# FORM A: BID (See B7)

1.	Contract Title	SUPPLY & DELIVERY O	F TANDEM DUMP TRUCKS	
2.	Bidder			
		Name of Bidder		
		Street		
		City	Province	Postal Code
		Facsimile Number		
	(Mailing address if different)	Street or P.O. Box		
		City	Province	Postal Code
		The Bidder is:		
	(Choose one)	a sole proprietor		
		a partnership		
		a corporation		
		carrying on business und	er the above name.	
3.	Contact Person	The Bidder hereby author the Bidder for purposes of the Bidder for purposes	rizes the following contact pe f the Bid.	erson to represent
		Contact Person	Title	
		Telephone Number	Facsimile Number	E-mail address
4.	Definitions		ed in the Contract shall ha eneral Conditions and D3.	ve the meanings
5.	Offer		s to perform the Work in act in Canadian funds, set out o	
6.	Commencement of the Work		o Work shall commence until rom the Award Authority ork.	

7.	Contract	The Bidder agrees that the Bid Opportunity in its entirety shall be deemed to be incorporated in and to form a part of this offer notwithstanding that not all parts thereof are necessarily attached to or accompany this Bid.
8.	Addenda	The Bidder certifies that the following addenda have been received and agrees that they shall be deemed to form a part of the Contract: No Dated
9.	Time	This offer shall be open for acceptance, binding and irrevocable for a period of sixty (60) Calendar Days following the Submission Deadline.
10.	Signatures	In witness whereof the Bidder or the Bidder's authorized official or officials have signed this
		day of , 20
		Signature of Bidder or Bidder's Authorized Official or Officials
		(Print here name and official capacity of individual whose signature appears above)

(Print here name and official capacity of individual whose signature appears above)

# FORM B: PRICES (See B8)

# SUPPLY & DELIVERY OF TANDEM DUMP TRUCKS

# UNIT PRICES

ITEM NO.	DESCRIPTION	SPEC. REF.	UNIT	APPROX. QUANTITY	UNIT PRICE	AMOUNT
1.	56,000 lbs. GVWR Cab & Chassis	08047	(Each)	(4)	\$	\$
2.	16' X 8' Dump Body 08048 (Each) (4) \$ \$				\$	
TOTAL BID PRICE (GST and MRST extra) (in figures) \$						
(in wo	(in words)					

Name of Bidder

# FORM N: DETAILED SPECIFICATIONS 08047

# 56,000 LBS. GVWR CAB & CHASSIS

(Water & Waste Excavation)

# 1.0 <u>TYPE</u>-

1.1 Shall be a minimum 56,000 lbs. GVWR Conventional Cab & Chassis suitable for use with a 16' x 8' heavy-duty dump body truck working in a severe duty application for the Winnipeg Water & Waste (excavation) Department during 24 hours/ 7 days a week, 12 months of the year in Manitoba weather conditions. The chassis shall be furnished complete and ready for use with all features and equipment as described herein.

# 1.2 STATE MAKE AND MODEL BEING BID:

# 2.0 OTHER SPECIFICATIONS AND STANDARDS-

2.1 All applicable SAE standards form an integral part of these specifications and shall have precedence in any conflict concerning minimum acceptable standards.

# 2.2 The completed equipment and all its components shall comply with all <u>CITY OF WINNIPEG</u>, <u>PROVINCIAL AND FEDERAL SAFETY AND LIGHTING REGULATIONS</u>.

# 3.0 SERVICE FACILITY-

- 3.1 For the purpose of warranty repairs, the Bidder shall have an authorized service facility located within 10 km of the boundaries of the City of Winnipeg. The facility, or a portion thereof, shall be dedicated to the service and maintenance of the type equipment being offered. Further to B9.1, Bidders shall provide a description of the service facility including, but not limited to, number of qualified service staff, years of service experience, and general service capabilities within three (3) Business Days upon request of the Contract Administrator.
- 3.2 If a suitable warranty facility is not available within 10 km of the boundaries of the City of Winnipeg, the Bidder may propose that warranty work be performed by the City of Winnipeg Repair Facility. Any Work performed by the City of Winnipeg Repair Facility shall be charged to the Contractor at the Facility's shop rate in effect at the time the work is performed (for example, shop rate for 2008: \$82.00/hr regular time, \$112.00/hr overtime and callout).

