

Michigan Office: 78 Northpointe Drive Lake Orion, Michigan 48359

Phone: (248) 370-0000 Fax: (248) 370-0011 Ohio Office: 1045 Taylor Road Gahanna, Ohio 43231 Phone: (614) 655-0022 Fax: (614) 655-0023

Date: June 22, 2020

Quate prepared for: Mr. Paul Matthews and Mr. CI Steginl

City of Ann Arbor 4251 Stone School Road Ann Arbor, MI. 48108



Qty	Description	Your Price (each)	Total
1	Heil Half-Pack (44) cubic yard front loading refuse body		
	Service hoist kit including mounting and vane style front mount pump		
	Multi-function strobe light package, LED container light		
	LED body side backup lights and mid-tailgate dual LED strobe lights		
	Dual cab guard mounted flood lights and cab shield hopper light		
	3 <sup>rd</sup> Eye (9) camera system, auto-lube system, extended forks, limit switch-forks		
	Aluminum top sliding door		
	Tailgate mounted steel ladder		
	3/16" Hopper floor liner		
	Extendable broom kit mounted curbside		
	Cab protector extension raise-manual jack		
	D-Ring fall protection kit		
	Rear caution decal		
	Tag axle with wheels and tires		
	BODY PRICE AS EQUIPPED		\$173,407.00
	AUTOCAR TRUCK CHASSIS		\$180,000.00
	DELIVERED PACKAGE PRICE		\$353,407.00
	NOTE: SOURCEWELL CONTRACT #091219-THC		

Delivery:
F O B

If you wish to proceed with the quote provided, please sign and return.

Authorized Signature:	

Thank you for considering **Bell Equipment Company** for your equipment needs.

Clark R. Bushman, Vice President/Sales

Cell: 248-705-1353

# Chassis Specification

06/18/2020

			Description	Front Weight	Rear Weight	
	AUTOC	CAR TRUCKS				
0	ENG0001	ENGINEERING GROUP IDENTIFIER	AUTOCAR ENGINEERING	0	0	
S	0040002	MODELS	ACX64	10,431	6,154	
S	5000001	CAB SHELL	SINGLE LEFT HAND DRIVE CAB	0	0	
O	100U001	CUSTOMER TYPE	MUNICIPAL	0	0	
	VEHIC	LE ADAPTATION				2 40
S	114010	COUNTRY OF USE	UNITED STATES STD MARKET ADAPTATION	0	0	
	SOLUT	ION				
O	C04001	BODY COMPANY	HEIL	0	0	
O	C02001	BODY TYPE	COMMERCIAL FRONT END LOADER	0	0	
S	C070001	FUEL SYSTEM TYPE	DIESEL	0	0	
0	C001051	TRUCK TYPE (WRENCH CODE)	FEL, HEIL, COMMERCIAL/RESIDENTIAL, WB 195, TAG@76, DIESEL, WITH SERVICE HOIST	0	0	
O	C06101	BODY STYLE	HEIL HALF PACK	0	0	
0	C05040	TOTAL BODY CAPACITY - BODY/HOPPER	40 YARD	0	0	
O	C090004	AXLE QUANTITY	4 AXLE	0	0	
S	C080001	REAR SUSPENSION TYPE	STD/BEAM TYPE REAR SUSPENSION	0	0	
O	C01003	APPLICATION	REFUSE - LANDFILL	0	0	
0	C11001	BODY COMPANY SERVICE OPTION	SERVICE HOIST	0	0	
O	C03003	TERRITORY	CENTRAL	0	0	
O	D010200	FRONT GAWR	20000 LBS	0	0	
O	D020460	REAR GAWR	46000 LBS	0	0	
O	D030110	TAG AXLE GAWR	11000 LBS (TIRE LIMITED)	0	0	
O	D100770	GVWR	77000 LBS	0	0	
	ENGIN	E				
S	1580001	ENGINE VOCATION	COMMERCIAL - DOMESTIC (DOT)	0	0	
0	1012014	ENGINE ASSY	X12 '18 350 HP / 2000RPM / 1350 LB-FT, CUMMINS	0	0	

S	4460001	FUEL TYPE	ULTRA-LOW SULPHUR DIESEL FUEL REQUIRED	0	0	
S	972A001	SPECIAL EMISSION CERTIFICATION LABELS	50 STATE - CALIFORNIA CLEAN IDLE CERTIFIED (DIESEL)	0	0	
	ENGIN	E EQUIP				
S	128071	ENGINE CONTROL SPECIFICATIONS	DEFAULT SPECS	0	0	
S	1290004	ENGINE ELECTRONICS	CUMMINS 500K COMMUNICATION	0	0	
S	132034	ENGINE PROTECT SYSTEM/WARNINGS	AUDIBLE/VISUAL ALARM/LOP, HT, LWL	0	0	
0	4380013	FILTER-FUEL, CHASSIS MOUNTED	DAVCO 382 FILTER W/ 12V HEAT & H2O PROBE	5	1	
0	170025	FILTER-FUEL, ENGINE MOUNTED	CUMMINS SPIN-ON FILTER	-5	0	
S	1750001	ENGINE OIL	STANDARD ENGINE OIL	0	0	
0	1760001	ENGINE OIL SAMPLING PROVISION	ENGINE OIL SAMPLING PORT	1	0	
O	180021	ENGINE BLOCK HEATER	PHILLIPS 120V 1500W	5	0	
0	1810004	HEATER RECEPTICAL LOCATION-ENGINE	RECEPTACLE LOCATED AT CAB STEPS, LH SIDE	1	0	
S	2000004	RADIATOR	1300 SQ. IN., 2-ROW HIGH CAPACITY ALUMINUM	0	0	
S	2080001	FAN & DRIVE-ENGINE	2-SPEED FAN	0	0	
S	2090001	RADIATOR COOLANT	EXTENDED LIFE COOLANT	0	0	
S	2120003	RADIATOR SURGE TANK	STANDARD SURGE TANK W/ SIGHT GLASS	0	0	
S	2200001	AIR CLEANER	15" ONE STAGE EPG CLEANER DONALDSON	0	0	
S	226001	AIR INTAKE RAIN CAP	BLACK, HOOD TYPE	Ū	0	
S	2302000	MUFFLER SYSTEM	RH VERT HORIZ DPF/SCR	0	0	
S	2310003	EXHAUST SHIELDS	DPF & SCR SHIELDS	0	0	
S	2320003	EXHAUST STACKS	VERTICAL DIFFUSER, SINGLE STAINLESS STEEL	0	0	
S	115A200	TURBO HEAT SHIELD	TURBO HEAT SHIELD	0	0	
S	2390002	UREA DELIVERY SYSTEM	OVER-FENDER MTD., LH SIDE, 10 GAL. CAPACITY	0	0	
S	5300001	ENGINE/EXHAUST COVER	ALUM TURBO/EXHAUST PIPE DEBRIS SHIELD	0	0	
0	7002000	AIR COMPRESSOR	CUMMINS WABCO 25.9 CFM COMPRESSOR	0	0	
S	8200003	STARTING MOTOR	DELCO REMY 12V 39 MT W/OCP	0	0	
S	8020004	ALTERNATOR	DELCO REMY 36SI 12V 160	13	0	
			AMP			

