



**TOWN OF STRATFORD
PURCHASING DEPARTMENT
STRATFORD, CONNECTICUT**

BID No. 2014-057

Issued : August 11, 2014

Subject : Refuse Collection Body

The Town of Stratford through the Office of the Purchasing Agent, will receive SEALED BIDS for furnishing the equipment described in the accompanying specifications, in accordance with the instructions, conditions and reservations that follow:

A. CLOSING DATE:

Bids will be received until 11:00 am August 26, 2014, at which time they will be publicly opened and read. All bidders are invited to attend this public opening, which will be held immediately following the closing time specified above, in the Office of the Purchasing Agent, Room 202, Town Hall, 2725 Main Street, Stratford, CT 06615.

Any bid may be withdrawn prior to the above-scheduled time for receiving bids or authorized postponement thereof. Any bids received after the date and time specified shall NOT be considered. No bidder may withdraw a bid within 45 days after the actual opening thereof.

B. INSTRUCTIONS:

Bid proposals are to be submitted (**TWO COPIES**) in a sealed envelope and clearly marked with the bid number and description on the outside of the envelope, including all outer packaging (DHL, FedEx, UPS, etc).

Bids must be delivered to:

Purchasing Department
Stratford Town Hall – Rm 202
2725 Main Street
Stratford, CT 06615

C. CONDITIONS:

Bid Surety:

A bid surety is not required.

Payment: Final payment will be made upon the acceptance of the completed work by an authorized representative of the Town of Stratford. NO partial payments will be made. Invoices covering the work specified herein should be forwarded to the Purchasing Department upon completion of the project.

Taxes: The Town of Stratford is exempt from all State and Federal taxes. Do not include these amounts in your quotation.

Addendums: All addendums will be posted on the town website, www.townofstratford.com. It is the responsibility of the bidder to check the website for any addendums before submitting their bid.

F.O.B. Destination: All prices quoted must be net delivered to destination.

Conflict of Interest: No public official or employee shall, while serving as such, have any financial interest or engage in any business, employment, transaction or professional activity or incur any obligation of any nature which is in substantial conflict with the proper discharge of his/her duties or employment in the public interest.

D. RESERVATIONS:

The Town of Stratford may consider informal any bid not prepared and submitted to the Town in accordance with the provisions herein stated. The Town of Stratford reserves the right to reject any or all bids or parts of bids; to waive defects in same bids; or to accept any bid or part thereof deemed to be in the best interests of the Town of Stratford.

Supply detailed descriptions and specifications of all items..

BID SPECIFICATIONS

SPECIFICATIONS FOR ONE 25 CUBIC YARD REAR LOADING RUBBISH / RECYCLING COLLECTION BODY

SCOPE: It is the intent of this specification to describe a hydraulically actuated Rubbish Rear Load Body with the following minimum specifications considered necessary to perform the work assigned and will be the product of a manufacturer actively engaged in the production of recycling and refuse collection equipment and will embody their latest improvements in design and construction. The body construction and specifications shall be in compliance with the applicable standards as promulgated by the American National Standards Institute (ANSI Z245.1).

GENERAL: The body shall be of a rectangular box form with straight vertical sides, no exception, and shall be mounted in a stationary manner that does not require the body to be tilted in order to discharge refuse. The body shall be of a design such that no cutting, welding, and /or material modification of a standard chassis frame forward of the rear axles is required to mount the body. The body shall be equipped with a hydraulically actuated rear loading tailgate. The Rubbish Body shall be capable of handling brush, trimming collection, in addition to Residential and Commercial Refuse Collection.

The Rubbish body described must meet the minimum specifications acceptable to the Town of Stratford. In order to be considered, the bidder must complete the comply portion of these bid specifications by placing an "X" in the appropriate column. Should deviations or exceptions be noted herein? They must be explained

in detail using separate pages with company letterhead following this Town of Stratford, Bid specification outline. Failure to list all deviations or exceptions will lead to disqualification of your bid proposal. Valid Notarized, Engineering certifications must accompany all said exceptions. The Town of Stratford reserves the right to question any and all certifications, if necessary.

Features which are regularly furnished, as standard with this unit shall be supplied by the successful bidder. The body shall conform in strength, quality of material and workmanship to that provided by the best manufacturing and engineering practices of the industry.

The bidder shall represent by his bid that all equipment is new and unused.

It is required that the unit, as specified herein, shall be completely assembled, painted, and ready for operation.

(X) If specification is met. If exception is taken, bidder must explain (using a separate page).