# 4.0 INSTRUCTIONS FOR COMPLETION OF SPECIFICATIONS-

- 4.1 All items in these specifications must be answered indicating compliance or non-compliance. <u>BIDDERS SHALL STATE "YES" FOR COMPLIANCE OR STATE DEVIATION</u>, or give reply where requested to do so. Deviations shall be clearly stated and fully detailed. Alternatives will be considered subject to evaluation.
- 4.2 Each bidder is required to fill in every blank. FAILURE TO DO SO MAY BE USED AS A BASIS FOR REJECTION OF BID.

ITEM	SPECIFICATION		IDDER TO STATE "YES" R STATE DEVIATION
5.0	<u>GVWR</u> -		
5.1	Total	56,000 lbs.	
5.2	Front	16,000 lbs.	
5.3	Rear	40,000 lbs.	
6.0	CHASSIS DIMENSIONS-		
6.1	Cab-to-axle	To accommodate a 16' X 8' Dump Boo	dy
6.2	Wheelbase	To accommodate a 16' X 8' Dump Boo	dy
6.3	Overall width	Maximum overall width (including mirro shall not exceed 109 in.	ors)
7.0	ENGINE-		
7.1	Engine	State make, model and displacement-	
7.2	Horsepower	350 HP gross	
7.3	Torque	1150 lb-ft	
7.4	Engine shut down	Low oil pressure / high water temperat	ure
7.5	Anti-idling programming	Programming to be determined upon pre-production meet.	
7.6	Air intake warmer	Cold weather starting aid, state-	
7.7	Fuel shut-off	Electric solenoid type	
7.8	Air cleaner	Dry type	
7.9	Air intake restriction	Dash mounted air restriction indicator	
7.10	Oil drain plug	Magnetic type	
7.11	Oil filter	Full flow, spin-on or cartridge type	
7.12	Fuel filter	Spin-on or cartridge type	
7.13	Fuel/water separator	Heated, drainable, mounted under hoo preferred, state location-	od
7.14	Block heater	Immersion type, 1000 watt with chrom recessed male plug, located under driv side door	

7.15	Coolant	Extended life coolant, antifreeze to -35°F (-37°C)	
7.16	Coolant hoses	Silicone type, Gates Blue Stripe or Premium type hoses	
7.17	Fan Drive	Thermostatically controlled, automatic type	
7.18	Air compressor	Water cooled, pressure lubricated, state cfm-	
8.0	ELECTRICAL SYSTEM-		
8.1	Chassis wiring	Multiplexed	
8.2	Alternator	165 Amp	
8.3	Starter	Over Crank Protection with thermal protection	
8.4	Batteries	Three (3), 12-volt, group 31, 2700 CCA combined capacity, state total combined battery CCA-	
8.5	Battery Box	Under cab or frame mounted c/w enclosure, readily accessible, not to impede with body installation, state location-	
8.6	Battery disconnect	In-cab mounted, state location-	
8.7	Remote boost terminal	Remote battery boost terminal(s), protected from road spray, covered, state location-	
8.8	Cab marker lights	Cab marker lights LED	
8.9	Trailer plug wiring	Routed to end of frame plus extra 3 ft. of wiring, c/w 6-Pole socket, Grote 82-1068 or equal. Circuit shall be fused separately from main truck lighting	
8.10	Back-up alarm	97dBA, located on inside-rear of frame rails	
8.11	2-way radio circuit	Independent 20 Amp circuit, ignition powered, wired under dash loose, labelled	
8.12	Accessory switches	Six (6) required, dash mounted for "Beacon, Work Lights, PTO, and additional switch labelled "Aux". All switches complete and wired for body installation, labelled and backlit. Exact labelling and function to be determined upon pre-production meet.	