S	P010065	VEHICLE GOVERNED SPEED LIMIT	SPEED LIMIT 65MPH	0	0	
O	P020002	ENGINE IDLE SHUT DOWN	ENGINE IDLE SHUT DOWN DISABLED	0	0	
S	P030001	CRUISE CONTROL PARAMETER	CRUISE CONTROL ENABLED	0	0	
S	P641200	RPM PTO MODE	1200 RPM MAX IN PTO	0	0	
S	P701200	PTO SET SWITCH	PTO SET SWITCH = 1200 RPM	0	0	
S	P711000	PTO RESUME SWITCH	PTO RESUME SWITCH = 1000 RPM	0	0	
	TRANS	MISSION				
S	2580003	VOCATION	RDS REFUSE - VOC 400-XXX	0	0	
S	2690014	CONTROL MODULE (ELECT)	REFUSE W/ AUTO-NEUTRAL, VP142	0	0	
S	26A0001	TRANSMISSION SHIFT SCHEDULE / FUEL SENSE	PRIMARY PERFORMANCE / SECONDARY ECONOMY	0	0	
S	PT10001	TRANS DIRECTION CHANGE SHIFT INHIBIT	SHIFT INHIBIT ENABLED	0	0	
S	27P0000	TRANSMISSION RETARDER AUDIBLE ALARM	NO TRANSMISSION RETARDER AUDIBLE ALARM	0	0	
0	2700028	TRANSMISSION	ALLISON 4500 SERIES,6- SPEED	384	59	
S	287A200	TRANSMISSION BREATHER	TRANSMISSION REMOTE BREATHER	0	0	
S	284016	TRANSMISSION CONTROLS	ALLISON PUSHBUTTON CONTROLS	0	0	
S	286005	COOLER-TRANSMISSION OIL	OIL TO WATER TYPE	0	0	
S	290003	TRANSMISSION OIL FILL/CHECK	OIL FILL TUBE / DIPSTICK W/ LEVEL SENSOR	0	0	
S	292004	TRANSMISSION LUBRICANT	TRANSYND SYNTHETIC AUTO TRANS FLUID	0	0	
0	300013	DRIVESHAFT-MAIN	SPICER 1810HD HALF ROUND	5	10	
0	3170007	PTO-TRANSMISSION MOUNTED	CHELSEA 890 / 897 PTO CLEARANCE (PREP ONLY)	5	0	
	FRONT	AXLE				
S	3700002	FRONT AXLE	MERITOR MFS-20 STEER AXLE, 20000# CAPACITY	0	0	
S	3690005	FRONT AXLE POSITION	52.5 INCHES	0	0	
0	3710003	FRONT SUSPENSION	10200 LB TAPER LEAF REDUCED RIDE HEIGHT, 22000 LB GROUND CAPACITY	-90	5	
O	371T01	SUSPENSION, FRONT AUX	AUX LOAD CUSHION	10	0	
S	373002	SHOCK ABSORBERS- FRONT	DOUBLE ACTING SINGLE - HEAVY DUTY	0	0	

S	904011	HUBS-FRONT	STEEL HUB PILOTED,285MM BOLT CIRCLE	0	0
S	9400001	WHEEL OIL SEALS-FRONT	SCOTSEAL PLUS XL	0	0
S	9210001	HUB CAPS - FRONT AXLE	CR ZYTEL HUBCAP	0	0
S	374002	FRONT AXLE LUBRICANT	SYNTHETIC,DANA SPICER EP75W90,OR EQUIV	0	0
0	7510001	BRAKES-FOUNDATION, FRONT AXLE	MERITOR 16.5X7" QP REFUSE BRAKE	29	0
S	754009	BRAKE SLACK ADJUSTERS -FRONT AXLE	MERITOR AUTOMATIC	0	0
S	755001	DUST SHIELDS - FRT BRAKES	DUST SHIELDS - FRONT BRAKES	0	0
S	901001	BRAKE DRUM-FRONT	CAST IRON	0	0
S	383101	STEERING GEAR	INTEGRAL POWER STEERING W/RIGHT HAND RAM	0	0
S	387003	POWER STEERING RESERVOIR	FOUR QUART REMOTE MOUNTED	0	0
	REAR A				
0	330444	REAR DRIVE AXLE-SINGLE & TANDEM	MERITOR RT46-160 46,000 LB	0	430
S	330U98	REAR AXLE LUBE PUMP	NO LUBRICATION PUMP	0	0
O	331538	REAR DRIVE AXLE RATIO	5.38	0	0
0	333014	REAR DRIVE AXLE ANTI- SPIN DEVICES	FOUR WHEEL LOCK	0	63
0	3500004	REAR SUSPENSION	HENDRICKSON HMX-460 SUSP @ 54" AS	0	0
S	351013	REAR SUSPENSION BEAMS	54 INCH STEEL RUBBER BUSHED	0	0
S	358005	TORQUE RODS	LONGITUDINAL & TRANSVERSE - RUBBER BUSHED	0	0
S	9130001	HUBS-REAR	IRON HUB, HP 10 STUD	0	0
S	3400001	REAR AXLE BREATHER	STANDARD AXLE BREATHER	0	0
S	9410001	WHEEL OIL SEALS-REAR	SCOTSEAL PLUS XL	0	0
S	339002	REAR AXLE LUBRICANT	SYNTHETIC	0	0
0	7610001	BRAKES-FOUNDATION, REAR AXLE	MERITOR 16.5X8.62" QP REFUSE BRAKE	0	42
S	764013	BRAKE SLACK ADJUSTERS -REAR AXLE	MERITOR AUTOMATIC,TANDEM AXLE	0	0
S	765001	DUST SHIELDS - REAR BRAKES	DUST SHIELDS - REAR BRAKES	0	0
S	781012	BRAKE CHAMBERS- PARKING, TYPE/VENDOR	CAM TYPE MGM STOPGARD (4)	0	0
S	910001	BRAKE DRUM-REAR	CAST IRON	0	0
	AUXILI	ARY AXLES			