<u>Comply</u>	<u>Exception</u>	<u>CHASSIS REQUIREMENTS:</u>
_____	_____	A <u>Clear / Usable</u> Cab to Trunnion of 156 inches is required.
_____	_____	An after frame dimension based on the centerline of Trunnion to the end of frame. 60 inches is required.
_____	_____	Engine, Remote Power Take Off Electronics is to be set at a maximum of 1,700 R.P.M.'S, no exceptions. In conjunction, engine ramp speed will be set at 650 rpm per second. <u>Chassis</u> must have a devise to prevent over-speeding of Hydraulic Pump.
_____	_____	All engine electronic programming will be preformed by the Chassis manufacturer <u>prior</u> to shipping the Chassis to the Rubbish Body manufacturer, no exceptions.
_____	_____	Drivers side of chassis, immediately in back of cab. Chassis frame, must be <u>Clean / Clear</u> of all air dryers, battery boxes, electrical junction boxes or wiring, air tanks, braces, brackets, etc. for mounting of Refuse Body hydraulic System Reservoir, all hoses, and plumbing, 60 inches "Clear" required, no exceptions.

I. BODY

A. Capacity:

- | | | |
|-------|-------|---|
| _____ | _____ | 1. The body shall have a minimum capacity of twenty-five (25) cubic yards. The capacity of the body shall be determined without regard to the capacity of the hopper of the tailgate. |
| _____ | _____ | 2. The Body Model being submitted shall have been manufactured for a minimum of eight years. |
| _____ | _____ | 3. The body must meet all applicable ANSI, safety standards. |

B. Dimensions:

- | | | |
|-------|-------|---|
| _____ | _____ | 1. <u>Inside Width:</u> The body shall have an inside width of 89 inches. |
| _____ | _____ | 2. <u>Inside Height:</u> The body shall have an inside height of 79 inches. |
| _____ | _____ | 3. <u>Width:</u> The body shall have an overall width of 96 inches. |

_____ 4. Length: The body shall have an overall length, inclusive of
25 cu. yd. Rear Load Rubbish / Recyclable Body Bid Continued:

Comply Exception
tailgate

the body front ejection cylinder clevis beam and the
(In lowered position; inclusive of rear corner steps) of 276
inches.

_____ 5. Height: The body shall have an overall height, exclusive of
hydraulic lines, clamps, optional accessories, etc. of 94
inches measured from the top of the frame of the chassis.

_____ 6. Weight: The body shall have an overall weight, inclusive
of the tailgate, of 14,350 pounds.

_____ 7. Continuous Body Welds: The body shall have, Continuous
Body Welds, no exception.

C. Construction:

_____ a. Sidewalls: The body sidewalls shall be constructed from
11-gauge high tensile steel reinforced with four (4) vertical
formed channel braces, exclusive of the body rear corner
posts, constructed from 12-gauge high tensile steel. Packer
bodies having curved sidewall body design, will not be
accepted, no exceptions. The rearmost sidewall sheets shall
be reinforced additionally with one horizontal formed
channel brace constructed from 12-gauge high tensile steel.
The sidewall sheets shall be joined by continuous seam
welds. The braces shall be joined to the sidewalls by
continuous seam welds.

_____ b. “Additional” Rear Body Reinforcement: The rearmost
sidewall sheets shall be reinforced additionally with a
second formed channel brace constructed from 12-gauge
high tensile steel, no exceptions. The brace shall be joined
to the sidewall sheet by continuous seam welds.

2. Floor:

_____ a. Upper Floor: The upper floor shall be constructed from a
minimum of 1/4 inch high tensile steel reinforced with
four (4) lateral formed cross-members (each side) exclusive
of the body rear apron and the body front bulkhead,
constructed from 1/4-inch high tensile steel. The rearmost
upper floor shall be reinforced additionally by 2 rows of
linear braces constructed from 2 x 2 x 1/4 inch steel
structural angle.

b. Trough:

25 cu. yd. Rear Load Rubbish / Recyclable Body Bid Continued:

<u>Comply</u>	<u>Exception</u>	
_____	_____	1. <u>Trough Floor:</u> The body will be constructed with a longitudinal center floor trough running the entire body length. The floor trough is to be constructed of a minimum 1/4 inch, 50,000 psi yield strength steel. Flat floors will not be considered.
_____	_____	2. <u>Ejection Panel Guides:</u> The trough shall be equipped with 2 ejection panel guides constructed from 6-inch steel structural channel. The guides shall extend the full length of the body located in the trough of the body floor.
_____	_____	3. <u>Roof:</u> The body roof shall be constructed from 11-gauge high tensile steel reinforced with four (4) lateral formed channel braces, exclusive of the body rear hinge beam, constructed from 12-gauge high tensile steel. The roof sheets shall be joined by continuous seam welds. The braces shall be joined to the roof by continuous seam welds.
_____	_____	4. <u>Body Front Bulkhead:</u> The body front bulkhead shall be constructed from 1/4 inch high tensile steel, no exceptions.
_____	_____ front	5. <u>Body Front Ejection Cylinder Clevis Beam:</u> The body ejection cylinder clevis beam shall be constructed from 1/4-inch high tensile steel.
_____	_____	6. <u>Body Rear Corner Posts:</u> The body rear corner posts shall be constructed from 3 x 6 x 3/8 inch high tensile steel structural tubing. The posts shall be joined to the body sidewalls by external continuous seam welds.
_____	_____	7. <u>Body Rear Apron:</u> The body rear apron shall be constructed from 1/4-inch high tensile steel reinforced with braces constructed from 1/4-inch high tensile steel. The apron shall be joined to the body floor and the body rear posts by continuous seam welds.
_____	_____	8. <u>Additional, Body Rear Apron Supports:</u> In addition, on the backside of the Rear Body Apron. Additional supports made of 1/4 inch high tensile steel plate shall be supplied and shall be fully welded, no exceptions.
_____	_____	9. <u>Body Rear Hinge Beam:</u> The body rear hinge beam shall

be constructed from 4" X 6" X 3/8" inch high tensile steel structural tubing. The beam shall be joined to the body roof by continuous seam welds.

25 cu. yd. Rear Load Rubbish / Recyclable Body Bid Continued:

Comply **Exception**

II. TAILGATE

- | | | |
|-------|-------|---|
| _____ | _____ | <p>A. <u>General</u>: The tailgate shall be mounted on the rear of the body. The tailgate shall rotate on 2 hinges located on the upper perimeter of the tailgate equipped with replaceable pins. The tailgate shall be raised by 2 hydraulic cylinders. The lower inside perimeter of the tailgate shall be equipped with a replaceable, watertight seal. The watertight tailgate seal shall not use screws, bolts, or fasteners of any type to hold the seal in place. Said, seal shall be of slip in type, no exceptions. The tailgate shall be comprised of 2 principal components hereinafter described as a tailgate shell and a packing mechanism.</p> |
| _____ | _____ | <p>B. <u>Hopper Capacity</u>:</p> <p>1. <u>General</u>: The hopper of the tailgate shall have a minimum capacity of 3.2 cubic yards measured by the NSWMA (TBEA) rating formula no exception.</p> |
| _____ | _____ | <p>C. <u>Dimensions</u>:</p> <p>1. <u>Hopper Loading Sill Height</u>:</p> <p>2. <u>Hopper Inside Width</u>: The hopper shall have an inside width of 78 inches.</p> <p>3. <u>Hopper Opening Height</u>: The hopper opening shall have a minimum height of 62 inches.</p> <p>4. <u>Tailgate Overhang Length</u>: The tailgate shall have an overhang length of 65 inches measured from the end of the body floor to the end of the hopper loading sill.</p> |
| _____ | _____ | <p>D. <u>Two Piece, Tailgate Shell</u>:</p> <p>1. <u>General</u>: The <u>Two Piece tailgate shell</u> shall be comprised of (2) principal components, hereinafter described as an upper-half and a lower-half, <u>no exceptions</u>. <u>The tailgate shell shall be constructed such that the upper-half can be raised either hydraulically or mechanically separately from the lower-half no exception.</u></p> |

Comply **Exception**

The upper-half of the tailgate shall rotate on 2 hinges, joining it to the lower-half, located on the upper perimeter of the upper-half equipped with replaceable pins. The upper-half shall be equipped with a securable access door. The access door shall rotate on 2 hinges located on the upper perimeter of the door. The lower-half shall be comprised of 4 principal components herein after described as a tailgate hinge beam, a baffle, a hopper floor, and a hopper loading sill. The tailgate hinge beam shall be located on the upper perimeter of the lower-half. The baffle shall be a crossmember sheet extending across the full lateral width of the lower-half and shall join to both lower-half sidewalls. The opposing surfaces of the upper-half and lower sidewalls shall be equipped with tracks in which the packing mechanism shall travel.

2. Construction:

a. Upper-Half:

- | | | |
|-------|-------|---|
| _____ | _____ | i. <u>Sidewalls:</u> The upper-half sidewalls shall be constructed from 3/16 inch steel reinforced with triangular truss-shaped formed braces constructed from 10-gauge high tensile steel. |
| _____ | _____ | ii. <u>Upper-Half Hinge Beam:</u> The upper-half hinge beam shall be constructed from 3/16 inch high tensile steel. |
| _____ | _____ | iii. <u>Upper Crossmember:</u> The upper crossmember shall be constructed from 3 x 1-1/2 x 1/4 inch high tensile steel structural tubing. |
| _____ | _____ | iv. <u>Lower Crossmember:</u> The lower crossmember shall be constructed from 10-gauge high tensile steel. |
| _____ | _____ | v. <u>Top Surfaces:</u> The upper-half top surfaces shall be constructed from 14-gauge high tensile steel. |
| _____ | _____ | vi. <u>Top Perimeters:</u> The upper-half top perimeters shall be constructed from 1-1/2" x 1-1/2" x 1/4 inch high tensile steel structural tubing. |