9.0	EXHAUST SYSTEM-		
9.1	Configuration	Vertical muffler and tailpipe. Tail pipe extension to be curved and not to impede with body. Exact height to be determined upon pre-production meet.	t 
10.0	TRANSMISSION-		
10.1	Model	Allison 4500 RDS Series recommended for requested engine horse power, torque and application, state make, model & ratio-	
10.2	Shift selector	Dash mounted digital push button	
10.3	Cooling	Water to oil transmission cooler, state-	
10.4	PTO provision	Required with maximum clearance from exhaust PTO provisions must accommodate requested engine horse power, torque, application and body.	
10.5	Oil level dipstick	Bayonet type with high and low level markings	
10.6	Trans. drain plug	Magnetic type	
10.7	Transmission Fluid	Synthetic Transmission Fluid	
11.0	FRONT AXLE-		
11.1	Capacity	16,000 lbs. capacity	
11.2	Axle Fluid	Synthetic-	
12.0	REAR AXLE-		
12.1	Capacity	40,000 lbs. capacity	
12.2	Ratio	For 110 km/hr top speed, state ratio-	
12.3	Differential lock	Required for both rear drive axles w/dash mtd. Switch	
12.4	Axle Fluid	Synthetic-	
13.0	FRONT SUSPENSION-		
13.1	Туре	Taper leaf spring suspension, 16,000 lbs. Capacity	

14.0	<b>REAR SUSPENSION</b> -		
14.1	Туре	40,000 lbs. capacity air suspension suitable for requested application. Note: This suspensior must be capable of travelling over curbs and perform in severe duty applications. State make and model-	
15.0	RIMS, WHEELS, HUBS-		
15.1	Front	22.5 x 12.25 steel disk, 10-bolt, hub piloted Powder coated	
15.2	Rear	22.5 x 8.25 steel disk, 10-bolt, hub piloted powder coated	
15.3	Hubs	Aluminum hubs, front and rear	
15.4	Hub seals	Oil lubricated front and rear	
15.5	Wheel nut indicators	Required on all wheel nuts, front and rear	
16.0	TIRES, FRONT-		
16.1	Make & model	Michelin suitable for application, state make and model-	
16.2	Size	385/65R 22.5, 20-ply	
17.0	TIRES, REAR-		
17.1	Make & model	Michelin Mud & Snow, suitable for application, state make & model-	
17.2	Size	11R 22.5 16 ply	
18.0	FRAME-		
18.1	Туре	To match requested GVWR, outside frame clear to mount applicable components.	
18.2	Application	Suitable for use with a 16' x 8' dump body	
18.3	Chassis fasteners	Grade-8 threaded hex headed frame fasteners Or huck-spin fasteners	
18.4	After-frame	As required for 16' X 8' Dump Body	

19.0	STEERING-	
19.1	Туре	Heavy -Duty Power as per requested GVWR
20.0	BRAKES-	
20.1	Туре	Air brakes, ABS
20.2	Air drier	Wabco System Saver 1200, heated, state-
20.3	Moisture ejector	Bendix DV-2, heated, required in all tanks
20.4	Drain valves	Manual, chain or cable operated, required on
21.0	FUEL TANK-	
21.1	Туре	Dual aluminum, largest fuel tanks capacity Available not to impede with body installation, fully fuelled upon delivery, state size -
21.2	Tank straps	Stainless steel or aluminum mounting straps with minimum 1/16 in. rubber or neoprene isolators
21.3	Fuel separator	Heated, drainable
22.0	CAB-	
22.1	Туре	Conventional type, aluminum or steel w/corrosion inhibitor
22.2	Hood	Fibreglass tilt
22.3	Cab mounts	Cab air suspension, state-
22.4	Cab interior/trim	Extreme climate insulation including cloth or vinyl headliner on roof, door panels and rear interior of cab
22.5	Cab silencer package	Required for minimal decibel level
22.6	Hood/Firewall/Engine	Insulated hood liner, engine cover and firewall
22.7	Floor covering	Heavy-duty rubber mat with under-padding
22.8	Floor mats	Two (2), rubber
22.9	Driver's seat	High back, air suspension w/dual arm rests, seat belt, heavy-duty vinyl upholstery, state material-

