



Ocean County Board of Commissioners

OFFICE OF THE
OCEAN COUNTY COMMISSIONERS

Director John P. Kelly

Deputy Director Virginia E. Haines

Commissioner Barbara Jo Crea

Commissioner Gary Quinn

Commissioner Joseph H. Vicari

101 Hooper Avenue
Toms River, New Jersey
08754-2191
Tel: (732)929-2005
Fax: (732)505-1918

Board Meeting Agenda

Date: September 21, 2022 - 4:00 PM

Location: Administration Building
Room 119
101 Hooper Avenue
Toms River, NJ 08754

Agenda: Awarding a Contract for the furnishing and delivery of MOTOR VEHICLE: TANDEM TRUCK to Robert H. Hoover & Sons, Inc., the sole qualified bidder. (B2022-125)

Official Resolution#	2022001304						
Meeting Date	09/21/2022						
Introduced Date	09/21/2022						
Adopted Date	09/21/2022						
Agenda Item	I-2						
CAF #							
Purchase Req. #	B2022-125						
Result	Adopted						
COUNTY COMMISSIONER	PRES.	ABS.	MOVE	SEC	AYE	NAY	ABST.
Kelly	<				<		
Haines	<		<		<		
Crea	<				<		
Quinn		<					
Vicari	<			<	<		

I HEREBY CERTIFY THAT THIS DOCUMENT IS A TRUE, COMPLETE AND ACCURATE COPY OF THIS RESOLUTION, ADOPTED BY OCEAN COUNTY BOARD OF COMMISSIONERS, NJ AT THE MEETING REFERENCED THEREON

Michelle I. Gunther

Clerk Of The Board



RESOLUTION

September 21, 2022

WHEREAS, on August 30, 2022, pursuant to legal advertisements therefor, sealed bids were received for the furnishing and delivery of MOTOR VEHICLE: TANDEM TRUCK for the County of Ocean; and

WHEREAS, at the advertised time, one response was received from the following bidder:

Name of Bidder

Robert H. Hoover & Sons, Inc.

Address of Bidder

149 Gold Mine Rd.
Flanders, NJ 07836
(973) 347-4210

; and

WHEREAS, after the receipt and examination of same, the County Purchasing Agent has now recommended to this Board that the sole qualified bid, according to specifications, namely that of, ROBERT H. HOOVER & SONS, INC.

NOW, THEREFORE, BE IT RESOLVED by the BOARD OF COMMISSIONERS of the COUNTY OF OCEAN, STATE OF NEW JERSEY, as follows:

1. The Director and Clerk of this Board are hereby authorized and directed to enter into a contract accepting the bid for the furnishing and delivery of Motor Vehicle: Tandem Truck for the County of Ocean, for the contract period from date of award through September 20, 2023, a period of one (1) year or until delivery is complete unless otherwise stated. The County reserves the right to extend the term of the contract pursuant to N.J.S.A. 40A:11-15, as follows:

ROBERT H. HOOVER & SONS, INC. for twelve (12) items, to wit:

ITEM NOS. 1, 1A, 1B, 1C, 1D, 1E, 1F, 1G, 1H, 1I, 1J and 1K.

For a Total Lump Sum Award (Item #'s 1 - 1K) of \$1,030,770.00.

This vendor has extended this contract to County Cooperative Contract System Participants.

2. Payments for the equipment to be acquired by this contract shall be made upon the approval of vouchers submitted by the successful bidders in accordance with the requirements of the Board of Commissioners and subject to the Board of Commissioners customary procedures. Delivery shall be made upon receipt of a Purchase Order issued by the Ocean County Department of Purchase, upon which delivery locations and needed quantities shall be indicated.

3. Funds for equipment shall be available within the following funding

Sources: Parks Department, Vehicle Services Department O.E.

4. The contract number must be placed on all papers, documents, invoices and vouchers pertaining to said contract, the number being B2022-125.

5. Be it further resolved that certified copies of this Resolution shall be made available to the County Auditor, County Department of Purchasing, Department of Finance, Parks Department, Vehicle Services and Robert H. Hoover & Sons, Inc., the successful bidder.

PROPOSAL DOCUMENT REPORT

Bid No. TBD

MOTOR VEHICLE: TANDEM TRUCK

ROBERT H. HOOVER AND SONS, INC.

COI_-_W19626_-_COUNTY_OF_OCEAN_-_2021_-_10-6-2021_-_420159497.pdfCOI_to_County_of_Ocean.pdf

11. Acknowledgement of Submission of Forms from Current Bid Package*

Bidders shall complete all documents and acknowledge all terms included with the bid package. All documents should be from this bid package as forms change frequently and the most updated forms are provided in this specification. The forms must not be dated or executed prior to the date of advertising. Failure to follow these instructions is cause for rejection.

Confirmed

12. Submission of Bid Package*

By submitting a response to this solicitation, the Vendor understands and acknowledges that all required documents to this solicitation must be submitted and that failure to do so may be cause for rejection.

Bidder also understands that only one (1) bid submission shall be considered. Please DO NOT Submit a manual bid response. Submitting a manual response in addition to the electronic response is cause for rejection of your bid.

Confirmed

PRICE TABLES

ITEM #1 - MODEL YEAR 2023 OR NEWER, FREIGHTLINER 114SD CHASSIS TANDEM TRUCK, AS SPECIFIED OR EQUAL

Line Item	Description	Qty.	Unit of Meas.	Unit Cost	Total Cost	Comments
✓ 1	Model Year 2023 or Newer, Freightliner 114SD Chassis Tandem Truck, as Specified or Equal	3	EA	\$250,654.00	\$751,962.00	
OPTIONS:						
✓ 1A	V-Box Spreader, As Specified	3	EA	\$33,461.00	\$100,383.00	

PROPOSAL DOCUMENT REPORT

Bid - MOTOR VEHICLE: TANDEM TRUCK

Page 6

PROPOSAL DOCUMENT REPORT

ROBERT H. HOOVER AND SONS, INC.

Bid No. TBD

MOTOR VEHICLE: TANDEM TRUCK

Line Item	Description	Qty.	Unit of Meas.	Unit Cost	Total Cost	Comments
✓ 1B	8' Under Tailgate Spreader, As Specified	3	EA	\$4,766.00	\$14,298.00	
✓ 1C	Heated Body, As Specified	3	EA	\$2,750.00	\$8,250.00	
✓ 1D	Chassis Upgrade to 74,000 GVWR, As Specified	3	EA	\$7,651.00	\$22,953.00	
✓ 1E	Paint for Dump Body, As Specified	3	EA	\$3,300.00	\$9,900.00	
✓ 1F	Paint Colors Not on Standard Color Chart	3	EA	\$1,000.00	\$3,000.00	
✓ 1G	Road Department Color Scheme, As Specified	3	EA	\$1,426.00	\$4,278.00	
✓ 1H	Diagnostic Tools / Test Equipment, As Specified	3	SET	\$17,922.00	\$53,766.00	
✓ 1I	Two-Way Radio Power and Wiring Requirements for New Vehicles, As Specified	3	EA	\$385.00	\$1,155.00	
✓ 1J	Installation of County Supplied Two-Way Radio and Accessories, As Specified	3	EA	\$775.00	\$2,325.00	
✓ 1K	Technical Support, As Specified	180	HR	\$325.00	\$58,500.00	
TOTAL					\$1,030,770.00	

PROPOSAL DOCUMENT REPORT

Bid - MOTOR VEHICLE: TANDEM TRUCK

Page 7

**ITEM #1 – MODEL YEAR 2023 OR NEWER, FREIGHTLINER 114SD CHASSIS TANDEM TRUCK,
AS SPECIFIED OR EQUAL**

Please enter the below information about the model of vehicle your company will be providing

Manufacturer: Freightliner 114 SD

Warranty: Base and Extended Per Specs

Delivery, A.R.O.: 300 Days ARO

Remarks:

Click or tap here to enter text.

Click or tap here to enter text.

✓ **ITEM #1 – MODEL YEAR 2023 OR NEWER, FREIGHTLINER 114SD CHASSIS TANDEM TRUCK, AS SPECIFIED OR EQUAL**

	<u>COMPLIANCE</u>	
	<u>YES</u>	<u>NO</u>
<u>GENERAL</u>		
66,000 GVWR	<input checked="" type="checkbox"/>	<input type="checkbox"/>
114SD conventional chassis; setback axle truck	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Trailer towing provision at end of frame for truck	<input checked="" type="checkbox"/>	<input type="checkbox"/>
LH primary steering location	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Truck/trailer configuration	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Expected front axle(s) load: 20,000 lbs	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Expected gross vehicle weight capacity: 66,000 lbs	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Expected gross combination weight: 66,000 lbs	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Adjustable tilt and telescoping steering column 4-spoke 18 inch (450 mm) steering wheel	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>ENGINE</u>		
Cummins X12 455V HP @ 1900 rpm, 1550 lb-ft@ 1000 rpm, 2000 Gov rpm, VOE, or equal	<input checked="" type="checkbox"/>	<input type="checkbox"/>
75 mph road speed limit with cruise control	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Regeneration inhibit speed threshold - 5 mph	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>ENGINE EQUIPMENT</u>		
2010 EPA/Carb/GHG21 configuration	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Clean idle certified (includes 6x4 inch label on lower forward corner of driver door)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Standard oil pan with engine mounted oil check and fill	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Side of hood air intake with Donaldson, or equal, high capacity air cleaner with safety element, firewall mounted	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Delco Remy 12V 160 amp 36-SI brush-less quadramount pad alternator with remote battery volt sense	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(3) dtna genuine, flooded starting, min 3000CCA, threaded stud batteries	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Battery box frame mounted standard battery jumpers	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Single battery box frame mounted lh side back of cab	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Wire ground return for battery cables with additional frame ground return	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Non-polished battery box cover	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cab auxiliary power cable	<input checked="" type="checkbox"/>	<input type="checkbox"/>