<u>Comply</u>	<u>Exception</u>	
_____	_____	b. <u>Lower-Half:</u>
_____	_____	i. <u>Sidewalls:</u> The lower-half sidewalls shall be constructed from 3/16-inch high tensile steel reinforced with formed braces constructed from 3-inch high tensile steel structural channel and 10 gauge high tensile steel.
_____	_____	ii. <u>Tailgate Hinge Beam:</u> The tailgate hinge beam shall be constructed from 1/4-inch high tensile steel reinforced with braces constructed 3/16-inch high tensile steel.
_____	_____	iv. <u>Baffle:</u> The lower-half baffle shall be constructed from 3/16-inch high tensile steel reinforced with linear and lateral braces constructed from 3-1/2 x 3-1/2 x 1/4 inch steel structural angle. The baffle shall be equipped with a scraper bar constructed from 5 x 3 x 3/8 inch steel structural angle.
_____	_____	v. <u>Hopper Floor:</u> The hopper floor shall be constructed from
a		minimum 1/4-inch 100,000 psi yield strength steel, no exception.
_____	_____	vi. <u>Hopper Floor Liner:</u> A 1/4-inch 100,000 psi yield strength replaceable hopper floor liner shall be supplied no exception. Note: A one piece 1/2" hopper floor is not acceptable.
_____	_____	vii. <u>Hopper Loading Sill:</u> The hopper loading sill shall be constructed from 3/8-inch high tensile steel reinforced with braces constructed from 1/4-inch high tensile steel.
_____	_____	c. <u>Tracks:</u> The tracks shall be constructed from 3 x 3 x 3/8 inch high tensile steel structural tubing. The track wear surfaces shall be constructed from 1/4 x 3 inch 100,000 psi yield abrasive resistant steel flat bar.
_____	_____	E. <u>Packing Mechanism:</u>
_____	within	1. <u>General:</u> The packing mechanism shall be contained
		the tailgate shell. The packing mechanism shall be

comprised of 3 principal components hereinafter described as a sweep/pack blade, a sweep shaft, and a slide plate.

The

sweep/pack blade shall rotate on the sweep shaft extending across the full lateral width of the packing mechanism. The sweep shaft shall join the sweep / pack blade to the slide

25 cu. yd. Rear Load Rubbish / Recyclable Body Bid Continued:

Comply **Exception**

plate, and shall be mounted on the slide plate by means of 2 steel cast hubs. The slide plate shall travel in the tracks of the tailgate shell. The packing mechanism shall be actuated by four hydraulic cylinders of equal bore diameter no exception. Here in-after described as sweep cylinders and pack cylinders. The sweep / pack blade rotation through the hopper of the tailgate (sweep cycle) shall be actuated by the 2 sweep cylinders connected to the sweep / pack blade and slide plate. The slide plate travel (pack cycle) shall be actuated by the 2 pack cylinders connected to the slide

plate

and the outer surfaces of the tailgate lower-half sidewalls. The packing mechanism shall operate such that the sweep cycle terminates automatically at a point where the sweep / pack blade cutting edge is approximately 7 inches above

the

hopper loading sill, and must be re-actuated to complete the sweep cycle. The packing mechanism shall operate such that the pack cycle shall be actuated automatically upon the termination of the sweep cycle. The packing mechanism shall be capable of exerting 34 psi of force across the sweep/pack blade face. The sweep/pack blade and the slide plate shall have the capability to be actuated independently.

2. Construction:

_____ _____ a. Sweep/Pack Blade Face Sheet: The sweep/pack blade face sheet shall be constructed from 1/4-inch 80, 000 psi yield strength steel reinforced with internal linear and lateral braces constructed from 1/4-inch high tensile steel.

_____ _____ b. Sweep/Pack Blade Cutting Edge: The sweep/pack blade cutting edge shall be constructed from 3/8-inch high tensile steel.

_____ _____ c. Sweep Shaft: The sweep shaft shall be constructed from 3-inch outside diameter, 1/2-inch wall thickness high tensile steel tubing.

_____ _____ d. Slide Plate Face Sheet: The slide plate face sheet shall be

constructed from 3/16-inch high tensile steel, reinforced with internal linear braces constructed from 3/16-inch high tensile steel and an upper perimeter sweep cylinder clevis beam constructed from 3/8-inch high tensile steel.