22.10	Passenger seat	High back, air suspension w/dual arm rests, seat belt, heavy-duty vinyl upholstery, state material-
22.11	Sun visors	Dual flip-up type
22.12	Steering wheel	Tilt/ Telescopic type
22.13	12-Volt power outlets	(2) Required
22.14	Radio	Factory installed AM/FM/CD
22.15	Starter switch	Key operated c/w three (3) sets of keys
22.16	Interior light	Dome light with driver and passenger door
22.17	Heater / Defroster	High output, capable of keeping all windows Clear at an outside temperature of -35°F (-37°C)
22.18	Air conditioning	Required
22.19	Brake & Pedals	Hanging type brake and accelerator pedals
22.20	Horn	Dual electric
22.21	Exterior mirrors	Dual West Coast, heated, 4 way remote control,stainless steel or moulded in color
22.22	Convex mirrors	8 in. integral convex mirrors, state-
22.23	Windows & windshield	Tinted
22.24	Windshield wipers	Electric, intermittent, arctic type winter blades
22.25	Windshield washers	Electric
22.26	Grab handles	Dual exterior & interior grab handles
22.27	Entrance steps	Dual each side, open grate / grip type
22.28	Winter front	Heavy-duty vinyl w/twist lock or snap type Fasteners
22.29	Exterior Sun Visor	Exterior Sun Visor Required
22.30	Interior Entry-	Driver & Passenger side interior door lips shall Have Line-X Protective Spray Material applied to full width of door.
22.31	Fender Extensions-	Front fender extensions required for front tires
22.32	Front Fenders-	Front Fenders to have mud-laps with anti-sail

22.33	Fender Mirrors-	Front Fender mounted mirrors required	
00.0			
23.0	INSTRUMENTATION-		
23.1	Oil pressure	Gauge	
23.2	Coolant temperature	Gauge	
23.3	Transmission oil temp.	Gauges	
23.4	LOP/HWT	Warning light and buzzer	
23.5	Voltmeter	Gauge	
23.6	Air reservoir pressure	Gauge with LAP warning light and buzzer	
23.7	Engine hour-meter	Required, non-resettable type	
23.7	Fuel	Gauge	
23.8	Rear Axle Temperature	Gauge/s	
24.0	TOW HOOKS-		
24.1	Location	Front & Rear Frame Mounted	
25.0	FRONT BUMPER-		
25.1	Туре	Stainless Steel, full width	
25.2	Bumper Markers	Front Bumper shall be "lighted" with front Bumper markers located in front left and right corners"	
26.0	COLOUR AND FINISH-		
26.1	Exterior	White	
26.2	Interior	Grey	
26.3	Frame & suspension	Primed and finished with black Imron 5000 paint or equivalent	
26.4	Wheels	Powder coated white	
27.0	ACCESSORIES-		
27.1	Flare kit	Three (3) triangular reflectors, CVSA approved	
27.2	Fire extinguisher	10 lb. ABC type, required in cab with mounting bracket	

27.3	First Aid Kit-	Required, mounted and secured in cab	
28.0	CHASSIS WARRANTY-		
28.1	Basic vehicle	Two (2) years, unlimited km, state-	
28.2	Batteries	One (1) year or 100 000 km state-	
28.3	Drive-train	Two (2) years, unlimited km state-	
28.4	Cab structure/corrosion	Five (5) years, unlimited km state-	
28.5	Frame cross-members	Five (5) years, unlimited km state-	
28.6	Cab paint	One (1) year or 100 000 km state-	
28.7	Engine	Four (4) years or 320 000 km including engine electronics and injectors state-	
28.8	Towing coverage	Four (4) year or 320 000 km state-	
28.9	Transmission	Two (2) years, unlimited km state-	
28.10	Axles, front & rear	Two (2) years or 240 000 km state-	
28.11	Exhaust system	Four (4) years or 160 000 km state-	