✓ **ITEM #1 – MODEL YEAR 2023 OR NEWER, FREIGHTLINER 114SD CHASSIS TANDEM TRUCK,
AS SPECIFIED OR EQUAL (CONT'D)**

	<u>COMPLIANCE</u>	
	<u>YES</u>	<u>NO</u>
<u>ENGINE EQUIPMENT (CONT'D)</u>		
Positive load disconnect with cab mounted control switch	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mounted outboard driver seat	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Positive and negative posts for jumpstart located on frame next to starter	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cummins naturally aspirated 25.9 cfm air compressor with internal safety valve	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Electronic engine integral shutdown protection system	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cummins intebrake brake with high/med/low brake	<input checked="" type="checkbox"/>	<input type="checkbox"/>
RH outboard under step mounted horizontal aftertreatment system assembly with	<input checked="" type="checkbox"/>	<input type="checkbox"/>
RHB-pillar mounted vertical tailpipe	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Engine aftertreatment device, automatic over the road regeneration and dash mounted regeneration request switch	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11' 6" standard curve bright upper stack	<input checked="" type="checkbox"/>	<input type="checkbox"/>
RH curved vertical tailpipe B-pillar mounted routed from step	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13 gallon diesel exhaust fluid tank	<input checked="" type="checkbox"/>	<input type="checkbox"/>
100% diesel exhaust fluid fill	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Standard diesel exhaust fluid pump mounting and tank cap	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Non-polished aluminum diamond plate diesel exhaust fluid tank cover	<input checked="" type="checkbox"/>	<input type="checkbox"/>
LH medium duty standard diesel exhaust fluid tank location	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Stainless steel aftertreatment device/muffler/tailpipe shield	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Horton drive master advantage on/off fan drive	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Automatic fan control with dash switch and indicator light, non-engine mounted	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cummins spin on fuel filter	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Combination full flow/bypass oil filter	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1500 square inch aluminum radiator	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Antifreeze to -34°F, oat (nitrite and silicate free) extended life coolant gates blue stripe coolant hoses or equivalent	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Constant tension hose clamps for coolant hoses	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Radiator drain valve	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Lower radiator guard	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Phillips-temro 1500 watt/115 volt block heater	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**ITEM #1 – MODEL YEAR 2023 OR NEWER, FREIGHTLINER 114SD CHASSIS TANDEM TRUCK,
AS SPECIFIED OR EQUAL (CONT'D)**

	<u>COMPLIANCE</u>	
	<u>YES</u>	<u>NO</u>
<u>ENGINE EQUIPMENT (CONT'D)</u>		
Chrome engine heater receptacle mounted under LH door	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Delco 12V 39MT HD/OCP starter with thermal protection and integrated magnetic switch	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>TRANSMISSION AND EQUIPMENT</u>		
Allison 4500 RDS automatic transmission with PTO provision	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Allison vocational package 223 - Maximum output speed for PTO operation 4000 rpm - Allison 5th gen transmissions	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Vehicle interface wiring connector without blunt cuts, at back of cab electronic transmission customer access connector firewall mounted customer installed Chelsea 280 series PTO	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PTO mounting, LH side of main transmission	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Magnetic plugs, engine drain, transmission drain, axle fill and drain push button electronic shift control, dash mounted	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Transmission prognostics	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Water to oil transmission cooler, frame mounted transmission oil check and fill with electronic oil level check	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Synthetic transmission fluid (TES-295 compliant)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>FRONT AXLE AND EQUIPMENT</u>		
Detroit da-f-20.0-5 20,000 lb. FLL 71.0 kpl/3.74 drop single front axle	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Meritor 16.SX6 q+ cast spider cam front brakes, double anchor, fabricated shoes	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Non-asbestos front brake lining	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cast iron outboard front brake drums front brake dust shields	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Front oil seals	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Vented front hub caps with window, center and side plugs - oil standard spindle nuts for all axles	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Haldex automatic front slack adjusters with stainless steel clevis pins standard king pin bushings	<input checked="" type="checkbox"/>	<input type="checkbox"/>
TRW-THP-60 power steering with RCH45 auxiliary gear power steering pump	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4 quart power steering reservoir oil/air power steering cooler	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Current available synthetic 75W-90 front axle lube	<input checked="" type="checkbox"/>	<input type="checkbox"/>

✓ **ITEM #1 – MODEL YEAR 2023 OR NEWER, FREIGHTLINER 114SD CHASSIS TANDEM TRUCK, AS SPECIFIED OR EQUAL (CONT'D)**

	<u>COMPLIANCE</u>	
	<u>YES</u>	<u>NO</u>
<u>FRONT SUSPENSION</u>		
20,000 lb. flat leaf front suspension	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Graphite bronze bushings with seals	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Front suspension front shock absorbers	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>REAR AXLE AND EQUIPMENT</u>		
RT-46-164P 46,000 lb. R-series tandem rear axle	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.30 rear axle ratio	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Iron rear axle carrier with standard axle housing RPL125SD Meritor main driveline	<input checked="" type="checkbox"/>	<input type="checkbox"/>
RPL20 Meritor interaxle driveline	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Driver controlled traction differential - both tandem rear axles	<input checked="" type="checkbox"/>	<input type="checkbox"/>
One (1) interaxle lock valve, one (1) driver controlled differential lock forward rear and rear-rear axle valve	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Blinking lamp with each interaxle lock switch	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Interaxle unlock default with ignition off	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Blinking lamp with each mode switch, differential unlock with ignition off, active <5 mph	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Meritor 16.SX7 Q+ cast spider heavy duty cam rear brakes, double anchor, fabricated shoes	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Non-asbestos rear brake lining	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Brake cams and chambers on forward side of drive axle	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Conmet cast iron rear brake drums	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Rear brake dust shields rear oil seals	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Bendix Eversure Longstroke, or equal	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2-drive axles spring parking chambers	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Haldex automatic rear slack adjusters with stainless steel clevis pins	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Synthetic 75w-90 rear axle lube	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Standard rear axle breathers	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>REAR SUSPENSION</u>		
Tuftrac Gen2 46,000 lb. rear spring suspension	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9.5 inch nominal ride height (460 mm global reference height) axle clamping group	<input checked="" type="checkbox"/>	<input type="checkbox"/>
55 inch axle spacing	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Fore/aft and transverse control rods rear shock absorbers -two axles	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**ITEM #1 – MODEL YEAR 2023 OR NEWER, FREIGHTLINER 114SD CHASSIS TANDEM TRUCK,
AS SPECIFIED OR EQUAL (CONT'D)**

	<u>COMPLIANCE</u>	
	<u>YES</u>	<u>NO</u>
<u>BRAKE SYSTEM</u>		
Wabco 4s/4M ABS	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Reinforced nylon, fabric braid and wire braid chassis air lines	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Fiber braid parking brake hose	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Standard brake system valves	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Standard air system pressure protection system Standard US front brake valve	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Relay valve with 5-8 psi crack pressure, no rear proportioning valve	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Wabco system saver HP with integral air governor and heater	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Wabco oil coalescing filter for air dryer	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Air dryer mounted inboard on LH rail aluminum air brake reservoirs	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Pull cables on all air reservoir(s)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Quick disconnect fitting with tire inflation kit	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>TRAILER CONNECTION</u>		
Air connections to end of frame with glad hands for truck and no dust covers	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Primary connector/receptacle wired for separate stop/turn	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ABS center pin powered through ignition	<input checked="" type="checkbox"/>	<input type="checkbox"/>
SAE J560 7-way primary trailer cable receptacle mounted end of frame	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>WHEELBASE AND FRAME</u>		
4450 mm (175 inch) wheelbase	<input checked="" type="checkbox"/>	<input type="checkbox"/>
½ x 3.64 x 11 ft. 7/8 inch steel frame (12.7 mm x 301.6 mm/0.5 x 11.88 inch)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
120 ksi partial inner frame reinforcement at front suspension	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1600 mm (63 inch) rear frame overhang	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Frame overhang range: 61 inch to 70 inch	<input checked="" type="checkbox"/>	<input type="checkbox"/>
24 inch integral front frame extension	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Calculated back of cab to rear suspension c/l (ca): 109.65 in	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Calculated effective back of cab to rear suspension c/l (ca): 106.65 in calculated frame length - overall: 307.79 in	<input checked="" type="checkbox"/>	<input type="checkbox"/>
High Visibility green loose lug nut indicators	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**ITEM #1 – MODEL YEAR 2023 OR NEWER, FREIGHTLINER 114SD CHASSIS TANDEM TRUCK,
AS SPECIFIED OR EQUAL (CONT'D)**

