEP "EZ-STEP" (ONLY)	Add:	\$325.00		
	3 STEP "EZ-STEP" WITH INSTALLATION	Add:	\$375.00		
	ASPHALT SPREADER APRON WITH INSTALLATION	Add:	\$425.00		
	TOOL BOX, UNDER BODY, 36" X 18" X 18", WITH INSTALLATION	Add:	\$495.00		
	SLOPING REAR TAILGATE	Add:	\$280.00		
	BARNDOOR REAR SWING GATE CURB SIDE	Add:	\$1,585.00		
	DEDUCT - CABLE SHIFT P.T.O. IN-LIEU-OF AIR SHIFT	Deduct:	\$675.00		

**SPECIFICATIONS FOR BODY, DUMP, SLOPE FRONT, 6 1/2 -16 CU. YD**

SCDOT Spec. No. B111.03 – 07/15/21

1. **DESCRIPTION:** The dump bodies shall be heavy-duty body and hoist assemblies designed and constructed for handling stone, dirt, and asphalt in highway maintenance applications over a very long life-cycle (15 + years). Additional uses will include tailgate and hopper type material spreader installations for snow removal. Three sizes of body are covered in this specification.
2. **CAPACITY:** Three sizes, measured in cubic yards, water level: 6 1/2, 12, and 16 cu. yd.
3. **DIMENSIONS:** The inside width of the body and the inside length shall meet the minimum requirements in the chart below. The height of the body sides shall be proportioned to secure the specified cubic yard capacity.

Body Size	Inside Width	Inside Floor Length	Side Height	Headboard Height	Tailgate Height	Rear Post Height
9.5 ft	84"	114"	34"	56"	46"	44"
12 ft	84"	144"	44"	56"	46"	44"
16 ft	84"	192"	44"	56"	46"	44"

4. **BODY:** The body shall only be constructed of mill certified steel per the specs requested. Body to be welded solid.
  - 4.1. Sides fabricated from single sheets of minimum 3/16" high tensil 50,000 yield steel.
  - 4.2. The side sheet shall overlap the floor radius and extend to the top of the top rail. All welding on the sides shall be 100%.

The top rail shall be formed from 3/16" steel with formed angle to prevent material from laying on top and shall have no less than a 5" face and a 5" depth forming a fully boxed top rail against top of the sides.

The center rail shall be formed from 3/16" steel formed with angle to prevent material from laying on top and shall have no less than a 5" face and a 5" depth forming a fully boxed center rail against center of the side. Steel C-channel shall be welded to bottom of center side rails with two 4 inch wide sliding tie-down winches with minimum 5,400 lbs. working load capacity straps on each side. Tie-down winches shall be adjustable and capable of locking into position. Each body shall have one ratchet type wench bar.

Formed fenders shall be installed on each side of the body extending full length of the sides. The sloping surface shall be no less than 45 degrees. The fenders shall have a 4" vertical face and a return flange for added strength. The inside of the fenders shall be boxed for additional strength and open at the rear to allow drainage and access for wiring. The fenders shall be formed from 10-gauge high tensile steel (50k min. yield). The fenders shall have one 2 3/4 inch round punched hole at front for one LED amber marker light. Amber round lights shall be provided. The body shall be equipped with a 2 or 3 step retractable access ladder with grab handles and positive latch to secure ladder while in horizontal stowed position. Ladder shall be mounted on curb side of body.

## **SPECIFICATIONS FOR BODY, DUMP, SLOPE FRONT, 6 ½ -16 CU. YD**

SCDOT Spec. No. B111.03 – 07/15/21

The rear posts shall be fabricated from a single sheet of ¼" 50k high tensile steel and form a box section no less than 10" wide. The rear posts shall extend from the top of the sides to the bottom of the rear panel. Top of posts shall have 45 degree angle with top pin for tailgate mounted. Bottom of post shall have a 30 degree angle apron. The rear posts shall be of sufficient depth to allow installation of recessed rubber mounted light. The rear of each post shall have three equally spaced 3" x 6" oval punched holes for: one LED red tail light, one LED white reverse light, and one LED amber/white warning light; one 2 ¾ inch round punched hole above ovals for one LED red marker light. The lower side of each post shall have one 2 ¾ inch round punched hole for one LED red marker light. Three LED red round marker lights shall be mounted under rear of body above pintle hook assembly. Red oval and round lights shall be provided. The body shall be pre-wired with plug under body near tailgate to connect to plug provided by cab and chassis dealer. The body shall have steel front mud guards and rear mud flaps hung on chains.