29.0 **EXTENDED WARRANTIES**- State extended warranty prices for the above-

•	Basic vehicle-	
•	Batteries-	
•	Drive-train-	
•	Cab structure-	
•	Frame-	
•	Cab paint-	
•	Engine-	
•	Towing-	
•	Transmission-	
•	Axles-	
•	Exhaust-	

# DETAILED SPECIFICATIONS 08048

# (16' x 8' DUMP BODY)

# (Water & Waste Excavation)

# 1.0 <u>SCOPE</u>-

- 1.1 These specifications describe the supply and installation of a 16 ft. x 8 ft. severe-duty dump body on 56, 000 lbs. GVWR Cab & Chassis Detailed Specifications 08048.
- 1.2 The dump bodies shall be furnished complete and ready for use. All parts not specifically mentioned, but which are required to complete and place the unit in successful operation, shall be furnished as though specifically mentioned in these specifications. The complete equipment, and all parts thereof, shall conform in strength and quality of material and workmanship, to the best standards and engineering practice of the industry.
- 1.3 It will be the responsibility of the Bidder to inform the City of any deficiencies in these specifications, for under this Contract the Contractor shall be held responsible for the design, performance, reliability and satisfactory operational function of the unit.

# 2.0 STANDARDS-

- 2.1 All applicable SAE standards form an integral part of these specifications and shall have precedence in any conflict concerning minimum acceptable standards.
- 2.2 All welding shall conform to the CSA/CWB Standards W47.1-03 and W59-03.
- 2.3 The completed equipment shall adhere to all <u>CITY OF WINNIPEG, PROVINCIAL AND</u> <u>FEDERAL SAFETY & LIGHTING REGULATIONS.</u>

# 3.0 QUALIFICATIONS OF MANUFACTURER / CONTRACTOR-

- 3.1 The manufacturer of the dump bodies shall have demonstrated experience manufacturing bodies of the type being offered.
- 3.2 The Contractor shall be a manufacturer or authorized distributor/supplier of dump body equipment.
- 3.3 For the purpose of warranty repairs, the Contractor shall have an authorized service facility located within 10 km of the boundaries of the City of Winnipeg. The facility, or a portion thereof, shall be dedicated to the service and maintenance of the equipment being offered. Further to B9.1, Bidders shall provide a description of the service facility including, but not limited to, number of qualified service staff, years of service experience on dump bodies, and general service capabilities. A description of the service facility shall be provided within 3-Calendar Days upon request of the Contract Administrator.
- 3.4 If a suitable warranty facility is not available within 10 km of the boundaries of the City of Winnipeg, the Bidder may propose that warranty work be performed by the City of Winnipeg Repair Facilities. Any work performed by City of Winnipeg Repair Facilities shall be charged to the Contractor at the Facility's shop rate in effect at the time the work is performed (for example, shop rate for 2008: \$82.00/hr regular time, \$112.00/hr overtime and callout).

# 3.5 <u>The manufacturer/installer shall be a certified vehicle completer and must affix their</u> National Safety Mark (NSM) certification sticker on each unit.

# 3.5.1 State NSM number-

# 4.0 INSTRUCTIONS FOR COMPLETION OF SPECIFICATIONS-

- 4.1 All items in these specifications must be answered indicating compliance or non-compliance. BIDDERS SHALL STATE "YES" FOR COMPLIANCE OR STATE DEVIATION, OR GIVE A REPLY WHERE REQUESTED TO DO SO. Deviations shall be clearly stated and fully detailed. Alternatives will be considered subject to evaluation.
- 4.2 Each bidder is required to fill in every blank. FAILURE <u>TO DO SO MAY BE USED AS A BASIS</u> FOR REJECTION OF BID.

# 5.0 PERFORMANCE-

5.1 The sever-duty dump bodies shall be capable of consistent top performance for hauling and dumping during the summer and winter environments which are normal to the City of Winnipeg.