0	3T10111	TAG AXLE #1	HENDRICKSON COMPOSILITE SCT	-325	1,575
			STEERABLE TAG, 13500 LBS CAPACITY		
0	3T1E001	TAG AXLE STEER LOCKS	AUX. LIFT AXLE STEER LOCKS	0	2
0	3T1F001	TAG AXLE BRACKET	ALTERNATE TAG AXLE BRACKET	0	0
0	3TS0049	TAG AXLE #1 SPACING	49" SPREAD	0	0
0	9T10001	TAG AXLE HUBS	STEEL HUBS, 11.25" BOLT CIRCLE	0	0
0	9T60001	TAG AXLE WHEEL SEALS	SCOTSEAL PLUS XL	0	0
0	9T80001	TAG AXLE HUB CAPS	CR ZYTEL HUB CAPS	0	0
0	7T20004	TAG AXLE BRAKES	HENDRICKSON INTEGRAL 15X4	0	0
0	7T40001	TAG SLACK ADJUSTER	XXXX MERITOR AUTOMATIC	0	0
	BRAKE	S			
s	729002	AIR LINES-PARKING BRAKE, CHASSIS	AIR LINES CHASSIS PARK BRAKE	0	0
0	7412002		MERITOR WABCO ABS 6S/6M W/PLC AND ATC	0	0
	CHASSI	IS.		160	
0	400195	WHEELBASE	195 INCHES	-22	-27
0	402098	FRAME-REAR OVERHANG		10	-32
S	403012	FRAME RAILS	3/8" VARIABLE DROP STEEL,	0	0
			EXT B		
S	409002	FRAME CROSSMEMBER- CENTER	ALUMINUM	0	0
S	411 <b>0002</b>	FRAME CROSSMEMBER- END CLOSING	ALUMINUM MEMBER-IF REQUIRED	0	0
S	4120002	FRAME BOLTS	HUCKSPIN RR SUSP & CROSSMEMBERS	0	0
O	460002	BUMPER-FRONT	CHROMED STEEL	0	0
0	4682000	GUARD-OIL PAN	ENGINE OIL PAN GUARD - STEEL	0	0
S	480002	TOWING DEVICE-FRONT	TWO REMOVABLE TOW PINS	0	0
S	8742000	WIRING, BODY INTERFACE	RP 170 COMPLIANT	0	0
O	430998	FUEL TANK-LEFT	DELETE LHS FUEL TANK	-29	-59
0	431020	FUEL TANK-RIGHT	75 GAL 26" DIA UNPAINTED ALUMINUM	29	59
O	431R001	FUELTANK FILL RHS	REAR FILL FUEL TANK, RHS	0	0
0	441001	FUEL TANK STRAP/ SUPPORT RIGHT	PAINTED STEEL, RH	0	0
0	448 <b>0004</b>	RH FUEL TANK SPACERS	RH FUEL TANK SPACED 2",	7	5
			DROPPED 4"		

0	4290003	DRILLING FUEL TK SUPT- RIGHT	FUEL TANK RHS LOCATION - SPEC DRIVEN	0	0	
S	436015	FUEL LINES	SAE J1402A1 WIRE BRAIDED	0	0	
S	8120005	BATTERY BOX	STEEL BOX, 3 BATTERY, LHS	0	0	
0	8160006	BATTERY BOX SPACERS	BATTERY BOX SPACED 2", DROPPED 8"	7	2	
0	8090003	BATTERY BOX DRILLING	BATTERY BOX LOCATION - SPEC DRIVEN	0	0	
S	810089	BATTERY	3 JOHNSON CONTROL 31ECL 12V 2250CCA	0	0	
O	8140003	BATTERY SHUT-OFF SWITCH	SHUTOFF W/ LOCKOUT & EMERGENCY JUMPER STUDS	5	2	
S	7110001	AIR TANK-BRAKE	STEEL AIR TANKS	0	0	
0	7090003	AIR TANK DRILLING	AIR TANKS LOCATION SPEC DRIVEN	0	0	
0	7380001	EMERGENCY AIR SYSTEM CHARGING	SCHRADER VALVE, WET TANK MTD	1	0	
0	715009	WET TANK DRAIN	BENDIX DV-2 AUTOMATIC WITH HEATER	1	1	
0	715T003	AIR RESERVOIR DRAIN SYSTEM	CENTRAL MANIFOLD W/ PETCOCKS	2	2	
O	713023	AIR DRYER	BENDIX ADIP W/HEAT	0	0	
0	7100008	AIR DRYER DRILLING	AIR DRYER MTD OUTSIDE RAIL, RHS, SPEC DRIVEN	0	0	
S	724001	AIR LINES-CAB	SAE J844 NYLON TUBING	0	0	
S	728001	AIR LINES-MAIN, CHASSIS	SAE J844 NYLON TUBING	0	0	
	CAB EX	TERIOR				
S	4510001	TERIOR STEP-CAB ACCESS, CAB MOUNTED	DUAL SELF CLEANING CAB ENTRANCE STEPS	0	0	_
s s		STEP-CAB ACCESS, CAB		0	0	
	4510001	STEP-CAB ACCESS, CAB MOUNTED MUD FLAPS-FRONT	ENTRANCE STEPS			
S	4510001 462004 502001	STEP-CAB ACCESS, CAB MOUNTED MUD FLAPS-FRONT WHEEL	ENTRANCE STEPS FRONT FLAPS	0	0	
s s	4510001 462004 502001	STEP-CAB ACCESS, CAB MOUNTED MUD FLAPS-FRONT WHEEL CAB DOORS	ENTRANCE STEPS FRONT FLAPS  STEEL DUAL INTERNAL REGULATOR POWER	0	0	
s s o	4510001 462004 502001 5120001	STEP-CAB ACCESS, CAB MOUNTED MUD FLAPS-FRONT WHEEL CAB DOORS POWER WINDOWS	ENTRANCE STEPS FRONT FLAPS  STEEL  DUAL INTERNAL REGULATOR POWER WINDOWS	<b>0</b> 0 4	0 0 0	
s s o	4510001 462004 502001 5120001	STEP-CAB ACCESS, CAB MOUNTED MUD FLAPS-FRONT WHEEL CAB DOORS POWER WINDOWS  CAB GUARD FRONT	ENTRANCE STEPS FRONT FLAPS  STEEL  DUAL INTERNAL REGULATOR POWER WINDOWS  XPEDITOR CAB GUARD	0 0 4	0 0 0	
s s o	4510001 462004 502001 5120001 5140001 622C201	STEP-CAB ACCESS, CAB MOUNTED MUD FLAPS-FRONT WHEEL CAB DOORS POWER WINDOWS  CAB GUARD FRONT MIRROR PANE QUANTITY MIRRORS-DUAL WEST	ENTRANCE STEPS FRONT FLAPS  STEEL  DUAL INTERNAL REGULATOR POWER WINDOWS XPEDITOR CAB GUARD SINGLE PANE MIRROR MIRROR, CHROME, HTD, REMOTE, W/LWR HTD	0 0 4 27 0	0 0 0	
s s o o s	4510001 462004 502001 5120001 5140001 622C201 6220019	STEP-CAB ACCESS, CAB MOUNTED MUD FLAPS-FRONT WHEEL CAB DOORS POWER WINDOWS  CAB GUARD FRONT MIRROR PANE QUANTITY MIRRORS-DUAL WEST COAST	ENTRANCE STEPS FRONT FLAPS  STEEL  DUAL INTERNAL REGULATOR POWER WINDOWS  XPEDITOR CAB GUARD SINGLE PANE MIRROR MIRROR, CHROME, HTD, REMOTE, W / LWR HTD CONVEX RETRACTABLE ARMS,	0 0 4 27 0 0	0 0 0	
s s o o s o s	4510001 462004 502001 5120001 5140001 622C201 6220019	STEP-CAB ACCESS, CAB MOUNTED MUD FLAPS-FRONT WHEEL CAB DOORS POWER WINDOWS  CAB GUARD FRONT MIRROR PANE QUANTITY MIRRORS-DUAL WEST COAST  MIRROR ARMS	ENTRANCE STEPS FRONT FLAPS  STEEL  DUAL INTERNAL REGULATOR POWER WINDOWS XPEDITOR CAB GUARD SINGLE PANE MIRROR MIRROR, CHROME, HTD, REMOTE, W / LWR HTD CONVEX RETRACTABLE ARMS, STAINLESS STEEL NO DOWN VIEW MIRRORS	0 0 4 27 0 0	0 0 0 -8 0 0	
s s o o s o	4510001 462004 502001 5120001 5140001 622C201 6220019 6190002 618998	STEP-CAB ACCESS, CAB MOUNTED MUD FLAPS-FRONT WHEEL CAB DOORS POWER WINDOWS  CAB GUARD FRONT MIRROR PANE QUANTITY MIRRORS-DUAL WEST COAST  MIRROR ARMS  DOWN VIEW MIRRORS	ENTRANCE STEPS FRONT FLAPS  STEEL  DUAL INTERNAL REGULATOR POWER WINDOWS XPEDITOR CAB GUARD SINGLE PANE MIRROR MIRROR, CHROME, HTD, REMOTE, W / LWR HTD CONVEX RETRACTABLE ARMS, STAINLESS STEEL NO DOWN VIEW MIRRORS PROVIDED	0 0 4 27 0 0	0 0 0 -8 0 0	
s s o o s o s s o	4510001 462004 502001 5120001 5140001 622C201 6220019 6190002 618998 6240001	STEP-CAB ACCESS, CAB MOUNTED MUD FLAPS-FRONT WHEEL CAB DOORS POWER WINDOWS  CAB GUARD FRONT MIRROR PANE QUANTITY MIRRORS-DUAL WEST COAST  MIRROR ARMS  DOWN VIEW MIRRORS  GRAB HANDLES-ENTRY	ENTRANCE STEPS FRONT FLAPS  STEEL  DUAL INTERNAL REGULATOR POWER WINDOWS XPEDITOR CAB GUARD SINGLE PANE MIRROR MIRROR, CHROME, HTD, REMOTE, W / LWR HTD CONVEX RETRACTABLE ARMS, STAINLESS STEEL NO DOWN VIEW MIRRORS PROVIDED BRUSHED SS GRAB HANDLES	0 0 4 27 0 0 0	0 0 0 -8 0 0	