	<u>COMPLIANCE</u>	
	<u>YES</u>	<u>NO</u>
<u>WHEELBASE AND FRAME (CONT'D)</u>		
Calculated frame space lh side: 30.64 in calculated frame space rh side: 16.03 in square end of frame	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Front closing crossmember	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Standard weight engine crossmember	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Standard midship #1 crossmember(s)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Standard rearmost crossmember	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Heavy duty suspension crossmember	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>CHASSIS EQUIPMENT</u>		
14 inch painted steel bumper front tow hooks	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Frame mounted bumper mounting for single license plate	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Grade 8 threaded hex headed frame fasteners	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>FUEL TANKS</u>		
60 gallon/227 liter aluminum fuel tank - LH	<input checked="" type="checkbox"/>	<input type="checkbox"/>
25 inch diameter fuel tank(s) with polished stainless steel bands	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Fuel tank(s) forward polished step finish custom fuel tank cap	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Alliance fuel filter/water separator Equiflo inboard fuel system	<input checked="" type="checkbox"/>	<input type="checkbox"/>
High temperature reinforced nylon fuel line	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>TIRES/HUBS/WHEELS – FRONT AND REAR</u>		
Michelin XZU-S2 315/80R22.5, 20-ply radial front tires	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Michelin XDS2 11R22.5, 16-ply radial rear tires	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Conmet preset plus premium iron front hubs	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Conmet preset plus premium iron rear hubs wheels	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Accuride 29039 22.5X9.00 10-hub pilot 5.25 inset 5-hand steel disc - Front	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Accuride 28828 22.5X8.25 10-hub pilot 2-hand HD steel disc rear wheels	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Front and rear wheel mounting nuts	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Nylon wheel guards front and rear - all interfaces	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Black, high solids polyurethane chassis paint powder white (N0006EA) front and rear wheels/rims (PKWHT21, TKWHY21, W, TW) powder white (N0006EA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**ITEM #1 – MODEL YEAR 2023 OR NEWER, FREIGHTLINER 114SD CHASSIS TANDEM TRUCK,
AS SPECIFIED OR EQUAL (CONT'D)**

	<u>COMPLIANCE</u>	
	<u>YES</u>	<u>NO</u>
<u>TIRES/HUBS/WHEELS – FRONT AND REAR</u>		
One (1) spare rear wheel and tire setup	<input checked="" type="checkbox"/>	<input type="checkbox"/>
One (1) spare front wheel and tire setup	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>CAB EXTERIOR</u>		
114 inch BBC flat roof aluminum conventional cab air cab mounting	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Nonremovable bugscreen mounted behind grille short fender with mudflap	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Bolt-on molded flexible fender extensions	<input checked="" type="checkbox"/>	<input type="checkbox"/>
LH/RH exterior grab handles with single rubber insert	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Bright finish radiator shell/hood bezel	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Stationary black grille with bright accents	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Chrome hood mounted air intake grille fiberglass hood	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Tunnel/firewall liner	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Air horn and electric horns	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Rear license plate mount end of frame	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Halogen composite headlamps with bright bezels LED aerodynamic marker lights	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Headlights on with wipers	<input checked="" type="checkbox"/>	<input type="checkbox"/>
No daytime running lights	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Integral LED stop/tail/backup lights	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Standard front turn signal lamps	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Dual west coast bright finish heated mirrors with LH/RH remote door mounted mirrors	<input checked="" type="checkbox"/>	<input type="checkbox"/>
102 inch equipment width	<input checked="" type="checkbox"/>	<input type="checkbox"/>
LH/RH 8 inch bright finish convex mirrors mounted under primary mirrors	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Standard side/rear reflectors	<input checked="" type="checkbox"/>	<input type="checkbox"/>
RH aftertreatment system cab access with plain diamond plate cover composite exterior sun visor	<input checked="" type="checkbox"/>	<input type="checkbox"/>
63 x 14 inch tinted rear window	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Tinted door glass –LH/RH with tinted operating wing windows	<input checked="" type="checkbox"/>	<input type="checkbox"/>
LH/RH electric powered windows	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1-piece bonded heated wiper park solar green glass windshield	<input checked="" type="checkbox"/>	<input type="checkbox"/>

✓ **ITEM #1 – MODEL YEAR 2023 OR NEWER, FREIGHTLINER 114SD CHASSIS TANDEM TRUCK,
AS SPECIFIED OR EQUAL (CONT'D)**

	COMPLIANCE	
	<u>YES</u>	<u>NO</u>
<u>CAB EXTERIOR (Cont'd)</u>		
2 gallon windshield washer reservoir with fluid level indicator, frame mounted	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>CAB INTERIOR</u>		
Opal gray vinyl interior	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Molded plastic door panel without vinyl insert with aluminum kickplate lower door	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Black mats with single insulation	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Forward roof mounted console with upper storage compartments and additional center compartment without netting	<input checked="" type="checkbox"/>	<input type="checkbox"/>
In-dash storage bin	<input checked="" type="checkbox"/>	<input type="checkbox"/>
LH door map pocket	<input checked="" type="checkbox"/>	<input type="checkbox"/>
LH/RH integral door panel armrests	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Driver and passenger interior sun visors	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Two (2) cup holders - LH/RH dash	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Gray/charcoal flat dash	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5 lb. Fire extinguisher	<input checked="" type="checkbox"/>	<input type="checkbox"/>
First aid kit	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Heater, defroster and air conditioner	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Standard HVAC ducting with snow shield for fresh air intake	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Main HVAC controls with recirculation switch	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Standard heater plumbing with ball shutoff valves	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Valeo heavy duty AC refrigerant compressor binary control, R-134A	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Premium insulation	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Solid-state circuit protection and fuses with spare fuse kit 12V negative ground electrical system	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Dome door activated LH/RH, dual reading lights, forward cab roof	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Door locks and ignition switch keyed the same	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Triangular reflectors without flares	<input checked="" type="checkbox"/>	<input type="checkbox"/>
LH/RH electric door locks	<input checked="" type="checkbox"/>	<input type="checkbox"/>
One (1) 12 volt power supply in dash	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Elite Isringhausen high back air suspension driver's seat with 2 air lumbar, integrated cushion extension, tilt and adjustable shock, heat	<input checked="" type="checkbox"/>	<input type="checkbox"/>

✓ **ITEM #1 – MODEL YEAR 2023 OR NEWER, FREIGHTLINER 114SD CHASSIS TANDEM TRUCK, AS SPECIFIED OR EQUAL (CONT'D)**

	<u>COMPLIANCE</u>	
	<u>YES</u>	<u>NO</u>
<u>CAB INTERIOR (Cont'd)</u>		
Premium Isringhausen high back air suspension passenger seat with 2 air lumbar, integrated cushion extension, tilt and adjustable shock	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Six (6) sets of keys	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>SEATS</u>		
Dual driver and passenger seat armrests	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Vinyl with vinyl insert driver seat and passenger seat	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Black seat belts	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>INSTRUMENTS AND CONTROLS</u>		
Low air pressure indicator light and audible alarm	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Primary and secondary air pressure gauges	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Intake mounted air restriction indicator without graduations	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Backup alarm	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Electronic cruise control with switches on auxiliary gauge panel (b dash panel)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Key operated ignition switch and integral start position	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4 position off/run/start/accessory	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ICU3S, 132 x 48 display with diagnostics, 28 led warning lamps and data linked heavy duty onboard diagnostics interface connector located below LH dash	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Electric fuel gauge	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Electronic Tachometer		
Electrical engine coolant temperature gauge	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Transmission oil temperature gauge	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Engine and trip hour meters integral within driver display	<input checked="" type="checkbox"/>	<input type="checkbox"/>
One (1) dash mounted PTO switch with indicator lamp	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Electric engine oil pressure gauge	<input checked="" type="checkbox"/>	<input type="checkbox"/>
AM/FM/WB world tuner radio with Bluetooth, USB and auxiliary inputs	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Two (2) Radio speakers in cab	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Electronic mph speedometer with secondary KPH scale	<input checked="" type="checkbox"/>	<input type="checkbox"/>
No vehicle performance monitor	<input checked="" type="checkbox"/>	<input type="checkbox"/>

✓ **ITEM #1 – MODEL YEAR 2023 OR NEWER, FREIGHTLINER 114SD CHASSIS TANDEM TRUCK, AS SPECIFIED OR EQUAL (CONT'D)**

	<u>COMPLIANCE</u>	
	<u>YES</u>	<u>NO</u>
<u>INSTRUMENTS AND CONTROLS (CONT'D)</u>		
Ignition switch controlled engine stop	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Minimum of four (4) ignition controlled extra switches with overload protection	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Tractor protection valve trailer hand control brake valve	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Digital voltage display integral with driver display	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Single electric windshield wiper motor with delay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Marker light switch integral with headlight switch and dual connectors and switch for customer furnished snowplow lights	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Low beams off with high beams	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Two-valve parking brake system with warning indicator	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Self-canceling turn signal switch with dimmer	<input checked="" type="checkbox"/>	<input type="checkbox"/>
washer/wiper and hazard in handle	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Integral electronic turn signal flasher with hazard lamps overriding stop lamps	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>FINISH</u>		
Paint: one solid color – shall be chosen from color chart at time of order	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Entire truck chassis, underside of cab and underside of body to be coated with Tectyl 2423 haps free black, which is a low VOC, high solids, emulsion corrosion Preventive coating, or equal	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Color: black	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Dry film: firm/flexible solvent: mineral spirits flash point °f: 104°f application	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>COLOR</u>		
Standard black bumper paint	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sunvisor painted same as cab color a standard e coat/undercoating	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>EXTENDED WARRANTY</u>		
Cummins engine Carb 22: X12 HD 1 5 years/ 200,000 miles extended warranty	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Allison 4500 RDS series transmission extended warranty, 7 years/unlimited miles	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Towing: 5 years/unlimited miles	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Ext chassis ATS: standard moderate/vocational 5 years/200,000 miles extended coverage	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>ACCESSORIES</u>		
Full set of all filters – fuel, oil, air, and cabin	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**ITEM #1 – MODEL YEAR 2023 OR NEWER, FREIGHTLINER 114SD CHASSIS TANDEM TRUCK,
AS SPECIFIED OR EQUAL (CONT'D)**

COMPLIANCE**YES****NO****DUMP BODY SPECIFICATIONS - BRANDON BODY MEDIUM DUTY****CROSSMEMBERLESS STAINLESS DUMP BODY****GENERAL**

The dump body required under these specifications shall be constructed of 304 stainless steel. Unit shall consist of a heavy duty body, hydraulic hoist, hydraulic pump, cab shield, safety accessories, and all other components necessary to make up a complete operating unit. The body and hydraulic hoist shall be manufactured by the same company. Hoist shall be class 50 NTEA rated telescopic.