The front of the body shall be sloped and fabricated from a single sheet of 3/16" Hardox/AR450 steel. The inside of the front sheet shall be reinforced using structural angle. The top flange shall be welded to the top of the bulkhead with a double bend design extended full width of the inside of the body. The front sheet shall be burned from a single sheet of Hardox 450 and incorporate hand holds and covers for the front of the trapezoid long beams. The body shall be equipped with a tarp box mounted at the top of the sides which is constructed of 10-gauge 50k high tensile steel and be fabricated with a slope to allow drainage. The leading edge of the cab shield shall be equipped with a wind deflector designed to protect automatic-type load covers (tarps). The cab shield shall have two 2 ¾ inch round punched holes at ends on front for two LED amber marker lights. Amber round lights shall be provided. Conduit for wiring to run up front of body on drivers side and across the front with 6 inch center covered brake in conduit. Head board brace to be cut at the same angle as the rear post. Steel two inch lip behind cab shield turned outward at 45 degree steel angle for mounting 1 ¼" x 4" perimeter warning lights on both sides of body. The body shall have an electric direct drive tarp system with all hardware and cab mounted controls, and asphalt rated tarp compatible with 6 ½, 12, or 16 cubic yard bodies. All tarp hardware to be installed on the body prior to primer and paint process with tarp arm pivot bracket mounted on center side rail. Donovan Model 7000ELD or equal.

The tailgate shall be fabricated from a single sheet of ¼" Hardox 450 abrasion resistant steel. The tailgate shall be double-acting design. 2-panel tailgate with spreader chains attached and hook to the top with a 90-degree chain guard at bottom. The top hardware shall be flame cut 1" steel or equal and be of the upward acting design. All bracing shall be 100% welded and of a material shedding design for severe duty. The lower tailgate pins shall be 1 ¼" diameter minimum and extend through entire width of tailgate. The lower hardware shall be cast steel and of the overshot design. There shall be 3/8" minimum coil proof chains attached to the gate and be of sufficient length to hold the gate in spreading operations. There shall be cast "no jump" banjo hooks in the rear post at the top and the bottom to secure the spreader chains. Hooks shall be installed on the gate to hold the chains when not in use. The operating device shall be designed to latch over center in the closed position. The tailgate latching mechanism shall be air operated. The air cylinder shall be located between the body long beams at the rear of the body. The cylinder shall be double acting and have a 2 ½" bore and 6" stroke. The switch to operate the cylinder shall be located in the cab within easy reach of the operator. Body shall have 12 inch asphalt taper on rear with approximate 30 degree angle.

## **SPECIFICATIONS FOR BODY, DUMP, SLOPE FRONT, 6 ½ -16 CU. YD**

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The floor of the dump body shall be fabricated of a single sheet of 3/16" Hardox AR450 steel minimum x 96" wide. The floor shall have 12" radii formed in the sides and the floor sheet shall extend 12" above the floor. The center section of the floor shall be flat and no less than 5' wide.

The cross shaft shall be no less than 1 1/4" diameter and shall be located near the rear of the body. There shall be a minimum of 4 greaseable cast steel blocks supporting the cross shaft on each side of the trapezoid long beam and at each end. The latching mechanism shall be of the over center design. There shall be adjustable linkage rods connecting the rear cross shaft to the lower hardware.

The understructure shall be of the cross-memberless design. The longitudinal shall be formed of 3/16" high tensile steel. The inside leg shall be vertical and the outside leg shall slope outboard to support the floor. Structural long beams are not acceptable. There shall be a full width rear panel formed from a single sheet of 3/16" high tensile steel. There shall be a formed in place return flange no less than 1" wide at the bottom of this panel for additional strength. The longitudinal shall be welded to the floor full length and to the rear panel 100%. There shall be a rubber cushion to run full length of the long sill. Rear hinge to be 1-3/4" steel platform with full pin.