0	661002	CAB TILT MECHANISM-C.O.E.	HYDRAULIC TILT WITH AIR ASSIST	20	0
S	6720001	GRILLE	AUTOCAR GRILLE	0	0
S	675001	BUG SCREENS	BUG SCREEN MOUNTED BEHIND GRILLE	0	0
S	6910001	FENDER EXTENSIONS- FRONT	IMPACT RESISTANT POLY FENDER	0	0
0	693002	UNDERCOAT	CAB CORROSION INHIBITOR	0	0
	CAB IN	TERIOR			
S	3800001	STEERING WHEEL	16" DIA. WHEEL, 2 SPOKE	0	0
S	3810002	STEERING COLUMN	TILT AND TELESCOPIC	0	0
			STEERING COLUMN		
0	5200003	SEAT-DRIVER	BOSTROM T905 MID-BACK, AIR RIDE	2	0
0	5210003	SEAT-PASSENGER	BOSTROM T905 MID-BACK, AIR RIDE	31	0
0	5222001	SEAT BELTS-DRIVER	THREE POINT RETRACTABLE, BRIGHT ORANGE COLOR, W/O COMFORT LATCH	0	0
0	5232001	SEAT BELTS-PASSENGER	THREE POINT RETRACTABLE, BRIGHT ORANGE COLOR, W/O COMFORT LATCH	0	0
S	526014	SEAT INSERT	BLACK CORDURA	0	0
0	538004	CARPET & MAT	ALUMINUM DIAMOND PLATE - DRIVER SIDE	4	2
S	5390001	CAB INTERIOR	AUTOTUFF INTERIOR UPHOLSTERY	0	0
S	5500001	CENTER CONSOLE	CENTER CONSOLE	0	0
О	5510002	REAR CONSOLE	REAR CONSOLE W/ WIRE FRAME STORAGE CONTAINER	2	0
S	5930001	ASH TRAY	ASHTRAY MTD IN CONSOLE	0	0
	CAB CL	IMATE CONTROL			
S	060001	CAB TEMPERATURE SYSTEM	AIR COND INTEGRAL WITH HEATER/DEFROSTER	0	0
S	612001	AIR CONDITIONER CONDENSER	STANDARD (RADIATOR MOUNTED)	0	0
	GAUGE	S & INSTRUMENTATI	ON		
S	0572001	INSTRUMENTS SALES PKG		0	0
S	1430001	TRUCK ELECTRICAL CONTROL MODULE	VEHICLE CONTROL UNIT	0	0
S	1362000	TACHOMETER/RPM TACHOGRAPH	ELECTRONIC TACHOMETER	0	0