☒☐**MINIMUM BODY DIMENSIONS**

Inside length: 14'

☒☐

Inside width: 87"

☒☐

Overall width: 9611

☒☐

Side height: 4011

☒☐

End height: 4411

☒☐

Rear post height: 4411

☒☐

Capacity: 13.3 cubic yards water level cab shield: 87" wide x 24" projection

☒☐**MINIMUM BODY CONSTRUCTION**

Sides & front: 7 gauge, 304 SS one piece formed sides: 304 Stainless Steel smooth one piece formed

☒☐

Floor: 3/1611 Brinell 450 floor

☒☐

Tailgate: 7 gauge 304 SS

☒☐

Tailgate panel: 2-panel straight tailgate with flame cut SS

☒☐

Hardware latching: air operated opening and latching

☒☐

Oak wood side boards: 2" x 411 side boards shall be placed on both sides of dump body

☒☐

Tailgate: single acting tailgate & SS tailgate latch system tailgate safety: Two (2) tailgate safety door lock-chains & anchors air cylinder: air cylinder tailgate

☒☐

Longsills: 811 I-beam 3/16" Brinell 250 cab shield mounted on body

☒☐

Cab shield projection: 24" projection SS corner posts: front & rear

☒☐

Banjo eyes: Two (2) banjo eyes on rear, low & high position rear post cut outs: one (1) set LED stop/turn/tail light

☒☐

Rear post cut outs: One (1) set LED class 1 amber 611 oval strobes rear post cut outs: (1 set) led back up light

☒☐

**ITEM #1 – MODEL YEAR 2023 OR NEWER, FREIGHTLINER 114SD CHASSIS TANDEM TRUCK,
AS SPECIFIED OR EQUAL (CONT'D)**

COMPLIANCE
YES NO

**DUMP BODY SPECIFICATIONS - BRANDON BODY MEDIUM DUTY
CROSSMEMBERLESS STAINLESS DUMP BODY (CONT'D)**

MINIMUM BODY CONSTRUCTION (CONT'D)

Body prop: driver side	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Ladder: SS fold up ladder driver's side	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Walk rail: grip strut safety walk rail (both sides of body)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Holder: SS shovel holder driver side- bolt on- mid mount of body hoist: Mailhot telescopic trunnion mount double acting cylinder cylinder mount: 35 ton cylinder block & 24 ton cradle	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Hoist spec: NTEA class 50 mud flaps: (1) set mud flaps	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Under body paint: painted black tailgate spreader chain kit	<input checked="" type="checkbox"/>	<input type="checkbox"/>
One (1) oval stop/tail/turn light cutouts in rear corner post	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Wiring for standard dump body lights enclosed in a sealed waterproof wiring harness. Split loom not acceptable	<input checked="" type="checkbox"/>	<input type="checkbox"/>
One (1) stainless steel grab handle, driver side front	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3M reflective tape on both sides of body and on 6-panel tailgate	<input checked="" type="checkbox"/>	<input type="checkbox"/>

ACCESSORIES

12-volt safety lighting:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Six (6) led amber strobe lights	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Two (2) recessed into rear post	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Two (2) sides of cab shield	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Two (2) front of cab shield	<input checked="" type="checkbox"/>	<input type="checkbox"/>
All body lights shall be LED	<input checked="" type="checkbox"/>	<input type="checkbox"/>
30-ton pintle hook	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1" pull plate with 5/8" d-rings	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7-way, round trailer Pollak-type plug with a removable end	<input checked="" type="checkbox"/>	<input type="checkbox"/>
One (1) set of Meyer saber plow lights mounted on hood of chassis with stainless steel mounts	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Two (2) forward facing strobe lights mounted on snowplow lights bracket to be powered by its own switch	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Electric brake controller to control	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7-way flat trailer Pollak type plug with a removable end	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Glad hand at rear of pintle hook. Location to be determined by county	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**ITEM #1 – MODEL YEAR 2023 OR NEWER, FREIGHTLINER 114SD CHASSIS TANDEM TRUCK,
AS SPECIFIED OR EQUAL (CONT'D)**

	<u>COMPLIANCE</u>	
	<u>YES</u>	<u>NO</u>
<u>PIONEER MODEL EDD 1500D TARP SPECIFICATIONS</u>		
Side mount	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Roller assembly-telescopic- 3-piece	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Left roller tube: 2.140 O.D. x 2.000 I.D. 6105-T6 aluminum extrusion with UHMW bushing and stainless steel roll pin to accept motor shaft	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Right roller tube: 2.140 O.D. x 2.000 I.D. 6105-T6 aluminum extrusion with UHMW bushing.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1" O.D. 6061-T6 aluminum shaft and stainless steel roll pin center section: 1.960" O.D. x 1.820 I.D. 6105-T6 aluminum extrusion	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Bearing plates: ¼" H.R.S.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Bearings: flange mounted sealed ball bearings roll mounting angles: 1 ½" x 2" x ¼" steel angle	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Direct drive gear motor: mounted directly to left side roller	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Worm & wheel configuration: permanently lubricated sealed gearbox. 90 to 1 ratio	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Output shaft shall be supported by ball bearings on both ends.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Output shaft shall be directly coupled to left side roller	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Electric motor is .85 horsepower.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Aluminum gearbox housing.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Plastic protective cover.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
¾" O.D. output shaft.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Motor is thermally protected by automatic resetting circuit breaker.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Pivot arms: 1.745" O.D. x 1.405" I.D. 6105-T6 aluminum extrusion with .250 w x .94 l reinforcing fin on one side and .75 w x .50 l reinforcing block on other side.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Overall height to be 3.185"	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Rear section: 13/4" O.D. x 170 wall 6061-T6 aluminum extrusion bows: 13/8" O.D. x .125 wall 6105-T4 aluminum extrusion	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Arm mounting brackets: steel weldment base plate: ¼" H.R.S.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mounting hub: 4" O.D. steel tube	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Spring: reverse wound torsion spring-½" diameter wire per ASTM A229 class I	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>FABRIC</u>		
100% polyester, 1000 denier, black HD mesh, 13 oz. per square yard.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**ITEM #1 – MODEL YEAR 2023 OR NEWER, FREIGHTLINER 114SD CHASSIS TANDEM TRUCK,
AS SPECIFIED OR EQUAL (CONT'D)**

	<u>COMPLIANCE</u>	
	<u>YES</u>	<u>NO</u>
<u>CONSTRUCTION</u>		
Seamless front to rear, rectangular in shape, 85" wide, grommets on front & sides, pocket at rear.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>WIRING AND ELECTRICAL</u>		
All wire shall be 8 gauge stranded cable, all connectors shall be ring type.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
High amperage self-centering rotary switch (momentary on/off - momentary on).	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Thermal reset circuit breaker (auto reset).	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>PTO</u>		
PTO shall be of a hot shift design driven off the Allison automatic transmission.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PTO shall have a direct mount rotatable pump flange.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
There shall be a console mounted rocker switch to engage and disengage the PTO.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Model shall be Chelsea, or equal	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>HYDRAULIC PUMP WITH PTO</u>		
Shall be on an open circuit axial piston design with adjustable compensator	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Pump operating pressure must adjust to the actual load pressure plus a pressure differential required for the controlled action	<input checked="" type="checkbox"/>	<input type="checkbox"/>
When the system is not demanding power, the load sense control will operate in an energy-saving stand-by mode	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Minimum pump displacement shall be 80CC/ 4.9 cubic inches, delivering 42 GPM at 2,000 rpm	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Pump minimum displacement shall be 90 cubic centimeters continuously rate at 350 bar (5,000 psi). Standby pressure shall be 350 psi	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mounting is an SAE C 4-bolt flange shaft is 1.25" diameter, 14 tooth splined	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Rpm is rated to 2300 (continuous) with pressure and flow compensator control	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Rear ported, flange mounted suction port shall meet the following requirements:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Suction port minimum 2.5"		
• Must use (4) M8 x 16-8.8 mounting bolts		
The rear SAE ported pressure port shall meet the following requirements:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• pressure port minimum 1"		
• SAE-16 o-ring boss		
The hydraulic system must include a low oil shutdown with momentary override.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The system shall disengage the PTO is a low oil scenario should occur.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The operator will have the ability to temporarily override the shutdown to park all hydraulic implements for travel.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