3. Packing Mechanism, Mounting/Guide Means:

25 cu. yd. Rear Load Rubbish / Recyclable Body Bid Continued:

<u>Comply</u>	<u>Exception</u>	
_____	_____	a. <u>General:</u> The packing mechanism shall be mounted on replaceable high density polyethylene shoes that shall travel on the track wear surfaces of the tailgate shell.
_____	_____	b. <u>Packing Cycle Time:</u> The packing mechanism shall be capable of completing the entire sweep and pack cycle in 25-30 seconds, and shall be capable of a hopper reload in 12-16 seconds after the beginning of the cycle.
		F. <u>Tailgate Locks:</u>
_____	_____	1. General: The tailgate shall be secured by locks at 2 points on the lower side perimeters. The locks shall be manually secured swing-away, screw-type bolt and turnbuckle clamps.
		G. <u>Tailgate Riding Steps:</u>
		1. Bolt on, Rider Steps are to be provided on each side of the tailgate. Grab handles will be located in a convenient place for the safety of the rider. Rider steps shall be made of a grip-strut open grate steel material which will comply with ANSI regulations.
		H. <u>Tailgate Maintenance Props:</u>
_____	_____	I. The tailgate shall be equipped with a positive means of support that is permanently attached and capable of being locked in position, no exceptions.
		III. <u>EJECTION MECHANISM</u>
_____	_____	A. <u>General:</u> The ejection panel shall be activated by a single hydraulic cylinder mounted in an angular attitude. The cylinder shall be connected to the ejection panel and the body front ejection cylinder clevis beam by replaceable pins. The ejection panel shall be capable of traversing the

entire length of the body. The ejection mechanism shall be capable of exerting counteracting force against the payload. The ejection mechanism shall be capable of retracting automatically ("drift") as necessary to compact the entire payload. The ejection cycle shall be accomplished by single, full stroke of the ejection mechanism cylinder.

B. Ejection Panel:

25 cu. yd. Rear Load Rubbish / Recyclable Body Bid Continued:

Comply **Exception**

- | | | |
|-------|-------|---|
| | | 1. <u>Construction:</u> |
| _____ | _____ | a. <u>Face Sheet:</u> The panel face sheet shall be constructed from 10 gauge high tensile strength steel reinforced with braces constructed from 10 gauge high tensile strength steel and 3 x 3 x 1/4 inch high tensile steel structural tubing. |
| _____ | _____ | b. <u>Cylinder Housing:</u> The panel cylinder housing shall be constructed from 3/16 inch high tensile steel reinforced with braces constructed from 3/16-inch high tensile steel. The ejection mechanism cylinder clevis plates shall be constructed from 3/4-inch steel. |
| _____ | _____ | c. <u>Perimeters:</u> The panel perimeters shall be formed channel lips constructed from 10 gauge high tensile steel reinforced with braces constructed from 1/4-inch high tensile steel. |
| _____ | _____ | 2. <u>Ejection Panel Mounting/Guide Means:</u> The panel shall be mounted on replaceable high density polyethylene shoes that shall travel in the 6-inch ejection panel guides installed in the trough of the body floor. |

IV. HYDRAULIC SYSTEM

- | | | |
|-------|-------|--|
| | | A. <u>Ejection Mechanism Cylinder:</u> The cylinder to actuate the ejection mechanism shall be chrome plated, multistage double acting, with a main bore diameter of 5-1/4 inches and a stroke length of 119 inches. |
| _____ | _____ | B. <u>Tailgate Lift Cylinders:</u> The cylinders to raise the tailgate shall be chrome plated rod, single stage, single acting with a bore diameter of 3 1/2 inches and a stroke length of 30 inches, no exception. |
| _____ | _____ | C. <u>Sweep Cylinders:</u> The cylinders to actuate the sweep/pack blade shall be chrome plated rod, single stage, double acting with a bore diameter of 5 inches, no exceptions. |

With a stroke length of 24 inches. The cylinders shall be capable of exerting 62,831 lbs. of output force.

_____ _____ D. Pack Cylinders: The cylinders to actuate the slide plate shall be chrome plated rod, single stage, double acting with a bore diameter of 5 inches, no exceptions. With a stroke length of 42 inches. The cylinders shall be capable of exerting 62,831 lbs. of output force.

25 cu. yd. Rear Load Rubbish / Recyclable Body Bid Continued:

Comply **Exception**

_____ _____ E. Transmission Mounted, Married Hot Shift and Pump: The Hydraulic pump is to be a Commercial / Parker. The hydraulic pump is to produce a maximum of 48 Gallons per minute at 1,700 RPM....

_____ _____ F. Control Valves: The main control valve and the tailgate (packing mechanism) control valve shall be sectional types.