S	1372000	GAUGE-HOURMETER	HOURMETER INCLUDED IN ON BOARD DISPLAY	0	0
S	225009	AIR INTAKE RESTRICTION INDICATOR	GRADUATED, AIR CLEANER MOUNTED	0	0
0	3190001	PTO CONTROLS	PTO ELECTRIC CONTROL SWITCH	1	0
S	4390001	GAUGE-FUEL LEVEL	ELECTRONIC FUEL LEVEL	0	U
S	1472001	VEHICLE MONITORING	AUTOCAR ADVANCED	0	0
		SYSTEM	TELEMATICS - FULL		
			INSTALLATION		
	LIGHTI	NG			
S	8360003	LAMPS-HEAD	LED HEADLAMPS	0	0
0	8410003	LAMPS-TURN SIGNAL -	LED TURN SIGNALS, FRONT	1	0
c	0440002	FRONT	END LOADER PACKAGE	0	
S	8440003	SWITCH-TURN SIGNAL & FLASHER	SELF-CANCELING TURN SIGNALS	0	0
S	8510002	LAMPS-MARKER	AMBER LED ROOF MARKERS	0	0
S	859001	LAMPS-RUNNING	DAYTIME	0	0
S	8700001	CIRCUIT PROTECTION	AUTO CIRCUIT BREAKERS	0	0
		DEVICE			
	RADIO/	MISC			
S	509001	KEY & LOCK SETS-	DOOR & IGNITION SAME -	0	0
		IGN/DOORS	UNIQUE PER TRUCK		
0	5900008	RADIO	AM/FM/WB/MP3/CD/USB/BLU ETOOTH	13	-4
O	5910002	ANTENNA/POWER SUPPLY	ANTENNA - ROOF MOUNTED	0	0
0	596005	RADIO SPEAKERS	2 DUAL CONE SPEAKERS	0	0
S	8730001	WIRING-CAB	RADIO SHUT-OFF IN REVERSE	0	0
O	9620001	FIRE EXTINGUISHER	DUAL 5LB ABC	5	0
			EXTINGUISHERS, ONE		
			UNDER EACH SEAT		
	FRONT	TIRES / WHEELENDS			
0	9310046	TIRE MANUFACTURER &	MICHELIN XZU-S 2 (RATED	0	0
		TREAD - FRONT	TO 10K)		
S	930469	TIRE SIZE & LOAD RANGE - FRONT	315/80R22.5L	0	0
S	9050015	WHEELS-DISC FRONT	22.5X9.0" STEEL, 5.25" INSET, HAYES	0	0
	REAR T	TRES / WHEELENDS			
0	9340061	TIRE MANUFACTURER &	MICHELIN X WORKS XDY	0	0
		TREAD - REAR			
S	933062	TIRE SIZE & LOAD RANGE - REAR	11R22.5H	0	0
S	9140014	WHEELS-DISC REAR	22.5X8.25" STEEL, 6.2" INSET, HAYES	0	0

O 975420 TAG AXLE TIRE TREAD MICHELIN XZE 0 O 974111 TAG AXLE TIRE SIZE 255/70R22.5H 0 O 9720014 TAG AXLE WHEELS 22.5X8.25" STEEL, 6.2" INSET, HAYES  PAINT  S 950001 CAB PAINT SCHEME SINGLE COLOR PAINT 0 S 9550001 CAB PAINT TYPE STANDARD WHITE 0 S 9801002 CAB COLOR-FIRST APPROVED -=- DPSS-N0007EX -=- STANDARD WHITE N0007 S 9861U1 CHASSIS COLOR BLACK P3036 0 S 987949 BUMPER COLOR SAME AS CHASSIS,UNPAINTED ALUM OR CHROME S 988401 DISC WHEEL OR RIM STEEL, E-COAT WHITE / 0 COLOR ALUM-UNPAINTED  ADDITIONAL OPTIONS  S 899002 CHASSIS WARRANTY STANDARD WARRANTY 0 899A203 TRANSMISSION ALLISON 5YR. EXT 0	-62 0 0 0 0 0 0	
HAYES	0 0 0 0	
S   950001   CAB PAINT SCHEME   SINGLE COLOR PAINT   0	0 0 0	
S   9550001   CAB PAINT TYPE   STANDARD WHITE   0	0 0 0	
S   9801002   CAB COLOR-FIRST   APPROVED DPSS-N0007EX   0   STANDARD WHITE N0007     S   9861U1   CHASSIS COLOR   BLACK P3036   0     S   987949   BUMPER COLOR   SAME AS   0   CHASSIS,UNPAINTED ALUM   OR CHROME     S   988401   DISC WHEEL OR RIM   STEEL, E-COAT WHITE /   0   ALUM-UNPAINTED     ADDITIONAL OPTIONS     S   899002   CHASSIS WARRANTY   STANDARD WARRANTY   0   899A203   TRANSMISSION   ALLISON 5YR. EXT   0	0 0 0	
STANDARD WHITE N0007  S 9861U1 CHASSIS COLOR BLACK P3036 0  S 987949 BUMPER COLOR SAME AS 0 CHASSIS,UNPAINTED ALUM OR CHROME  S 988401 DISC WHEEL OR RIM COLOR ALUM-UNPAINTED  ADDITIONAL OPTIONS  S 899002 CHASSIS WARRANTY STANDARD WARRANTY 0 899A203 TRANSMISSION ALLISON 5YR. EXT 0	0	
S 987949 BUMPER COLOR SAME AS CHASSIS,UNPAINTED ALUM OR CHROME S 988401 DISC WHEEL OR RIM STEEL, E-COAT WHITE / O ALUM-UNPAINTED  ADDITIONAL OPTIONS S 899002 CHASSIS WARRANTY STANDARD WARRANTY 0 O 899A203 TRANSMISSION ALLISON 5YR. EXT 0	0	
CHASSIS,UNPAINTED ALUM OR CHROME  S 988401 DISC WHEEL OR RIM COLOR STEEL, E-COAT WHITE / 0 ADDITIONAL OPTIONS  S 899002 CHASSIS WARRANTY STANDARD WARRANTY 0 O 899A203 TRANSMISSION ALLISON 5YR. EXT 0		
COLOR ALUM-UNPAINTED  ADDITIONAL OPTIONS  S 899002 CHASSIS WARRANTY STANDARD WARRANTY 0  O 899A203 TRANSMISSION ALLISON 5YR. EXT 0	0	
S 899002 CHASSIS WARRANTY STANDARD WARRANTY 0 O 899A203 TRANSMISSION ALLISON 5YR. EXT 0		
O 899A203 TRANSMISSION ALLISON 5YR. EXT 0		
	0	
WARRANTY WARRANTY	0	
O 899B213 ENGINE WARRANTY 2017 ISX-D HD1 5YRS/300K 0 MILES EXTENDED WARRANTY PP1 MATRIX 236412	0	
O 899K207 EXHAUST 2017 X12 AT3 5YRS/300K 0 AFTERTREATMENT MILES AFTERTREATMENT EXTENDED WARRANTIES EXTENDED WARRANTY MATRIX 233812	0	
S 978015 FLOOR PLAN 15 DAYS FLOORING 0	0	
OTHERS		
O 9722018 CERTIFICATION- COMPLIES WITH 2018 U.S. 0 EMISSIONS EMISSIONS	0	
SUB TOTALS		
BASE WEIGHT 10,431	6,154	
FACTORY OPTION WEIGHT 157	2,041	
DISTRIBUTOR OPTION 0 WEIGHT	0	
TOTALS		
TOTAL WEIGHT (LB) 10,588	8,195	18,7

06/18/2020

## GAWR, GVWR & Tire Pressure

GVW Rating - 77,000#					
Front GAWR	20,000#	Rear GAWR	46,000#		
Front Suspension	22,000#	Rear Suspension	46,000#		
Front Wheels	20,000#	Rear Wheels	59,100#		
Front Tire Size And Tread	20,000#	Rear Tire Size And Tread	48,000#		
Front Brakes	20,000#	Rear Brakes	48,000#		
Front Axle	20,000#	Rear Axle	46,000#		
Tag 1 GAWR	11,000#				
Tag 1 Wheels	14,700#				
Tag 1 Tire Size And Tread	11,000#				
Tag 1 Axle	13,500#				
	P	SI			
Front PSI	130.0	Rear PSI	105.0		
Tag 1 PSI	120.0				

Heil Environmental Half/Pack®

## SUGGESTED STRUCTURAL BID SPECIFICATIONS

FOR HIGH COMPACTION FRONT LOADING REFUSE COLLECTION TRUCK BODY

#### INTENT:

This specification describes a hydraulically actuated partial pack front loader with a container hoisting device capable of handling 1-10 cubic yard containers with side pockets. The body shall be capable of compacting and transporting refuse to a landfill or transfer station and dispensing the load by means of hydraulically ejecting the load from the body.