# 6.0 <u>SPECIFICATIONS</u> – ELIGIBLE MODEL BEAUROC MODEL DL OR EQUIVALENT IN ACCORDANCE TO B5. SUBSTITUES STATED HEREIN.

6.1	Length outside - (16 ft.			
6.1.1	Length inside – 3.8 m (			
6.2	Width outside – to mate			
6.2.1	Width inside – 229 cm			
6.3	Height of sides – (42 in			
6.4	Height of tailgate – (48	in.) approx. measured from the floor, state-		
6.5	Cab Guard – (18 in.) to	match chassis cab height.		
6.6	Tarp – Air operated flip pre-production meet.			
6.7	Ladder- Fabricated into			
7.0	MATERIAL-			
7.1	All material used in construction to shall be the following:			
7.2	Top rail-	3" X 4" X 3/16" tubing		

7.3	Sides-	4 mm (5/32" ) Hardox 450			
7.4	Front-	4 mm (5/32" ) Hardox 450			
7.5	Tail Gate-	4.5 mm (3/16") Hardox 450			
7.6	Floor	4.5 mm (3/16") Hardox 450			
8.0	HOIST SYSTEM-				
8.1	Hoist System-	Front Mount make "Mailhot" telescopic cylinder			
9.0	BODY WEIGHT-				
9.1	Body weight-	State body weight-			
10.0	IN-CAB CONTROLS-				
10.1	Type – dash mounted single switch dump control, return to centre, electrically actuated OEM switch preferred. State details of in-cab controls.				
11.0	HYDRAULICS-				
11.1	PTO – Muncie electric/hydraulic power shift.				
11.1.1	Electric/Hydraulic power shift– Operable from a normal driving position.				
11.1.2	Warning light – to show PTO engaged.				
11.2	Pump – Close coupled with air operated hoist control.				
11.2.1	Reservoir – shall be clearly labelled "Hydraulic Oil" with a permanent type, engraved style label.				
11.2.2	2 Level gauge – glass sight type, mounted in readily visible location.				
11.3	Return line filter – spin-on type, serviceable without oil loss.				
11.4	Shut-off valve – ball typ in open position with a b	e, located for servicing without oil loss, secured pracket and bolt.			

- 11.5 Hydraulic hoses wire braid reinforced, rated for system operating pressure with 4 to 1 safety factor for burst pressure.
- 11.5.1 Hydraulic hoses- To be protected at wear and scuff locations.
- 11.5.2 Hose fittings hydraulic full flow, crimp-on (non-reusable) type.

# 12.0 ELECTRICAL & LIGHTING-

- 12.1 All lighting To conform to C.M.V.S.S. and Manitoba Highway Traffic Act.
- 12.2 Supplier installed lighting and lighting equipment– Shall be Truck-Lite Or Groté LED (except where otherwise noted) and shall include the following components:
- 12.2.1 Combination turn/stop and taillights One (1) per side with mounting grommets, flash rate 70-90 fpm.
- 12.2.2 Back-up lights One (1) per side with mounting grommets.
- 12.2.3 Light cluster Three (3) only with mounting grommets, located to be protected from damage.
- 12.2.4 Rear light mounting location Taillights, back-up lights and 3-light cluster shall be mounted in the rear sill and corner pillars. The lights shall be situated so that no debris contacts the lights while dumping.
- 12.2.5 Clearance lamps With mounting grommets.
- 12.2.6 Clearance lamp mounting locations
  - i) Front two (2), located one on each bottom corner.
  - ii) Sides two (2) per side, located on front and rear bottom corners.
  - iii) Rear two (2), located one on each bottom or top corner.