_____ _____ G. Hoses and Fittings: The hoses shall be double braid wire reinforced with a burst pressure to operating pressure ratio of 4-to-1. All hose fittings shall be JIC female swivel and /or NPT male. Operational Tailgate Hoses requiring a guard must utilize wire wrapped hoses.

_____ _____ H. Underbody (Frame Mounted) Oil Reservoir:

_____ _____ 1. Capacity: The oil reservoir shall have a minimum capacity of 50 gallons.

_____ _____ 2. Location: The oil reservoir shall be mounted on the drivers side of the chassis frame rail.

_____ _____ 3. The Oil Reservoir Shall Be Equipped With The Following:

_____ _____ a. Internal baffling: to enhance oil flow and heat dissipation.

_____ _____ b. A magnetic trap: extending a minimum of 16 inches into the center of the reservoir to collect metal particles which may enter the hydraulic system.

_____ _____ c. Hydraulic Oil Level Sight Gauge: An oil level sight gauge to permit visual determination of the oil level in the reservoir. The gauge shall have a 5-inch sight glass.

_____ _____ d. Hydraulic Oil Filler Cap: A filler-breather cap, capable of straining oil as it is poured into the reservoir, and capable of providing 35 cubic feet of air breathing capacity.

- _____ _____ e. Reservoir Clean Out Port: A removable clean-out port providing easy access to all portions of the hydraulic reservoir, and shall be no less than 10 inches in diameter shall be equipped with a replaceable oil tight seal.
- _____ _____ I. Shut-Off Valve: A appropriately sized shut-off valve shall be located in the suction line of the hydraulic system between the oil reservoir and the pump.

25 cu. yd. Rear Load Rubbish / Recyclable Body Bid Continued:

Comply **Exception**

- _____ _____ J. Return Filter: The Hydraulic Reservoir shall be equipped with a 10 micron return filter with a flow rating up to 150 GPM, a maximum operating pressure of 1000 PSI, and contain a built-in 40 PSI bypass valve. The in-tank return filter element shall be submerged inside the reservoir, on a angular plane for minimal loss of fluid during maintenance, no exceptions.
- _____ _____ K. Suction Filter: An in-line 149 micron (100) mesh suction line oil strainer, rated at a minimum 100 GPM and equipped with a 5 PSI bypass valve, no exceptions.
- _____ _____ L. Hydraulic System Pressure: The hydraulic system shall operate at a primary relief pressure of 2000 psi. The packing mechanism hydraulic system shall operate at a secondary relief pressure of 1600 psi, no exceptions. The ejection mechanism hydraulic system shall operate at a drift relief pressure of 1500 psi.

V. CONTROLS

- _____ _____ A. Packing Mechanism Controls: Positive lever controls shall be located on the curbside of the tailgate to actuate the packing mechanism. The controls shall be capable of actuating the sweep blade and the slide plate independently.
- Actuation of the controls shall automatically accelerate the engine of the chassis to the proper RPM to operate the body.
- _____ _____ B. Ejection Mechanism and Tailgate Lift Controls: Positive lever controls shall be located on the streetside front of the body to actuate the ejection cycle and the tailgate (raise and lower) with a manually actuated switch to accelerate the engine of the chassis to the proper RPM to operate the body.

VI. WARNING ALARM

_____ _____
A warning alarm shall be provided that emits an audible, intermittent signal when the transmission of the chassis is in the reverse position. When the tailgate of the refuse body is not in the fully lowered position an audible intermitting alarm will sound and a in cab visual warning light will be actuated.

VII. LIGHTS

25 cu. yd. Rear Load Rubbish / Recyclable Body Bid Continued:

Comply Exception

- | | | | |
|-------|-------|----|--|
| _____ | _____ | A. | <u>General</u> : Lights and reflectors shall be in accordance with Federal Motor Vehicle Safety Standard No. 108. <u>All</u> refuse body lights with the exception of the Hopper Lights shall be
"LED" and flush mounted in rubber grommets. |
| _____ | _____ | B. | <u>Rear Mounted 6 Lamp Light Bar</u> : A light bar shall be mounted on the upper-half of the tailgate. The light bar shall have four "LED", directional and stop lights of a four inch diameter, and two "LED" white back- up lamps of four inch diameter. The lamps shall be flush mounted in rubber grommets. |
| _____ | _____ | C. | <u>"LED" Mid-Body Turn Signal Lights</u> : Amber in color intermediate turn signals shall be supplied. |
| _____ | _____ | D. | <u>Light Bar Construction</u> : The light bar shall be constructed of a minimum of 3/16 inch thick steel plate no exceptions. |
| _____ | _____ | E. | <u>Reflective, Vehicle Conspicuity Tape</u> : The body shall be equipped with D.O.T. approved, Reflective Tape with a pattern of alternating red and white color segments. Reflective tape shall be horizontally placed on body lower sides, and across rear of tailgate. |
| _____ | _____ | F. | <u>Left Side of Tailgate, Electrical Disconnect</u> : To be used for when servicing hopper area wear shoes, etc.. Disconnect will be where upper and lower tailgate sections meet. A waterproof military type disconnect plug will be used for ease of disconnecting tailgate harness that runs along the left side of the tailgate hopper.. |