#### **GENERAL TERMS:**

The manufacturer of all equipment provided under this contract shall be ISO 9001-2008 certified. All equipment furnished under this contract shall be new, unused and the same as the manufacturer's current production model. Accessories not specifically mentioned herein, but necessary to furnish complete unit ready for use, shall also be included. Unit shall conform to the best practice known to the body trade in design, quality of material and workmanship. Body shall be made in the United States of America. Assemblies, sub-assemblies and component parts shall be standard and interchangeable throughout the entire quantity of units as specified in this invitation to bid. The equipment furnished shall conform to ANSI Safety Standard Z245.1-2012.

#### **WARRANTY:**

Unit shall include a One-Year Complete Body warranty as standard. This warranty will cover parts and labor not including normal wear items. Bidder shall state his normal warranty and extended warranty where available.

#### PARTS MANUAL:

Bidder shall furnish complete parts, maintenance, and operator's manual along with a CD containing the aforementioned material with each body sold.

#### **BID QUOTATION:**

Bidder shall complete every space in the specification bidder's proposal column with a check mark to indicate if the item being bid is exactly as specified. If not, the "NO" column must be checked and a detailed description of the deviation from the specification to be supplied.

			YES_	NO	OFFERED
Α.	CA	APACITY			
	1.	The body shall have a capacity, excluding the receiving hopper, of not less than:			
		a. 32 yd³			
		b. 28 yd³			
		c. 23 yd³			
		d. 20 yd³			
	2.	The hopper shall have a capacity of twelve (12) cubic yards.			
B.	ВС	DDY DIMENSIONS			
	1.	Body length including 52"cab shield is			
		a. 32 yd³ - 372"			
		b. 28 yd³ - 354"			
		c. 23 yd³ - 322"			
		d. 20 yd³ - 313"			
	2.	Overall length with arms down and forks in full tuck position is			
		a. 32 yd³ - 422"			
		b. 28 yd³ - 409"			
		c. 23 yd³ - 377"			
		d. 20 yd³ - 365"			
	3.	Overall length with arms down and forks in horizontal position is			
		a. 32 yd³ - 465"			
		b. 28 yd³ - 447"	П		

# BIDDER SHALL COMPLETE BY CHECKING THE FOLLOWING. IF NOT COMPLIANT, STATE SPECIFICALLY ITEM BEING OFFERED.

		IES	NU	OFFERED
	c. 23 yd³ - 415"			
	d. 20 yd³ - 403"			
4.	Body width, outside shall be no more than 96".			
5.	Body width, inside should be a maximum of 88".			
6.	Body height, inside should be a minimum of 85 ".			
7.	Body height above chassis rail, arms down is 108".			
8.	Body height above chassis rail, arms up with full tuck forks is 120".			
9.	Height above frame with tailgate raised including rear underride guard is 199 ".			
10	Hopper width (bottom), above guide tracks, must be no less than 80".			
11	. Hopper width (top) must be a minimum of 81".			
12	. Hopper length at roof must be a minimum of 94".			
13	. Hopper depth must be a minimum of 91".			
ВС	DDY CONSTRUCTION			
1.	Packer body will have flat hopper and body floor with curved roof and body sides and of overhead loading design. Hopper will be designed to properly handle containers from 1-10 cubic yard capacity.			
2.	Roof - Minimum 8-gauge high tensile steel sheet 80,000 PSI typical yield.			
3.	Side Walls			
	<ul> <li>a. Lower hopper sides – minimum 3/16" AR400 abrasion resistant plat steel with typical 184,000 PSI tensile strength and 150,000 PSI typical yield strength.</li> </ul>			

C.

			YES	NO	OFFERED
	b.	Upper hopper sides – minimum .118" Steel sheet, with a minimum of 110,000 PSI typical yield.			
	C.	Body sides – minimum 7-gauge high tensile steel sheet 80,000 PSI typical yield			
4.	Flo	por			
	a.	Hopper floor – minimum 1/4" AR400 abrasion resistant plate steel with typical 184,000 PSI tensile strength and 150,000 PSI typical yield strength.			
	b.	Body floor – minimum 1/4" AR400 abrasion resistant plat steel with typical 184,000 PSI tensile strength and 150,000 PSI typical yield strength.			
5.	Ro	oof and Side Reinforcements			
	a.	Roof sheet - minimum 8 gauge high tensile steel sheet 80,000 PSI minimum yield.			
	b.	Upper longitudinal corner brace shall be 12-gauge 80,000 PSI typical yield 4" x 6" deep formed channel fully welded to the roof and body side sheets.			
	C.	Lower longitudinal corner brace shall be 11-gauge 80,000 PSI typical yield 5" x 19" deep formed channel fully welded to the body side sheets.			
	d.	Forward vertical body side bolster shall be 7-gauge 80,000 PSI typical yield 7.75" x 7" deep formed channel conforming to the curved body sides and fully welded to the body sides.			
	e.	Rear vertical body side bolster shall be 3/16", 80,000 PSI typical yield 6.7" x 5" deep formed channel conforming to the curved body sides and fully welded to the body sides.			
6.	Нс	opper Side Reinforcements			
	a.	The bottom side brace shall be 11-gauge formed 9.5" x 2" channel, 110,000 PSI typical yield.			

