

# **CITY COUNCIL AGENDA ITEM**

Date: June 17, 2024

To: Robert J. Bruner, Acting City Manager

From: Megan E. Schubert, Assistant City Manager

Rob Maleszyk, Chief Financial Officer

Dee Ann Irby, Controller

Kurt Bovensiep, Public Works Director

Brian Varney, Fleet Manager

Emily Frontera, Purchasing Manager

Subject: Standard Purchasing Resolution 4: MITN Cooperative Purchasing Agreement – Hook

Lift Truck with Body Attachments

# **History**

• A truck equipped with a hydraulic hook lift can reduce the size of the fleet by using one truck that can haul various bodies or attachments.

- The one (1) truck being purchased replaces two (2) current fleet trucks that are used on a daily basis by the Department of Public Works for snow plowing and de-icing major and local roads, grading, material hauling, dust control, road repairs and ditch cleaning.
- These trucks have exceeded their intended life expectancy.
- The two (2) obsolete vehicles will be removed from service and sold at auction for the estimated total proceeds of \$40,000.00.
- Truck chassis will be purchased from Wolverine Freightliner Inc. of Mount Clemens, Michigan
  and hook lift with service body attachments will be provided and installed by Truck and Trailer
  Specialties Inc. of Howell, Michigan.
- The new hook lift truck will have current technology with multiple body attachments that will be capable of performing various tasks.
- This purchase replaces existing vehicles and does not increase the size of the existing Department of Public Works motor pool fleet.

# **Purchasing**

 On February 10, 2020, the Cities of Rochester Hills, Auburn Hills, Huntington Woods, Troy, Farmington Hills, Livonia, Madison Heights and Charter Township of Bloomfield; members of the Michigan Inter-governmental Trade Network (MITN), cooperatively developed and issued a Request for Proposal (RFP) for the purchase of Single/Tandem Axle Dump Truck(s), parts, and related services, RFP-RH-20-023, the MITN website.



# **CITY COUNCIL AGENDA ITEM**

# Purchasing (continued)

Five (5) proposal responses were received as listed below:

Tri-County International Trucks Wolverine Freightliner Michigan CAT M&K Truck Center Truck & Trailer Specialties, Inc.

- Proposals were evaluated by the City of Rochester Hills Fleet personnel and purchasing staff, as well as the representatives from the participating cooperative MITN members which were the Cities of Troy, Auburn Hills, Huntington Woods, Farmington Hills, Livonia, Madison Heights and Charter Township of Bloomfield;
- The City of Troy was instrumental in developing the Request for Proposal specifications and was also an integral part of the evaluation team with the above listed cities.
- Wolverine Freightliner-Eastside, Inc. of Mount Clemens, Michigan and Truck and Trailer Specialties, Inc. of Howell, Michigan were selected and unanimously supported by the entities as providing the best value, quality product, timely delivery, exceptional services, an ongoing training program, and also offering the most comprehensive options to meet all of the entities needs.
- City Council authorized participation in the Cooperative Purchasing Programs on February 5, 2024 (Resolution number 2024-02-031-J-5)

## **Financial**

- On February 10, 2014 City Council authorized departments to utilize sites such as GovDeals.com to dispose of City owned surplus items (Resolution# 2014-02-017-J-4a). Therefore, note that the City will utilize and market the two (2) obsolete vehicles on *GovDeals.com* site for optimal trade-in value and transparency.
- Funds are budgeted and available in the Public Works Fleet Division Capital Fund under project numbers 2024C0095 for the 2024 Fiscal Year.
- Expenditures of \$340,065.00 will be charged to Account Number 661.571.565.981.