12.3 No clearance light– Shall protrude beyond the dump body.

- 12.4 Taillights and back-up lights– Shall be fully visible when tailgate is lowered to horizontal position.
- 12.5 Licence plate lamp P/N 15040, complete with licence plate bracket.
- 12.6 Harnesses Truck-Lite 50 Series Harness system, properly routed and secured.
- 12.6.1 All harnesses– Shall be internally grounded, no exceptions.
- 12.7 Junction box P/N 50400, complete with necessary compression fittings, required for all vehicle lighting harness connections, located inside rear of truck frame.
- 12.8 All plug-in connectors– Shall be coated with Truck-Lite NYK compound prior to assembly.
- 12.9 Mini light bar Grote 77163, mounted on cab shield complete with steel protect guard.
- 12.9.1 Strobe lights Two (2) Grote P/N 77363, rear facing, one in each rear corner pillar.
- 12.9.2 Mini light bar and strobe lights– shall be wired through the ignition, wired through a single OEM dash mounted switch, labelled "Beacon" with a permanent type, engraved style label.
- 12.9.3 Working Lights- Two facing forward cab mounted, two facing rear dump body mounted, exact locations to be determined upon pre-production meet.
- 12.10 Trailer connector 6-pole, Grote 82-1068 or equal, wired through chassis manufacturer's OEM auxiliary circuit, and installed in rear trailer hitch plate.
- 12.11 All wiring for warning lights and trailer connector– Shall be colour coded, loomed and properly secured.
- 12.11.1 All electrical connectors– Shall be crimped and soldered, then sealed using heat shrink tubing.
- 12.11.2 All joining of wires– Shall be soldered and sealed using heat shrink tubing or approved OEM weathertight connections (crimp on electrical connectors for joining wires are not acceptable).

12.11.3	3 Any holes required to run wires through– Shall be drilled (not punched), grommeted and sealed as required.			
13.0	WELDING-			
13.1	All welds– Shall be continuous welds.			
13.2	All welding performed – Shall conform to CSA Standard W47.1-03 and W59-03.			
	Note: All welds are subject to inspection by a City of Winnipeg Qualified Inspector.			
14.0	INSTALLATION-			
14.1	Any holes required in the chassis frame web must be drilled and reamed to fit bolts.			
14.1.1	Drilling on chassis frame flanges is not permitted.			
14.1.2	Welding on the chassis frame is not permitted, with the exception of installation of dump body pivot support.			
14.2	Tire clearance – min. 8 cm ( $3\frac{1}{4}$ in.) with rear suspension air bags lowered.			
14.3	Clearance between dump body and back of truck cab shall be 8 cm (3¼ in.).			
14.4	The dump body shall be installed on the 56,000 lbs. cab & chassis Vehicle detailed specification 08047 as stated herein.			
15.0	MISCELLANEOUS-			
15.1	Rear hitch plate– 12.7 mm ( $\frac{1}{2}$ in.) thick solid steel, (laminated plates unacceptable) installed to chassis frame.			
15.1.1	"A" frame hitch reinforcement – 76 mm x 76 mm x 9.5 mm (3" x 3" x $\frac{3}{3}$ ") angle iron, welded to back of hitch plate and bolted to chassis frame web.			
15.2	Combination hitch – Premier 150 w/2 in. ball or approved equivalent hitch, installed on hitch plate at a 61 cm (24 in.) height.			

- 15.3 Lunette eyes for trailer safety chains one (1) each side of hitch, Buyers Products B56730 or equal.
- 15.4 Mud-flaps Black rubber, no-name, located in front & rear tandem.
- 15.4.1 Rear mud-flaps– Shall not contact the ground when the dump body is at maximum dump angle.
- 15.5 Dump body prop Double prop design, steel construction, to support dump body in raised position and permit servicing of hoist, operable by a single person, designed so as not to interfere with hoist cylinder or surroundings.
- 15.5.1 Dump body prop To be complete with receiving bracket.
- 15.6 Toolbox ¼ in. aluminum checker-plate construction, (30"W X 18"H X 18" D). Tool box to have seal on the door. Exact location to be determined upon pre-production meet.
- 15.7 Grease fittings Required on all bushings, pivot points and tailgate as required.
- 15.8 Automatic greasing system Complete dump body and chassis shall be supplied with a Groeneveld CPL Systems Inc. automatic greasing system including all required grease points on dump body & chassis, approx. thirty (30), with automatic low level shut-off with in-cab red light indicator.
- 15.9 Quantity State quantity of grease points-
- 15.10 Rear Wheel Fenders– Require composite or polycarbonate heavy duty rear tandem "half-moon" Fenders.
- 15.11 Shovel brackets– (2) Shovel brackets required, exact locations to be determined upon pre-production meet.