✓ **ITEM #1 – MODEL YEAR 2023 OR NEWER, FREIGHTLINER 114SD CHASSIS TANDEM TRUCK,
AS SPECIFIED OR EQUAL (CONT'D)**

	<u>COMPLIANCE</u>	
	<u>YES</u>	<u>NO</u>
<u>MOUNT</u>		
Pump must mount directly to a PTO on Allison 4500 series, or equal, transmissions without requiring bent axis or external mounting hardware	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Pump must offer mounting flanges in SAE and ISO configurations, and ports are offered in SAE and ISO tube and flange versions.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>CONTROL VALVE GRENSON VALVE WITH PRIORITY FLOW INLET</u>		
Central hydraulic valve system shall be a mobile design to withstand exposure to deicing chemicals and severe weather conditions.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
System shall provide hydraulic fluid to operate the dump body hoist, front plow, and granular spreader system.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Hydraulic system shall be able to run all hydraulic functions simultaneously without inhibiting the action of the others.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Valve sections shall be of cast iron, horizontally stackable, and serviceable without disassembly.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Directional control valves shall be pre-compensated, proportional, and load independent	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Valve system shall be closed center for variable displacement	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Pump valve sections must be adjustable for pressure up to 5,500 psi and flow ratings up to 40 gpm	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Each valve must be laminar flow design for minimal pressure drop.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Each section must be manually activated with manual push/pull cables	<input checked="" type="checkbox"/>	<input type="checkbox"/>
There shall be a main pressure relief set at 2,400 psi to protect against system over-pressurization	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Hoist section must be a PVG 100, 40 gpm 4-way section for double acting hoist	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Plow lift and angle sections are also 4-way for double acting cylinders with crossover relief	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Spreader section shall have detent on one side of valve and self-centering on reverse	<input checked="" type="checkbox"/>	<input type="checkbox"/>
All hydraulic hoses must be bulkhead mounted with metal tube style connectors.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
All tubes shall be labeled with the hydraulic operation	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>SPREADER CONTROL</u>		
Spreader control shall be a dual knob valve with on/off handle	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Shall have individual flow adjustment knobs for the spinner and auger shall include a relief cartridge to protect the motors in the event of a material jam	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Valve shall feature spinner priority to reduce material pile up from the auger at low flow conditions	<input checked="" type="checkbox"/>	<input type="checkbox"/>

✓ **ITEM #1 – MODEL YEAR 2023 OR NEWER, FREIGHTLINER 114SD CHASSIS TANDEM TRUCK,
AS SPECIFIED OR EQUAL (CONT'D)**

	<u>COMPLIANCE</u>	
	<u>YES</u>	<u>NO</u>
<u>CABLE CONTROLS</u>		
Control valve shall be shifted via sealed cable assemblies	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cable assembly shall feature a polyethylene conduit with armor over braid and Teflon liner	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cable assembly shall be rated for a minimum of 100 lbs. of pull and 80 lbs. of push	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cables shall be attached to the hydraulic valve with clevis pin and locking clips	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cable to be attached to an in cab handle.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Handle will be mounted in a location convenient to the operator.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The handle shall feature cast base construction with steel internal parts and be rated for 80 lbs. of output force.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
A knob with identification label will be attached to the end of the handle	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>RESERVOIR/VALVE ENCLOSURE</u>		
Reservoir must be constructed of 10 gauge stainless steel.		
Reservoir/valve enclosure shall be 40 gallon capacity with an integrated covered mounting area for the valve. All plumbing for the hydraulic valve inside the enclosure shall be SAE rated stainless steel tubing and terminate on the front of the reservoir with JIC bulkhead connectors.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The breather cap shall be mounted to an inspection lid.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Inspection lid shall also provide for an in-tank mounted return line filter.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The filter assembly shall incorporate a 10 micron 50 gpm filter element with a 25 psi bypass.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The reservoir will include a twist off filler/breather assembly with 40 micron vent filter and a fill screen. Reservoir shall be complete with a sight temperature gauge and a magnetic drain plug. Suction port will allow for	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Installation of a 2" NPT 50 gpm suction screen. Suction screen shall have a 3 to 5 psi bypass spring. A 2" full flow ball valve shall be installed in the suction line. Removing of a lid to access the filter and breather cap is not acceptable. The reservoir shall have a float switch to control PTO operation in the event of low oil.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

✓ **ITEM #1 – MODEL YEAR 2023 OR NEWER, FREIGHTLINER 114SD CHASSIS TANDEM TRUCK,
AS SPECIFIED OR EQUAL (CONT'D)**

COMPLIANCE
YES **NO**

**SPX301 AMERICAN ROADS TRITON SNOWPLOW - STEEL MOLDBOARD
TUBE TABLE POWER INFINITE REVERSING FULL PLOW SPECIFICATIONS**

MOLDBOARD

Dimensions shall be: 11' L X 42" H

☒ ☐

Material shall be 10 gauge carbon steel smooth rolled profile providing ultra-smooth surface for snow deflection and stop at the top of the bottom angle to allow replacement of angle.

☒ ☐

Overhang from cutting edge shall have minimum 12" overhang with 10° attack angle.

☒ ☐

Top of moldboard shall be reinforced by 2 ½" x 2 ½" x 3/8" angle iron.

☒ ☐

Bottom of moldboard shall be reinforced by 4 x 4 x ¾" angle iron and drilled to accommodate AASHTO standards.

☒ ☐

Ribs shall be 3" tall at the top edge by ½" wide.

☒ ☐

Ribs shall be spaced to match support arm locations as well as provide adequate support of the moldboard.

☒ ☐

A total of 12 ribs shall be used per moldboard assembly.

☒ ☐

Three (3) sets of double ribs and six (6) single ribs.

☒ ☐

Each rib shall have a ½" relief at the corners where they attach to the reinforcement angles. This allows water to drain off the back of the moldboard during storage.

☒ ☐

At the bottom of each rib there shall be three 1 5/16" holes spaced at 1 7/8" center to center to allow for semi-circle height adjustment

☒ ☐

Two sets of double ribs shall have three 1 5/16" holes spaced at 2 ¼" center to center to allow for attack angle adjustment.

☒ ☐

Weldments on the moldboard shall be continuous.

☒ ☐

Outer and the two center rigs of moldboard shall be drilled for marker installation.

☒ ☐

Two (2) curb guards mounted each side of moldboard.

☒ ☐

TRIP MECHANISM CONSTRUCTION

Plow shall be full trip design consisting of two (2) coil springs

☒ ☐

Springs shall be ¾" wire with a coil od of 5 9/16", consisting of 16 full coils bottom angle shall be reinforced by eleven (11) ½" thick gussets spaced evenly to avoid interference with cutting edge attachment hardware cutting edge shall be 6" x 5/8" x 11' long and is drilled to AASHTO standards cutting edge shall be secured using 5/8" grade 8 carriage bolts

☒ ☐

✓ **ITEM #1 – MODEL YEAR 2023 OR NEWER, FREIGHTLINER 114SD CHASSIS TANDEM TRUCK, AS SPECIFIED OR EQUAL (CONT'D)**

COMPLIANCE
YES **NO**

SPX301 AMERICAN ROADS TRITON SNOWPLOW - STEEL MOLDBOARD
TUBE TABLE POWER INFINITE REVERSING FULL PLOW SPECIFICATIONS
(CONT'D)

PUSH FRAME

Push frame shall be designed to hydraulically reverse the moldboard in an arc at any angle from 35 degrees left to 35 degrees right from a centered position.

☒ ☐

Push frame shall be constructed from a ½" plate.

☒ ☐

Push frame shall be supported above and below the semi-circle with 2 x 4 x 3/16" tubing.

☒ ☐

Push frame shall be drilled to accept 1 ½" bolt at the semi-circle connection. At this connection, welded to the push frame is the female portion of the socket connection. This connection distributes the pushing load directly from the push frame to semi-circle and moldboard relieving stress on the bolted connection. The female socket connection is made from 1" plate steel and contoured to match the male portion on the semi-circle.

☒ ☐

Rear of push frame shall be drilled to accept a removable qcp adapter. Three sets of 1 3/16" holes shall be drilled on 2" centers to allow for installation on a variety of trucks and hitches.

☒ ☐

Two holes shall be located on the top and bottom push frame plates drilled to accept 1 ½" bolts for hydraulic cylinder attachment.

☒ ☐

All welds must be continuously welded, no exceptions.

☒ ☐

SEMI-CIRCLE CONSTRUCTION

Semi-circle shall be constructed from 5 x 5 x 3/16" tubing.

☒ ☐

The main tube or "push beam 5 x 5 x 5 1/16" is 120" long spanning the entire width of the moldboard.

☒ ☐

This tube shall be constructed from one continuous piece.

☒ ☐

There shall be four stops placed appropriately to prevent the plow from turning past 35° left or right.

☒ ☐

Crank style jackleg (part #0091215) to be mounted on backside of semi-circle hydraulic cylinder mounting points shall be ½" plates welded to the top and bottom of the semi-circle.

☒ ☐

Plates shall be drilled to accept 1 ½" bolts for hydraulic cylinder attachment.