V111. SPLASH GUARDS

_____ _____
Front and Rear Splash Guards: Splash guards shall be mounted fore and aft of the chassis tandem axles (Total quantity of Four). Steel Splash guards shall be utilized in front of the tandem drive axle tires, and rubber splash guards at the rear of the tandem drive axle tires.

1X. HOPPER LIGHTS

- _____ _____ 1. Two sealed beam white hopper lights shall be mounted on the inside upper-half of the tailgate. The lamps shall be of a 4-inch diameter and surface mounted. The lights shall be

25 cu. yd. Rear Load Rubbish / Recyclable Body Bid Continued:

Comply Exception

_____ _____
 actuated manually by a switch located on the curbside of the tailgate no exception, and a master switch located in the cab of the chassis.

- _____ _____ 2. Two sealed beam white hopper lights shall be mounted on the outside upper-half of the tailgate shining toward the operator steps. The lamps shall be of a 4-inch diameter and surface mounted. The lights shall be actuated manually by a switch. Located on the curbside of the tailgate no exception, and a master switch located in the cab of the chassis

X. “LED” STROBE LIGHTS

- _____ _____ 1. On the upper front bulkhead corners of the rear load recycling body. There will be two triangular flat steel brackets in left and right corners of the body, on an outward cant'. These brackets shall allow the Strobe Lights to have rubber mounting grommets. Then, the two amber, oval 6". Peterson “LED” Piranha 420S amber strobes at upper front bulkhead, one on each side, shall be installed. Strobes will be below the front roof line.

- _____ _____ 2. There will also be (4) multi-function Peterson “LED” Piranha Strobes, 4344 amber strobes at rear of tailgate. To be positioned in the four corners of the tailgate in lieu of turn signals. The Piranha Strobes will be mounted into rubber grommets.

- _____ _____ 3. Strobe lighting pattern configuration, shall be alternating.

- _____ _____ 4. Strobe System shall be compatible with any 12 or 24 system.

- _____ _____ 5. No separate external electronic power pack

will be required.

- | | | |
|-------|-------|--|
| _____ | _____ | 6. One, on / off control switches for front strobes, and for rear strobes shall be mounted in the truck cab. |
| _____ | _____ | 7. Warranty, 100,000 hours, with the exception of abuse. |

XI. REAR VISION BACK-UP CAMERA SYSTEM

_____ _____
Safety Vision, SV-CLCD70B one (1) per vehicle. Model of Camera shall be a SV-625B-. Camera field of view shall be 25 cu. yd. Rear Load Rubbish / Recyclable Body Bid Continued:

Comply **Exception**

a minimum of 110 degrees. Model of Monitor shall be a SV-LCD70B. Monitor to have a minimum of 7.0 inch Color This would be measured Diagonally. The Manufacturer shall provide a one (1) year warranty for defects in materials and workmanship from date of delivery, no exceptions.

XII. PAINTING

- | | | |
|-------|-------|---|
| _____ | _____ | 1. All burrs and rough areas are to be ground off. |
| _____ | _____ | 2. All body surfaces to be washed with a phosphorous-based steam cleaning solution. |
| _____ | _____ | 3. A coat of 2-part epoxy primer is to be applied and must be rust inhibiting. |
| _____ | _____ | 4. A high gloss two part polyurethane or equivalent. Top coat paint shall be Mack White, and match cab. |

XIII. MOUNTING

- | | | |
|-------|-------|--|
| _____ | _____ | 1. Mounting of refuse body is to be preformed at the factory of the body manufacturer. |
| _____ | _____ | 2. Factory mounting to incorporate rear pivot bolts. Front of refuse body hold downs, two sets of dual spring supports (both Left and Right Sides). Total of four front body hold downs with eight springs. Lateral restraints with wear plates to restrict side to side movement. |

XIX CONTAINER HANDLING DEVICES

_____ _____ A. Overhead Drum Winch Container Handling Device: A container handling device shall be mounted on the upper-half of the tailgate. The device shall be capable of engaging, raising, discharging, lowering, and disengaging standard rear loader metal containers up to a 10 cubic yard capacity. The device shall be actuated by a drum type winch with cable, actuated by an hydraulic motor. The device shall have a 12,000-lb. lift capacity. Winch shall have

25 cu. yd. Rear Load Rubbish / Recyclable Body Bid Continued:

Comply Exception

_____ _____ Twenty-Five Feet of 1/2 inch Wire Cable. The Wire Cable will be equipped with a (DB2) Gunnebo 13-8, Grip Latch Safety Hook for Latching on to Rear Load Containers.