The body shall be equipped with a Hyva 63101 hoist and shall include telescopic support stabilizer to support and maintain cylinder perpendicular to its mounting base to prevent roll-overs, hose burst protection valve to prevent damage in event of fluid loss, cartridge style pressure relief valve for ease of replacement in field, pneumatic limiter switch (pull stop switch not acceptable), Muncie power take-off (PTO) with complete installation kit and hardware shall be included, PTO warning light, and body raised warning light, .

The hoist shall have a steel hydraulic tank to be mounted on platform behind cab (9.5 & 12 ft body to have a 21 gallon tank, 16ft body to have a 30 gallon tank). Hydraulic tank to have a 3/8" oil level check. The State truck body and cab and chassis dealers must coordinate exact locations for factory drilled or punched hole patterns on frame rails to accept dump body platform and hoist bracket. Hydraulic fluid to fill tank shall be provided by body dealer.

The hoist rating shall be per chart below. The hoist manufacturer shall be a current member of the National Truck Equipment Association (NTEA) and hoist system shall be listed on the current NTEA Dump Body & Conversion Hoist Chart.

6 ½ cu. yd. body: Lift cylinder 5 inches in diameter, 3 stages up and down, and 110 inch stroke. Hoist rating - NTEA Class 80 (minimum) and not less than 16 tons with 9.5 ft. body. Godwin 5-3110 or approved equal.

12 cu. yd. body: Lift cylinder 5 inches in diameter, 3 stages up and down, and 127 inch stroke. Hoist rating - NTEA Class 90 (minimum) and not less than 23 tons with 12 ft. body. Godwin 5-3127 or approved

16 cu. yd. Body: Lift cylinder 6 inches in diameter, 4 stages up and down, and 158 inch stroke. Hoist rating – NTEA Class 110 (minimum) and not less than 29 tons with 16 ft. body. Godwin 6-3110 or approved equal.

## **SPECIFICATIONS FOR BODY, DUMP, SLOPE FRONT, 6 ½ -16 CU. YD**

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**REQUIREMENTS:** The unit shall be complete with all standard equipment and accessories normally furnished. Safety devices as required by OSHA regulations Sect. 196.601 (6) (10) (11) and (12) shall be furnished. Two (2) body safety props, one on each side, shall be provided. Safety props shall be designed so operator does not have to reach inside of hoist frame to operate prop.

**EQUIPMENT/SERVICES OPTIONAL:** When required during the contract term, the following optional equipment and/or services shall be provided.

1. Dump bodies and associated hardware installations as may be required during the contract term.
2. Body and hoist optional equipment additions, deletions and/or substitutions of equipment as may be required by this specification, based on terms found under special conditions of the bid invitation.

\*\*\*NOTE\*\*\* All optional mounting brackets, hardware, studs, tie rails, shall be installed prior to primer and paint process.

**TRUCK CHASSIS-CAB:** The body and hoist shall be furnished for subsequent installation by the South Carolina Department of Transportation. If optional installation is required, the successful bidder will take delivery of the Department's truck at the SCDOT Equipment Depot, 1500 Shop Road, Columbia, SC. The body vendor shall deliver the truck to his facility from the Department's Equipment Depot and return it after installation of the body. The vendor shall accept full responsibility and liability in transporting the truck, relieving the Department of any loss, liability, or claim whatsoever incurred enroute.

The truck chassis-cab applications shall be as follows:

6 ½ cu. yd. body: Current Model Year Western Star 4700SB or equal, 96" CA, with Allison Model 3000 RDS transmission.

12 cu. yd. body: Current Model Year Western Star 4700SB or equal, 112" CT, with Allison Model 3500 RDS transmission.

16 cu. yd. body: Current Model Year Western Star 4700SB or equal, 165" CT, with Allison Model 3500 RDS transmission.

During the contract period for bodies, it is expected that the separate state contracts for truck chassis-cabs will result in different year models, manufacturers, and vehicle models. These changes should not significantly affect the body contract.

**SERIAL NUMBER:** Each unit shall be provided with a manufacturer's serial number, unique to each unit, permanently attached by plate or engraving, and easily identified. The serial number shall be used by the Department and the manufacturer to identify units for recall, to aid in recovery of stolen units, to establish ownership, and for other similar reasons.