☒ ☐

These plates also serve as locators for support arm shackles and gussets to provide additional support from the "push beam" to the rest of the semi-circle.

☒ ☐

In the center of the semi-circle, a hole shall be drilled to accept the 1 ½" grade 8 bolt that acts as the pivot point for the push frame. Also, at this point above and below the semi-circle shall be the male portion of the socket that relieves stress from the bolted connection.

☒ ☐

This shall be made from 1" plate steel and contoured to match the female portion on the push frame.

☒ ☐

✓ **ITEM #1 – MODEL YEAR 2023 OR NEWER, FREIGHTLINER 114SD CHASSIS TANDEM TRUCK,
AS SPECIFIED OR EQUAL (CONT'D)**

COMPLIANCE
YES **NO**

**SPX301 AMERICAN ROADS TRITON SNOWPLOW - STEEL MOLDBOARD
TUBE TABLE POWER INFINITE REVERSING FULL PLOW SPECIFICATIONS
(CONT'D)**

PUSH FRAME

Tabs shall be welded on the push frame to accept ½11 screw type chain shackles. These tabs shall be made from ½11 plate steel 5 ¼11 long and 2 ½" wide. They shall be welded to the back side of the 511 tubular push beam to increase the weld surface area. They shall be welded at 55 degrees from the bottom of the semi-circle to match the chain angle going to the lift arm on the hitch.

☒ ☐

There shall be seven (7) sets of 3/411 thick moldboard mounting ears installed along the push beam for attachment of the moldboard. Moldboard shall pivot at these points on 1 ¼" diameter rivet pins with a washer and cotter pin on the opposite side of the rivet head.

☒ ☐

Four (4) sets of the moldboard mounting ears (two (2) outer sets on either side of the push beam) shall have an inside spacing of ¾" to accept a single ½" moldboard rib. Three (3) sets of the moldboard mounting ears (the center sets) shall have an outside spacing of 2 ¾" to fit inside double moldboard ribs.

☒ ☐

Moldboard attachment ears shall be gusseted with 4" triangular steel gussets.

☒ ☐

The push frame shall connect to upper portion of the moldboard using two support arms.

☒ ☐

The center of the support arm shall be made from 2 x 2 x ¼" square box tube.

☒ ☐

Actual mounting points are 1" schedule 40 pipe fully welded through the box tubing.

☒ ☐

The box tubing shall be drilled through to accept the pipe, the actual connection point is a 7/8" bolt.

☒ ☐

ADJUSTABLE CAST MUSHROOM SHOES

Plow to be fitted with adjustable cast steel mushroom shoes mounted left and right on rear of semi-circle.

☒ ☐

A ½" steel plate to be welded onto the semi-circle rear with five (5) adjusting holes for overall height.

☒ ☐

Adjusting handle crank to be storable against the shoe housing and allow up and down movement of the shoe via threaded screw.

☒ ☐

A 1 ¼" screw with adjusting nut are housed in a 311 square shoe housing with a welded on 5-hole mounting platecast steel mushroom plow shoe has 6" bolt centers, ¾" square holes and is 10.625" in diameter and 2.34 inches thick.

☒ ☐

Grade 8 hardware shall be used throughout.

☒ ☐

HYDRAULICS

Plow angle shall be controlled by two (2) double acting hydraulic cylinders each cylinder shall have a 4" bore with an 8" rod diameter with a maximum operating pressure of 3000 psi.

☒ ☐

✓ **ITEM #1 – MODEL YEAR 2023 OR NEWER, FREIGHTLINER 114SD CHASSIS TANDEM TRUCK,
AS SPECIFIED OR EQUAL (CONT'D)**

COMPLIANCE
YES **NO**

**SPX301 AMERICAN ROADS TRITON SNOWPLOW - STEEL MOLDBOARD
TUBE TABLE POWER INFINITE REVERSING FULL PLOW SPECIFICATIONS
(CONT'D)**

HYDRAULICS (CONT'D)

Retracted cylinder length shall be 21" with both the rod and cylinder ends accepting 1 ½" bolts/pins for connecting to the semi-circle and push frame.

☒ ☐

Plow shall be equipped with one crossover relief valve. Valve shall use ½" ports and be set to a relief pressure of 1000 psi.

☒ ☐

QCP

Push frame shall be equipped with a removable QCP adapter for quick hitch applications.

☒ ☐

The side of the removable QCP shall be drilled to allow for three different mounting heights.

☒ ☐

Base of the QCP shall be made from MC4 x 13.8# channel QCP side plate shall be ½" formed plate.

☒ ☐

QCP loop diameter shall be 2".

☒ ☐

PAINT

Paint shall be of high quality, free of runs, overspray, and defects standard paint type shall be epoxy.

☒ ☐

SPH A-152 ARM BUMPER TO FRAME PLOW HITCH SPECIFICATIONS

HITCH FRAME

Frame shall be heavy duty, low profile, front frame mounted style, designed for use with trucks equipped with a tilt hood and stationary grille.

☒ ☐

Snow plow hitch must clear hood when open.

☒ ☐

The frame shall be capable of self-storing the hydraulic cylinder when not in operation thus allowing the lift arm to fold down parallel to the rest of the frame.

☒ ☐

Vertical supports of the hitch shall be constructed from 4 x 4 x 3/8" square tubing.

☒ ☐

Cylinder support bracket on the hitch shall be constructed from 3 ½" x 3 ½" x ½" angle fully welded to both vertical supports.

☒ ☐

The two (2) cylinder mounting tabs shall be ½" steel placed in the center of support bracket and spaced at 2 1/8" apart.

☒ ☐

Each tab shall be drilled to accept a 1" pin.

☒ ☐

✓ **ITEM #1 – MODEL YEAR 2023 OR NEWER, FREIGHTLINER 114SD CHASSIS TANDEM TRUCK, AS SPECIFIED OR EQUAL (CONT'D)**

COMPLIANCE
YES **NO**

SPH A-152 ARM BUMPER TO FRAME PLOW HITCH SPECIFICATIONS
(CONT'D)

HITCH FRAME (CONT'D)

The upper horizontal support of the hitch shall be constructed of two (2) pieces:

• The first is a formed 3/8" plate that wraps the top and upper back portion of the vertical supports. This plate also acts as a stop when the lift cylinder is stored as well as one (1) of two (2) points. The lift arms connection tabs are welded. ☒ ☐

• The second horizontal support is a 1/2" contoured plate that allows the lift cylinder to be stored and provides a second mounting point for the lift arm connection tabs. ☒ ☐

There shall be two (2) pairs of lift arm support shackles. Each pair shall be made from 1/2" x 9 3/4" plate and drilled to accept 1 1/4" pins. ☒ ☐

Fully welded to the vertical supports shall be two (2) C 8 x 18.75 channels with 1/2" thick end plates. ☒ ☐

The end plates shall be drilled to accept six 5/8" grade 8 bolts for attaching the hitch between the frame rails. ☒ ☐

Support of the lower portion of the hitch shall be provided by left and right hitch side plates constructed of 5/8" plate and securely bolted to the truck frame where appropriate. ☒ ☐

PIN LOCK QUICK CONNECT PLATE

Plow attachment shall be made by a pin lock QCP assembly. ☒ ☐

Top and bottom of the assembly shall be made from 1/2" contoured plate. ☒ ☐

Both plates shall be drilled to accept the 2" lock pin. ☒ ☐

Welded to the bottom plate shall be a 5/8" chamfered plate that both provides support to the lock pin and helps to guide the QCP loop into the hitch. ☒ ☐

Welded to the top of the top plate shall be a formed 3/8" plate drilled for the 2" lock pin that both provides support and protects the pin in the event a plow is set too high while hitching. ☒ ☐

In front of the QCP assembly shall be two (2) 1/2" thick form bumpers. These bumpers are the resting/pushing point for the plow. They shall be curved to allow the plow to raise and lower smoothly. ☒ ☐

Lock pin shall be 2", tapered at one end for ease in guiding into position, and has tabs welded to the other for the lift bar attachment. ☒ ☐

HEAVY DUTY LIFT ARM ASSEMBLY

Heavy duty lift arm shall be an extendable style with seven different extended positions. ☒ ☐

Frame of the lift arm shall be constructed from 1/2" x 4" steel plate that is formed to contour the outer tube of the extendable arm. ☒ ☐

✓ **ITEM #1 – MODEL YEAR 2023 OR NEWER, FREIGHTLINER 114SD CHASSIS TANDEM TRUCK,
AS SPECIFIED OR EQUAL (CONT'D)**

COMPLIANCE
YES **NO**

SPH A-152 ARM BUMPER TO FRAME PLOW HITCH SPECIFICATIONS
(CONT'D)

HITCH FRAME (CONT'D)

This frame is also the connection point to the hitch and hydraulic cylinder.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The external tube shall be constructed of 411 heavy wall square tubing.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
On each end of the tube are 1" wide bushings ground to fit the inner tube. This ensures a tight long lasting fit.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Top plate on the lift arm shall be 3/16" and is used to prevent "racking" of the frame.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The inner tube shall be constructed of 3" heavy wall square tubing.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Tubing is drilled to allow for the seven (7) different extended positions.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Lift arm assembly shall be welded to the square tubing.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Tubing shall be drilled to allow for the seven different extended positions.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Welded to the front of the inner tube shall be a formed ½" plate with notches to accept standard ½" link chain. When required this plate can be shall be changeable to match different level lift systems.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