_____ _____ B. Roll Bar Container Handling Device: A container handling device shall be mounted laterally on the rear of the tailgate. The device shall be capable of engaging, raising, discharging, lowering and disengaging standard rear loader metal containers up to 3 cubic yard capacity. The device shall be actuated by 2 hydraulic cylinders. The device shall have a 2,000 lb. lift capacity.

XX. WARRANTY

- _____ _____ A. Body structural one (6) months minimum.
- _____ _____ B. All hydraulic operating cylinders (1) years Minimum, parts and labor.
- _____ _____ C. Main push out cylinder (1) years minimum parts and labor .
- _____ _____ D. Main operation pump and valve, 12 months minimum.

XXI. MANUALS

_____ _____ One (1) Refuse Body, Parts and Service Manuals will be provided with vehicle at time of delivery. CD Disc's are acceptable.

XXIX. DELIVERY

State delivery in detail. number of days after receipt of truck chassis at Rubbish body factory. _____

XXX. OPERATOR & MECHANIC TRAINING

_____ Successful bidder will provide operator and mechanic instruction / training.

XI PARTS AND SERVICE

25 cu. yd. Rear Load Rubbish / Recyclable Body Bid Continued:

Comply **Exception**

_____ In the day of poor economy. The Bidder’s, Parts, and and Repair Facility to Service the Rubbish Body shall be within an area of 30 miles. This mileage is to start from The Town of Stratford Public Works Facility to the Bidder’s Facility. The Bidders Facility is to have Factory Trained Mechanics for Warranty, Repairs, and Service. A fully stocked Parts Department with Bar Code System for expediting pulling of Parts, and a parts delivery system.

BELOW OPTIONS: MUST BE PRICED OUT

(2) CART LIFTERS

Dual Cart Lifters: Two (2) Perkins Rotary, Model D-6220-27K , (Tuck-A-Way) Design Cart Lifter

shall

be supplied on each refuse body, and mounted on right, and left sides of the tailgate hopper loading sill. Hydraulic actuator/controls will be located on each side of tailgate, left side for left cart lifter, right side for right cart lifter. The Lifters shall be designed to accommodate ninety-five (95) gallon capacity and sixty – five (65) gallon capacity American/Domestic two wheel bar type refuse carts. Lifters shall engage the refuse carts without the need of lifting the cart onto the lifter. The lifters shall rotate the container to a point at least 45 degrees above horizontal, and shall empty the contents of the refuse cart into the refuse body hopper. It shall return to vertical, and shall be capable of continuing its movement through the

disengagement position to under the hopper. Lifters shall have a lifting capacity of not less than Three Hundred Pounds (350 lbs.) and a cycle time of no Less than eight (8) seconds and no more than ten (10) seconds. Cart Lifters shall be actuated by a (27K) Hydraulic Rotary Motors with full two-year warranty on motors and lifters, with the exception of abuse. Speed- up monetary weather proof push buttons are to be supplied on both left and right

sides

of the tailgate. Should the right side of tailgate (Winch Speed –up Button) be operational, it can be used for the right side Cart Lifter, also for speed up.

Pricing: Two D-6220 27K (2) Perkins, (Tuck-A-Ways) Cart Lifters, complete with Dual Tapping Kit:
\$ _____

25 cu. yd. Rear Load Rubbish / Recyclable Body Bid Continued:

Undercoating, Bottom of Refuse Body: Rus-Fre undercoating will be applied to center section of Refuse Body, and left and right under body floor. Also under hopper will be undercoated.

Pricing of Undercoating: \$ _____

One (ABC) Twenty lb. Fire Extinguisher and Mounting: Mounting Bracket shall be supplied with the Body. It is to be mounted on the frame below the Packer Body. It is not to be mounted in the cab area. It does need to have immediate fast / easy access.

Pricing of Fire Extinguisher: \$ _____

TOWN OF STRATFORD
BID SHEET
BID # 2014-057

DESCRIPTION : Refuse Collection Body

Price for body \$ _____

Attach a detailed list of specifications (including make and model).

Bidder shall note in writing any deviations from the bid requirements. Failure to do so may be just cause for rejection of vendor's bid as being nonresponsive.

Bidder's Name : _____

Address : _____

Phone : _____ Date : _____

Authorized Signature : _____

Print Name: _____

Title : _____

References (at least three, including contact name and phone) :