# 16.0 <u>FINISH</u>-

- 16.1 Complete dump body, hitch plate, reservoir, steel brackets, etc. shall be sandblasted, properly cleaned, primed and finished with the Endura paint process as follows:
- 16.1.1 Primer Endura EP32 Intermix Epoxy Primer.
- 16.1.2 Paint 3-5 mils of Endura EX-2C Topcoat, black.

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16.2 Protective Spay on Material- The dump body shall have products Line-X Protective spray on material all interior four side of the body, top, middle & lower rails. Exact locations to be determined upon pre-production meet.

#### 17.0 WARRANTY-

17.1 The warranty on the complete dump bodies and attachments shall include 100% replacement parts and labour at no cost to the City and shall cover the complete equipment and all parts thereof against defects of workmanship, construction and materials for one (1) year from the date the equipment is put into service by the City of Winnipeg.

# APPLICABLE TO DETAILED SPECIFICATIONS- (08047-56, 000 LBS. GVWR CAB & CHASSIS) & (08048- 16' X 8' DUMP BODIES)

# 18.0 PERFORMANCE RELIABILITY-

- 18.1 The responsibility for the design of the complete tandem dump trucks, it's performance and reliability shall rest upon the Contractor.
- 18.2 The term "repeated failures" as used herein is defined to mean that the same component, assembly, or sub-assembly develops repeated defects, breakdowns and/or malfunctions rendering the unit inoperative, or requiring repeated shop correction, service and/or replacement during the warranty period applicable for said component, assembly, or sub-assembly. Minor items or ordinary service adjustments are not included, or considered under the scope of "repeated failures", as well as other factors, such as operational damage due to accidents, misuse or lack of proper maintenance, service and lubrication attention by not following the manufacturer's preventative maintenance schedules.
- 18.3 Where the unit develops "repeated failures" in service, the Contractor shall make any necessary engineering changes, repairs, alterations or modifications in order to guarantee reliability of performance.

# 19.0 TRAINING-

- 19.1 The Contractor shall provide operational and maintenance training by qualified staff for City of Winnipeg personnel. The training shall be conducted in separate sessions for each group of personnel. Each session shall be approximately ½ day in duration and shall provide adequate familiarization and orientation on the unit, to the satisfaction of the Contract Administrator. The training shall be conducted in Winnipeg at a location to be designated by the Contract Administrator.
- 19.2 State if other training aids (videos, CDs) are available.

- 19.3 One (1) Set of Technical Parts, Service & two (2) Operators Manuals required.
- 19.4 Please state- the manufactures recommended training time for the complete equipment.

# 20.0 DELIVERY-

- 20.1 Delivery point-Equipment shall be serviced, ready for operation and delivered F.O.B. with the freight prepaid to the WFMA 185 Tecumseh Street, Winnipeg, Manitoba
- 20.2 Delivery time-Within <u>twenty (20) calendar weeks</u> from the date of official notification of award of contract. Equipment shall be delivered between 8:00 am and 3:00 pm on Business Days.
- 20.3 Delivery contact-Administrator prior to delivery of the equipment The Contractor shall contact the Contract Administrator prior to delivery of the equipment
- 20.4 Vehicle specifics-The Contractor shall fax all vehicle serial numbers, hours/mileage to the Contract Administrator 1-calendar week prior to delivery
- 20.5 Pre-Delivery Insp.- A pre-delivery inspection shall be performed by the Contractor on all equipment

# 21.0 <u>REPAIR TIMES</u>-

21.1 SRT Times- Please provide Standard Repair Times (SRT), of the nature of equipment being bid.