OPTIONS

1A. V-Box Spreader Specifications

General

14 7 series v-box hopper style salt and sand spreader. Spreader shall be capable of hauling and spreading free flowing granular materials. Unit shall consist of a 304 stainless steel body, rear discharge conveyor, spinner disk, power drive and all components necessary to make a complete operating unit. Unit shall be manufactured in the USE by an ISO 9001:2008 certified company.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--	-------------------------------------	--------------------------

Body

10 yard capacity	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Inside length of hopper shall be 14' at top and 12' at bottom inside top width shall be 82".	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Side slope to be 45° minimum.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Front panel slopes shall be a minimum of 18° hopper seams shall be continuous welded on inside.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sides, ends and side supports shall be 10 gauge 304 stainless steel top edge of hopper is formed "J" channel 2" x 1 ½".	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Auger trough shall be 10 gauge 304 stainless steel longsills shall be 10 gauge 304 stainless steel.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cross sills shall be formed 7 gauge 304 stainless steel welded to side supports.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Lift hooks on each corner are 5/8" stainless steel round bar all hardware is stainless steel.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3/8" rod on 3/8" rod top grate screens with anti-freeze hinges are required equipment with auger conveyor v-box units.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

✓ **ITEM #1 – MODEL YEAR 2023 OR NEWER, FREIGHTLINER 114SD CHASSIS TANDEM TRUCK, AS SPECIFIED OR EQUAL (CONT'D)**

COMPLIANCE
YES **NO**

✓ **OPTIONS (CONT'D)**

1A. V-Box Spreader Specifications (Cont'd)

Auger Requirements

Twin 7" diameter hard faced variable pitch augers with direct drive hydraulic motor.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Motor is directly coupled to end of auger shafts.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Auger shafts connect at front with a 2" 4-bolt flange bearing rear auger drive has no motor guard bolted to rear.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
One (1) LED spreader light mounted to spreader box.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Light bar mounted to rear of spreader at top.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Spinner Chute Assembly

10 gauge 3 04 stainless steel	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Four (4) position telescopic adjustment.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Four (4) bottom spinner deflectors shall be overlapping to prevent loss of granular material when the deflectors are raised.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Front deflector shall be fixed.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Bottom overlapping spinner deflectors shall have four (4) positions of rod and pin adjustment without tools. Chain adjustable deflectors are not acceptable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Poly 20" diameter spinner disc shall have replaceable machined hub spinner hydraulic motor shall mount directly on bottom of spinner disc.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Paint

All metal surfaces shall be high pressure cleaned with a phosphate solution to remove slag, splatter, oxide, and oil residue.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Non-stainless steel parts shall be painted or powder coated black.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
304 stainless steel components unpainted.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Tailgate Lock Kit

Main latch bar shall be 3" x 4.1 lb structural channel 84" wide.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Two (2) 3" x 4.1 lb x 811 structural channel with two (2) ½" x 1 ½" mounting hole shall be welded to main channel to bolt on spreader.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Two (2) 1 ¼" x 7" round stock tailgate latches to be welded to main channel.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Tie Down Kit

Shall consist of four (4) chain style tie down assemblies chains shall be grade 30 3/8" x 29 links.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Top plate shall be ¼" x 4 triple broke ALOL 1 powder coated steel with banjo eye to accept 3/8" chain.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

✓ **ITEM #1 – MODEL YEAR 2023 OR NEWER, FREIGHTLINER 114SD CHASSIS TANDEM TRUCK, AS SPECIFIED OR EQUAL (CONT'D)**

COMPLIANCE
YES **NO**

✓ **OPTIONS (CONT'D)**

✓ **1A. V-Box Spreader Specifications (Cont'd)**

Tie Down Kit (Cont'd)

Tie down bracket shall be 1/4" x 4" x triple broke ALOL 1 powder coated steel with 3/8" double link clevis to attach chain.

☒ ☐

3/4" zinc plated turnbuckle to have grease fitting.

☒ ☐

1/4" turnbuckle shall have 1/2" - 13 nut welded to center to secure turnbuckle.

☒ ☐

Galvanized Spreader Leg Stands

Main channels to be constructed of 2" x 6" x 7 gauge tubing crossmembers to be 3" structural channel.

☒ ☐

Telescoping rear legs to be constructed of 3 1/2" x 3 1/2" x 3/16" tubing adjustable front legs to pivot, constructed of 4" x 4" x 3/16" tubing 4" adjustable steel front roller wheels.

☒ ☐

Body guide wheels front and rear of stand.

☒ ☐

Light bar mounted on back of spreader with detachable plug.

☒ ☐

✓ **1B. 8' Under Tailgate Spreader Specifications**

Meyer BL-960 Specifications

• Body width: 96"

☒ ☐

• Hopper height: 19"

☒ ☐

• Hopper width: 96"

☒ ☐

• Hopper depth: 18"

☒ ☐

Spread width: 4'-40' empty weight: 450 lbs. Spinner diameter: 18".

☒ ☐

Material movement: auger

Mounting method: under tailgate

Hopper material: stainless steel.

☒ ☐

Spreader material: salt or salt/sand mix.

☒ ☐

General

This under tailgate shall be of the bottom opening design.

☒ ☐

The spreader shall fasten to the corner posts of the dump body using spreader manufacturers' brackets and quick disconnect pins for quick mounting and removal without the use of special tools.

☒ ☐

This mounting shall allow the dumping of materials without interference from the spreader.

☒ ☐

This unit shall spread free flowing granular materials, abrasives and chemicals.

☒ ☐

This unit shall be factory adapted to accept automatic control systems (only with a sensored motor).

☒ ☐

✓ **ITEM #1 - MODEL YEAR 2023 OR NEWER, FREIGHTLINER 114SD CHASSIS TANDEM TRUCK, AS SPECIFIED OR EQUAL (CONT'D)**

COMPLIANCE
YES NO

OPTIONS (CONT'D)

✓ **1B. 8' Under Tailgate Spreader Specifications (Cont'd)**

General (Cont'd)

All stainless steel used in the production of this unit shall be corrosion resistant, non-magnetic stainless steel.

☒ ☐

The manufacturing and production of this unit shall be of the best commercial practices, and only materials of the finest quality shall be used.

☒ ☐

Trough

Rigid 10 ga stainless steel one piece end plates shall be continuously welded to a 10 gauge stainless steel auger trough & 3" x 1 1/2" formed channel stainless steel rear member.

☒ ☐

The unit shall have a 10 gauge stainless steel three point hinged bottom door that when released, exposes the entire length of the auger for easy cleanout.

☒ ☐

This hinged bottom shall be held in place by two replaceable heavy duty cam locks with a lift handle for convenient one man operation.

☒ ☐

The anti-flow cover over the discharge opening shall be manufactured of 10 gauge stainless steel and removable without the use of tools.

☒ ☐

The 10 gauge stainless steel trough cover/backplate shall be one piece hinged integral part of the unit that may be raised when spreading and lowered for dumping operations.

☒ ☐

This cover shall be capable of being locked in either the raised or lowered position by two replaceable captivated latches.

☒ ☐

Drive

A direct drive coupled hydraulic motor shall be provided for driving the auger.

☒ ☐

This hydraulic motor shaft shall mount directly to the auger pipe by a non-corrosive sleeve and a 1/2" grade 8 bolt.

☒ ☐

The hydraulic motor shall mount directly to the end plate.

☒ ☐

There shall be two separate hydraulic "orbital type" motors capable of delivering high torque at low speeds to power both the auger and the spinner.

☒ ☐

The auger feed rate and spinner speed are both variable.

☒ ☐

Feed Mechanism

The 611 diameter (nominal) heavy duty auger shall consist of flights with outer edge at not less than .150 thickness, which is welded to a 2 7/8" diameter ERW pipe size tube.

☒ ☐

This auger shall have continuous and reverse flighting to the discharge port for more uniform dump body unloading, and shall be supported by 1 1/4" idler end shaft.

☒ ☐

The auger idler shaft shall be supported in sealed self-aligning precision single row radial ball bearing with grease fitting.

☒ ☐

✓ **ITEM #1 – MODEL YEAR 2023 OR NEWER, FREIGHTLINER 114SD CHASSIS TANDEM TRUCK, AS SPECIFIED OR EQUAL (CONT'D)**

COMPLIANCE
YES **NO**

OPTIONS (CONT'D)

✓ **1B. 8' Under Tailgate Spreader Specifications (Cont'd)**

Feed Mechanism (Cont'd)

The discharge port shall be located on the left side of the trough, approximately 21" in from the edge of the bottom door.

☒ ☐

The spreader shall be equipped with a safety interlock device to positively prevent power from reaching the auger motor when the top cover and bottom door are opened beyond the normal operation position.

☒ ☐

Spinner

The spinner shall consist of a disc and six (6) fins molded into a single polyurethane.

☒ ☐

Unit, resulting in a flat trajectory and uniform spread pattern from 4 to 40 feet in width.

☒ ☐

The spinner assembly shall be adjustable side to side, allowing for variable spread patterns left, right, and center of vehicle.

☒ ☐

This shall be accomplished by sliding the hinged frame sideways on the shaft so that the point at which the material hits the spinner disc is varied the entire spinner assembly shall be easily removed by pulling two pins, and uncoupling two hydraulic quick disconnect hoses.