		IE2	NO	OFFERED
	<ul> <li>b. Lower and intermediate side bracing – minimum of four (4) 11-gauge 110,000 PSI typical yield 8.5" x 1.5" formed angles of lap construction.</li> </ul>			
	c. All external welds of hopper side bracing shall be continuous full seam.			
7.	Floor Reinforcements			
	a. Cross members shall be 7-gauge 80,000 PSI typical yield, 6" x 3" formed channel. Members shall be spaced on approximately 21-1/2" centers in low compaction zone and 17-1/4" centers in high compaction zone. Cross			
	members shall be full width, single piece construction.			-
	<ul> <li>b. Cross members shall interlace with body longitudinals to fully support the floor.</li> </ul>			
8.	Body Longitudinals (Long Members) - Shall be minimum of 7-gauge 80,000 PSI typical yield formed box section.			
9.	Steel Side Access Door - The side access door shall be located at the front street side of the body with minimum opening of 26.5" x 29.5" (796.5 in²). Steps and grab handles shall be provided for ease of entry. An electrical interlock shall be provided to disable the pump whenever the side door is open. The Hopper side will include a rubber bumper stop to keep the door from damaging the body side			
10	Roof Access Ladder - A ladder shall be provided on the rear of the tailgate for access to the body roof. Steps must be of "non-slip" material.			
11	. Sliding Top Door			
	a. A hydraulically actuated sliding top door will be provided to cover the hopper for traveling to the discharge site.			
	b. The top door cylinder shall be double acting and have a minimum 2-3/4" bore x 90" stroke with a 1-1/2" diameter chrome plated rod with a sensor embedded within the cylinder to notify when Door is in the fully opened position.			

	YES	NO	OFFERED
<ul> <li>An in-cab mounted light will be provided to indicate when the top door is not fully open.</li> </ul>			
12. Hopper Sump - A 28-gallon hopper liquid sump with a 14" x 5.5" door each side of the hopper will be provided for ease of clean out.			
13. Hopper Sump Drain – A 3" sump drain valve located on the streetside and curbside shall be provided for the removal of liquid waste from the hopper sump			
14. Front Head Closure – a minimum 47" x 77" front head closure screen made of 1/4" expanded metal shall be provided to prevent loose debris from entering the area in front of the packer and to prevent unauthorized entry by non-service personnel.			
15. The body shall be equipped with a rear hinge style mounting to allow for the manual raising of the body for serviceability. Two (2) inter-connected tubular aluminum body props will be provided to hold the empty body in a partially raised position for servicing the unit. When the props are released, and the body is raised the props automatically position themselves in the support pockets. The props will have a 2" through shaft hinge and will be secured under the body by a positive type chain lock			
16. A plastic shovel and bracket shall be mounted to the rear of the packing blade for the sump area cleanout.			
17.A single 20lb fire extinguisher shall be provided and be readily accessible.			
18. Front and Rear mud flaps shall be provided to give the utmost protection from road debris.			
19. A safety Triangle kit shall be provided in the cab.			

			YES	NO	OFFERED
D.	PA	ACKING MECHANISM			
	1.	A hydraulically actuated packer traversing a minimum of 81", from the front head, shall clear the hopper of material			
	2.	The lower packing panel face will be a minimum 3/16" AR400 abrasion resistant plat steel with typical 184,000 PSI tensile strength and 150,000 PSI yield strength. The upper vertical face will be a minimum 11-gauge, 80,000 PSI typical yield. The packer will be reinforced with a combination of structural members for maximum rigidity.			
	3.	Packing mechanism guide rails			
		a. The hopper zone packer guide rails (2) in the side of the body shall be comprised of 3/8" 50,000 PSI typical yield structural angle welded to 3-1/2" x 1/4" ASTM A500 Grade B structural tubing on each side of body. The structural tubing shall be of a continuous piece the full interior length of the hopper, minimum of 128" long.			
		b. Abrasion resistant wear bars, AR500 215,000 PSI minimum yield 230,000 Tensile x 500 BHN typical, shall be clad to the hopper zone guide rails, each side, in the following manner			
		<ul> <li>Bottom horizontal track wear bar shall be 1/4" thick x 3-1/2" wide and located 3-1/2" above floor at corner.</li> </ul>			
		<ul><li>ii. Top horizontal track wear bar shall be 1/4" thick x 2- 1/2" wide.</li></ul>			
		iii. Outer vertical track wear bar shall be 1/4" thick x 2- 1/2" wide.			
		c. The ejection zone guide rails shall be 3/8" 50,000 PSI typical yield structural angle welded to the full length 3-1/2" x 3-1/2" x 3/16" ASTM A500 Grade B structural tube. A 1/4" x 2-1/2" H.R.S. wear bar shall be welded to the vertical and undersides surface of the guide rail assembly. The top wear surface shall be clad with 1/4" x 3-1/2 H.R.S. steel.			

**OFFERED** 

YES NO

#### SUGGESTED STRUCTURAL BID SPECIFICATION

	d.	The packer panel shall be guided on each side of the body with 3" x 6" x 1/4" ASTM A500 Grade B structural tubing clad with AR500 abrasion resistant with typical 184,000 PSI tensile strength and 150,000 PSI yield strength wear bars in the following manner:		
		<ul> <li>Bottom horizontal packer panel wear bar shall be 3/8" thick x 3" wide x 41" long.</li> </ul>		
		<ul><li>ii. Top horizontal packer panel wear bar shall be 1/4" thick x 3" wide x 41" long.</li></ul>		
		iii. Two (2) vertical packer panel wear bars, located below the structural tubing, shall be 1/4" thick x 2" wide x 18" long.		
4.	Вс	olt-on lugs		
	a.	The packer panel shall be provided with bolt-on lugs for each of the two (2) packing cylinders. The cylinders shall be attached to the packer panel lugs via two-inch (2") diameter pins. Cylinder removal may be accomplished by either pulling the pins or by removing the entire bolt-on lugs. The lugs shall be attached to the packing panel with six (6) 3/4" diameter bolts for each lug assembly.		
	b.	The body front head shall also be provided with bolt-on lugs for packing cylinders. The lugs shall retain cylinder pins with four (4) 3/4" diameter bolts.		
5.	Pa	acker cylinders		
	a.	The packer will be hydraulically actuated by two (2) double acting telescopic cylinders with 5-1/2" bore		
	b.	Packer cylinders shall have spherical bearings on both ends.		
	C.	The Packer cylinder grease zerks that are located on the rod and base end shall be equipped with a remote lube system that is accessible from the ground		

			IES	NO	OFFERED
	6.	Packing force – minimum cylinder compaction force shall be 117,000 pounds.			
Ε.	Вι	JSTILE TAILGATE			
	1.	Tailgate must be one piece; top hinged and shall open approximately 4° above horizontal. Tailgate shall not slide against body seal material when opening/closing to keep seal wear/damage to a minimum			
	2.	Tailgate back sheets shall be constructed of a minimum 0.135" (10 Ga) 80,000 PSI typical yield steel.			
	3.	Tailgate side sheets shall be constructed of a minimum 0.118" (11 Ga), 110,000 PSI typical yield steel.			
	4.	The tailgate will be secured to the body by two (2) sets of hinges with 2" hinge pins at the roof line.			
	5.	The Tailgate hinge shall be equipped with greaseless bearings.			
	6.	A heavy duty rear door positive seal of rubberized gasket material will be installed the full length of the bottom and 68" up the sides of the tailgate to prevent leakage.			
	7.	The tailgate shall be secured in the closed position by means of a fully automatic latching mechanism actuated by a separate control in the cab.			
	8.	Hydraulic tailgate			
		a. The tailgate shall be raised and lowered hydraulically actuated by two (2) double acting cylinders with a minimum bore of 3" and a minimum stroke of 35" with a 1.75" diameter hardened chrome plated rod. Cylinder design shall also include an orifice fitting in the base port which will prevent the rapid descent of the tailgate in the event of a hydraulic failure. The cylinders shall use greaseless bearings in the rod and base ends to eliminate the need for greasing			