**COLOR:** The unit shall be painted or powder coated gloss black. All oil, grease, dirt, etc. shall be removed chemically or whatever means necessary and primed prior to application of the finish paint. All dump body surfaces (top, underneath, inside and outside perimeter) to be 100% abraded by sand blasting or shot blasting to remove all surface rust and mill scale/slag. Any blast media residue shall be removed before painting. Partial abrading of inside and outside corners only is not acceptable. All surfaces shall be abraded to a SP-10 finish. Serial and data plates shall be protected from being painted over.

## **SPECIFICATIONS FOR BODY, DUMP, SLOPE FRONT, 6 ½ -16 CU. YD**

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There shall be a zinc/epoxy primer used that is to be certified for a minimum of 4000 hours in an SAEB-117 salt spray test. In addition, the finish paint shall be certified for 1000 hours for this same test for a combined total of 5000 hours of testing. The under coating is to be certified for 800 hours for the salt test.

A zinc rich epoxy primer shall be applied to accommodate a 4000 hour certification. (If using a liquid primer a sealer must be applied to prevent out gassing and pinholes in finish paint)

A black high gloss top coat shall be applied to accommodate a 1000 hour certification. It shall have a gloss rating of 90% or higher.

The combined paint system finish shall pass an SAEB-117 accelerated salt spray test for no less than 5000 hours. Any methods, practices, or products must abide and be certified to meet this specification prior to bid opening. Paint systems and material certification must be made available upon request.

All manufacturers' standard warning, safety, instructional, and identification decals shall be provided; however, there shall be no vendor or dealer identification or advertising decals allowed.

**WARRANTY:** The unit shall be warranted against defects in materials and workmanship for a period of not less than twelve (12) months. The warranty start date shall be based on the unit's in-service date as established by its issue from the Department's Equipment Depot to the using field custodian, and the vendor shall perform all the administrative work necessary to accomplish this following notification by the Department.

In the event there is not an authorized parts and service dealership within a reasonable distance of the unit's place of assignment, there shall be a procedure for the Department to make a claim for recovering the cost of parts and labor incurred in performing repairs which otherwise would have been covered by the warranty. Instructions and forms needed for warranty claims should be attached to the bid.

The unit shall be furnished with a copy of the warranty statement and any necessary cards, booklets, or certificates needed to receive warranty repairs at a dealership.

**SERVICE LITERATURE:** An illustrated parts book and installation instructions manual shall be furnished with each hoist and body. CD format is preferred and shall be provided if available. Two (2) additional copies shall be furnished to the South Carolina Department of Transportation's Director of Supply and Equipment at the time of delivery of the initial order.

**SALES LITERATURE, SPECIFICATIONS, AND QUESTIONNAIRE:** It is the bidder's responsibility to ensure sales literature, specifications, questionnaire, and deviations (if any) submitted with the bid are accurate, complete and sufficiently clear as these will be used to evaluate the bid. Each bidder shall attach to his bid illustrated catalog data sheets with manufacturer's complete printed specifications covering the class or type of equipment covered by the bid. This material shall show reasonable evidence of having been printed and publically available over the internet before publication of the bid notice and shall be sufficiently detailed to permit the Department's engineers and/or staff to properly evaluate the bid. Each bidder shall attach to his bid a completed questionnaire. Any deviation from the specifications must be clearly pointed out; otherwise it will be considered that items offered are in strict compliance with these specifications, and the successful bidder will be held responsible therefore. Deviations must be explained in detail on separate attached sheet(s).

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**PILOT MODEL:** A body and hoist shall be furnished for installation by the Department as a pilot model to verify dimensional and other requirements. This installation shall be used to determine mounting details or minor changes needed. All subsequent units shall be manufactured and furnished to match the approved pilot model and the approved changes. Should the pilot model be found unacceptable to the Department, the contract may be terminated upon written notification.

**GENERAL:** The body and hoist shall be of the latest design and in current production. It shall operate efficiently in dumping the body of maximum dimensions specified herein and will form a satisfactory unit in connection with the body and truck chassis. The right is reserved to reject any and all bids proposing to furnish equipment which in the opinion of the Department's engineers and/or staff is not satisfactory for the Department's use in the proposed application.

**PACKAGING:** Components for each individual body must be packaged per unit. No bulk packaging of components will be accepted.