☒ ☐

The spinner disc shall be mounted directly onto the hydraulic motor shaft by means of a cast iron spinner hub.

☒ ☐

The spinner shall be linked to the truck frame with a universally mounted parallel arm to keep the spinner horizontal to the road surface at all dump body angles a spinner shield shall be provided to prevent material from striking the truck.

☒ ☐

The spinner shall be adjustable in height in four positions.

☒ ☐

The entire spinner assembly shall be made of stainless steel except for the motor and the spinner disc.

☒ ☐

Mounting

This spreader shall fasten to the side of the dump box using quick disconnect pins for quick mounting and removal without the use of special tools.

☒ ☐

Paint

All stainless steel shall be chemically cleaned, but remain un-painted. Carbon steel components shall be chemically cleaned and coated with a leadfree rust inhibitive primer and painted with lead free black.

☒ ☐

✓ **1C. Heated Body Specifications**

General

Heavy duty heated crossmemberless stainless steel dump body.

☒ ☐

Body shall be heated through diverter box with thermos-switch for activation with stainless steel piping.

☒ ☐

✓ **ITEM #1 – MODEL YEAR 2023 OR NEWER, FREIGHTLINER 114SD CHASSIS TANDEM TRUCK, AS SPECIFIED OR EQUAL (CONT'D)**

COMPLIANCE
YES **NO**

OPTIONS (CONT'D)

✓ **1D. Chassis Upgrade to 74,000 GVWR**

General

Upgrade to 74000 GVWR	<input checked="" type="checkbox"/>	<input type="checkbox"/>
22000 lb. Meritor front axle	<input checked="" type="checkbox"/>	<input type="checkbox"/>
23000 lb. front suspension	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Meritor 16.5x6 q + high capacity cast spider cam front brakes	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Michelin XZY-3 425/65R22.5 20 ply front tires	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Accuride 29807 22.5x12.25 front rims	<input checked="" type="checkbox"/>	<input type="checkbox"/>
52000 lb. RT-52-185 T series tandem rear axle	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Driver controlled traction differential rear most tandem only	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1 inter axle lock and 1 driver controlled differential lock rear-rear Meritor 16.5x7 p cast spider cam rear brakes	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Gunitite heavy weight cast iron brake drums 11Rx24.5 16 ply Michelin x multi drear tires	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Accuride 24.5x8.25 rear rims	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Tufrac Gen2 52000 lb. rear spring suspension	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Minimum Body Dimensions for Chassis Upgrade

Inside length: 14'	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Inside width: 87"	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Overall width: 96"	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Side height: 46"	<input checked="" type="checkbox"/>	<input type="checkbox"/>
End height: 50"	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Rear post height: 50"	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Capacity: 15.2 cubic yards water level cab shield: 87" wide x 24" projection	<input checked="" type="checkbox"/>	<input type="checkbox"/>

✓ **1E. Paint for Dump Body** ☒ ☐

✓ **1F. Paint Colors Not on Standard Color Chart** ☒ ☐
i.e.: Gem Green: W7515G or Chestnut

✓ **1G. Road Department Color Scheme** ☒ ☐
Dupont 4357A – School bus yellow from the bottom of the windows down. Academy blue # 5240 from the bottom of the windows up to and including cab roof and back, on hood from bottom of windshield to a point on the hood to make a "V" and match the road department fleet. (Note: Not all Vehicles will be painted this way).

✓ **ITEM #1 – MODEL YEAR 2023 OR NEWER, FREIGHTLINER 114SD CHASSIS TANDEM TRUCK, AS SPECIFIED OR EQUAL (CONT'D)**

COMPLIANCE
YES **NO**

OPTIONS (CONT'D)

✓ **1H. Diagnostic Tools / Test Equipment**

Cummins Quickserv Unlimited Service plan, with renewals, shall be provided at no cost to the county for a period of five (5) years from the acceptance of the equipment.

☒ ☐

1. Successful bidder. may be required to supply between one (1) to three (3) complete sets of OEM test/diagnostic/ programming equipment (i.e. laptop, software, cabling, and adapters) and special tools required to perform the full range of diagnostic and maintenance actions necessary to maintain vehicle operability. This equipment will cover the vehicle chassis, engine, transmission, brakes, hydraulics, and all additional equipment (if applicable).
2. Provide a list of all test/diagnostic/programming equipment and special tools being supplied at the time of bid.
3. All software installations and activations will be completed by the successful bidder at no cost to the County.
4. All software updates and renewal will be provided at no cost to the County for a period of five (5) years from the acceptance of the equipment.
5. All technical issues relating to test/diagnostic/programming equipment and special tools shall be resolved by the successful bidder at no cost to the County for a period of five (5) years from the acceptance of the equipment.
6. Training shall be provided on all items in this section at a County location.
7. All laptop computers will be of the newest available technology and have sufficient storage and memory to operate all required software.

☒ ☐

☒ ☐

☒ ☐

☒ ☐

☒ ☐

☒ ☐

☒ ☐

✓ **1I. Two-Way Radio Power and Wiring Requirements for New Vehicles**

For the purpose of installing two-way radios into new County vehicles and equipment, the following power and wiring components shall be included:

- #12 AWG RED wire connected to 12VDC Battery Source rated at 20 Amps.
- #12 AWG BLACK wire connected to chassis ground.
- #16 AWG YELLOW wire connected to 12VDC Ignition Sense rated at 5 Amps.

These wires shall be encased in plastic wire loom and routed from their source into the cab of the vehicle and secured in the vicinity of the operator. The wiring harness shall be clearly labeled "TWO-WAY RADIO". The wires shall be unterminated. The 12VDC sources shall be protected from making contact with grounded metal surfaces.

☒ ☐

✓ **ITEM #1 – MODEL YEAR 2023 OR NEWER, FREIGHTLINER 114SD CHASSIS TANDEM TRUCK,
AS SPECIFIED OR EQUAL (CONT'D)**

COMPLIANCE
YES **NO**

OPTIONS (CONT'D)

✓ **1J. Installation of County Supplied Two-Way Radio and Accessories**

Install is to include but not limited to antenna cable, mounts, speakers, brackets, etc. For the purpose of installing two-way radios into new County vehicles and equipment, the following power and wiring components shall be included:

- #12 AWG RED wire connected to 12VDC Battery Source rated at 20 Amps.
- #12 AWG BLACK wire connected to chassis ground.
- #16 AWG YELLOW wire connected to 12VDC Ignition Sense rated at 5 Amps.

These wires shall be encased in plastic wire loom and routed from their source into the cab of the vehicle. The wiring harness shall be clearly labeled "TWO-WAY RADIO". The 12VDC sources shall be protected from making contact with grounded metal surfaces.

☒ ☐

✓ **1K. Technical Support**

Technical Support is to be provided by factory authorized technical representatives and shall be the original equipment Manufacturer's industry standard technical presentation in a classroom setting.

☒ ☐

The support provided shall be at the journeyman/equipment technician level and should address limited theory, fault diagnosis and repair pertaining specifically to the equipment supplied under this specification.

☒ ☐

Technical support may be requested in the following areas:

- Engine (cooling, fuel, ignition, lubrication systems) – 1 day at each location.
- Transmission – 1 day at each location
- Electrical – 1 day at each location
- Brakes – 1 day at each location
- Hydraulic system (dump body, spreader, snow plow) – 1 day at each location
- Upfitter (dump body, sweeper, etc.) – 1 day at each location

☒ ☐

Technical representative(s) shall be made available for a total of 180 training/support hours (anticipated to be scheduled in six (6) hour blocks).

☒ ☐

Shorter training days shall be allowed only with consent of Vehicle Services.

☒ ☐

Total training hours shall be provided and no additional compensation will be considered.

☒ ☐

Actual time to be spent on each area will be by mutual agreement of the Vehicle Services Department and the successful bidder.

☒ ☐

For the purposes of determining materials and other training costs, class size is anticipated to be comprised of six (6) to ten (10) Vehicle Services Department personnel Actual class size will be determined by the Vehicle Services Department at the time the classes are scheduled.

☒ ☐

Before the training is scheduled, Vehicle Services and the contractor will agree on the scope of the training, and the type and quantity of manuals, etc. that are necessary for proper education.

☒ ☐

✓ **ITEM #1 – MODEL YEAR 2023 OR NEWER, FREIGHTLINER 114SD CHASSIS TANDEM TRUCK, AS SPECIFIED OR EQUAL (CONT'D)**

COMPLIANCE
YES **NO**

OPTIONS (CONT'D)

✓ **1K. Technical Support (Cont'd)**

Technical Support for Vehicle Services may be provided at the following fleet maintenance facility locations as scheduled by a Vehicle Services Department representative:

- Toms River, 152 Chestnut Street, Toms River, N.J. 08753
 (Two (2) sessions will be provided at this location: One beginning at 7 am and another beginning at 1:30 pm)
- Manahawkin, 379 Haywood Road, Bldg. 109, Manahawkin, N.J. 08050

☒ ☐

Successful bidder shall provide Technical Support sessions for other Departments, which will be held at an Ocean County location specified by the requesting Department.

☒ ☐

Training at the successful bidder's site, rather than the designated locations, will be by mutual consent only.

☒ ☐

Technical support will be requested, and scheduled, on an as needed basis up to but not exceeding the 180 hours total during a period not to exceed twelve (12) months from the date of placing the last unit in service.

☒ ☐