Half/Pack®

#### SUGGESTED STRUCTURAL BID SPECIFICATION

			YES	NO	OFFERED
		b. The tailgate shall be locked by two (2) lock cylinders with a minimum bore of 3" x 3-5/8" stroke with 1-1/2" diameter hardened chrome plated rod. Lock and tailgate raise cylinders shall be actuated by separate controls in the cab. Both cylinders should have embedded sensors that sense when cylinders are fully extended			
	9.	All lights will be recessed into the tailgate with the lens flush with the outer skin. Clearance, backup and directional lights shall be an Acrylic or Lexan lens, shock mounted in a protective housing. The whole unit will be "pop-out" and replaceable. All vehicles will meet FMVSS #108 and state lighting and reflector requirements.			
	10	An in-cab mounted display shall display a warning message to indicate that the tailgate is not fully closed.			
F.	LIF	T ARMS			
	1.	The lift arms will be 3" x 8" box reinforced type construction rated and capable of lifting 8,000-pound gross container and payload.			
	2.	Lift arms shall be capable of lifting loaded containers from a truck dock with 10' maximum pocket height.			
	3.	Lift arm cycle time will be approximately 19-21 seconds at 35 GPM.			
	4.	Container pick-up, dump, and disengagement will be done without the need for assistance and without the driver leaving the cab.			
	5.	The lift arms, during the dump cycle, must not obstruct or interfere with the opening of the truck cab doors on either side.			
	6.	The two (2) 3" x 8" rigidly constructed lift arms will be held tight to the torque tube using 4" thick ASTM A-487, 60,000 PSI yield cast steel clamping devices, and secured using two (2) 7/8" Grade 8 bolts and lock nuts on each side.			

			YES	NO	OFFERED
7.	. The arm torque tube will be mounted in blocks with four (4) replaceable split begrease provisions. The split bearing welded to the lower front of the body.	ronze bushings with			
8.	. Lift arm hydraulics				
	<ul> <li>a. The lift arms will be hydraulically double acting cylinders 4-1/2" bore a 2-1/2" diameter induction hardene</li> </ul>	x 41-1/2" stroke with			
	rod.	d and chrome plated			
	<ul> <li>The cylinders will be located outside floor level and directly attached to the</li> </ul>				
9.	. Container Forks				
	<ul> <li>a. Two (2) 1-1/2" x 59" grip high tensile yield forks shall be welded to a 4-1/2 1018 Seamless tubing fork cross s assembly shall include rubber bump</li> </ul>	2' O.D. x 3/8" wall C- haft assembly. This			
	and prevent damage to containers.	ers to reduce impact			
	<ul> <li>b. Fork cross shaft assembly shall be with two (2) split bearing blocks w bronze bushings fitted with grease p</li> </ul>	vith replaceable split			
10	<ol> <li>Fork Hydraulics - The forks will be hydraulics two (2) double acting cylinders, 3.5" both 2" diameter induction hardened and chromatolic contents.</li> </ol>	e x 25" stroke with a			
11	<ol> <li>Forks shall be designed to provide to angle to assure complete discharge of refuse containers.</li> </ol>				
12	<ol><li>Lift arms shall be brought to a smooth s lowered position by use of cushic cylinders.</li></ol>	•			
13	<ol> <li>Heavy duty bolt-on hard rubber arms side of the body will cushion and preve lift arms.</li> </ol>	•			

Heil Environmental Half/Pack®

### SUGGESTED STRUCTURAL BID SPECIFICATION

			YES	NO	OFFERED
	14	Maximum height with the lift arms raised in the full up and forks fully tucked position will be 13'6" (based on a chassis rail height of 42").			
	15	5.An in-cab mounted display shall display a warning message to indicate when any part of the arms are raised above 13'6".			
G.	RE	EAR UNDERRIDE GUARD			
	1.	The body shall be equipped with a rear under-ride guard as standard equipment.			
┥.	PA	AINTING			
	1.	First Step – Smoothing - All weld slag, splatter or roughness shall be removed with the appropriate hand tools. No sand, shot or glass air blasting shall be permitted to eliminate contamination and possible damage to bearings or pin surfaces and possible distortion of higher gauge sheet materials used on the body.			
	2.	Second Step – Purgation - A heated pressure wash shall drench the entire body with a silicated alkaline phosphate based pre-cleaner to clean all metal surfaces. This solution shall soak through and break down the oil film and other contaminants found on steel. The solution shall be non-corrosive to metals and shall be environmentally friendly.			
	3.	Third Step — Pre-Treatment — An organically accelerated phosphoric acid based pretreatment will be applied to all metal surfaces. This step provides a chemical conversion coating which changes the chemical and physical nature of the surface by providing a surface that the next application (prime) will adhere to.			
	4.	Fourth Step – Sealing - The entire body shall be coated with an application of the patented Dry-In-Place Seal from Henkel Surface Technologies. This process shall dramatically improve the surface finish's resistance to rusting that occurs from general wear and tear, and shall provide improvements to paint adhesion and other related corresion that occurs over the life of the products. This shall			

			152	NO	OFFERED
		help retain the "as new" appearance of the factory paint surface.			
	5.	Fifth Step - Primer Coat Paint - The seal coat shall be painted using Axalta Corlar - a high performance, low VOC/HAPS epoxy polyamide primer-sealer. Corlar is a two-component gray primer-sealer that is lead and chromate free. This shall be applied in an amount necessary to achieve a dry film thickness of 1.2 mil.			
	6.	Sixth Step - Finish Top Coat Paint - A high luster finish coat shall be applied using Axalta Imron Elite — a high-performance, low VOC (<3.5 lbs/gal RTS) two-component polyurethane enamel. An ample amount shall be applied to achieve a dry film thickness of 2 mil and shall result in a finish of 3.2 mil minimum film thickness.			
l.	Во	dy Undercoating			
	1.	The body shall be undercoated with a Thixotropic material to provide protection to the underside of the refuse body.			
J.	Ru	st Prevention			
	1.	The body and attaching parts shall be sealed with Tersotat Joint Sealer and CavityCoat for rust prevention protection.			
K.	. Warranty				
	1.	A one year complete body warranty covering parts and labor shall take effect on the body contract date.			