Qty.		Vendor	Unit Cost	Total Cost
1	Single Axle 108SD Truck Chassis	Wolverine Freightliner	\$107,165.00	<u>\$107,165.00</u>
Wolverine Freightliner Total				107,165.00
1	SwapLoader Hook Lift Hoist	Truck & Trailer Specialties	\$119,895.00	\$119,895.00
1	Monroe Snow Plow	Truck & Trailer Specialties	\$12,110.00	\$12,110.00
1	AR450 Dump Body	Truck & Trailer Specialties	\$35,335.00	\$35,335.00
1	Flatbed Stake Body with Lift	Truck & Trailer Specialties	\$29,315.00	\$29,315.00
1	Anti-Ice/Dust Control Tank	Truck & Trailer Specialties	\$36,245.00	\$36,245.00
Truck & Trailer Specialties Total				232,900.00
Grand Total				\$340,065.00



# **CITY COUNCIL AGENDA ITEM**

# **Recommendation**

City Management requests authorization to purchase one (1) Freightliner 108SD truck chassis from *Wolverine Freightliner-Eastside Inc. of Mt. Clemens, Michigan* as per the MITN Cooperative Contract #RFP-RH-20-023 for an estimated total cost of \$107,165.00; as detailed in the attached quotes; not to exceed budgetary limitations.

City Management further requests authorization to purchase and one (1) SwapLoader Hooklift hoist with body attachments including installation from *Truck and Trailer Specialties Inc. of Howell, Michigan* as per the MITN Cooperative Contract #RFP-RH-20-023 for an estimated total cost of \$232,900.00 as detailed in the attached quotes; not to exceed budgetary limitations.







Hook Lift Truck with Various Body Attachments (not actual vehicle, for example only)



107 S. Groesbeck • Mt. Clemens, MI 48043 • (586) 783-2444 FAX (586) 469-8054

6/12/2024

# City of Troy

RE: RH Co-Op Chassis Pricing

Attn: Mr. Brian Varney

The following is 2026 Model Year, Freightliner chassis pricing information per your request. Pricing and conditions are per the proposed Rochester Hills Co-op RFP-RH-20-023 agreement.

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Single Axle Swap Loader, 39,000 GVW

Chassis Model: 108SD Plus

Base Chassis Price:	\$84,993
2022 MY- 108SD Models:	900 Add
2023 MY- 108SD Models	1,000 Add
2023 pricing surcharge	6,700 Add
2024 Pricing & Surcharges	5,925 Add
2025 Actual Model & Surcharge	1,500 Add
2026 MY increase, not to exceed	2,500 Add
330 HP Cummins Upgrade	936 add
Driver Controlled Locking differential	530 add
Upgraded rear suspension, 26,000 lbs	1,087 add
Driver's Seat 3 Chamber upgrade	134 add
Fender extenders	50 add
Spare Tire & Wheel (front)- 315/80R22.5	. 595 add
Cooling System Warranty	. 315 add

TOTAL: (Not to exceed) \$ 107,165 each

Steven Sexton Municipal Sales Manager Wolverine Truck Group



#### May 29, 2024

City of Troy
4693 Rochester Road, Troy, MI 48085
Attn: Brian Varney, Fleet Superintendent

Attn: Brian Varney, Fleet Superintendent, ph: (248) 524-3390

HQO003233

# **Equipment Quotation**

The following pricing is based on City of Rochester Hills RFP-RH-20-023 contract awarded September 2020

#### Install SwapLoader Hooklift hoist model #SL-2418 including the following:

24,000 lbs. dumping capacity and a minimum lifting capacity of 24,000 lbs. with gross weight evenly distributed in and/or on container/body

Hooklift shall be able to handle skid-mounted containers/bodies with lengths of 10-13' Hooklift shall have a minimum of 57-degree dump angle, on a 41" truck frame height chassis Skid-mounted containers/bodies shall be supported with a pair of 6 1/4" minimum diameter outside flanged rollers at the rear of the hoist, and be adjustable to accommodate bodies/containers with outside subframe rail widths of 40-1/2" or 41-5/8"

#### **Hooklift operation:**

The lift shall adjust weight distribution of the container/body horizontally on the chassis while remaining in the body locks and without lifting the container/body rails off the hoist frame

Hooklift has a dual rear pivot section incorporated into the hoist design to allow for both a true dump truck operation, with the container/body secured to the hooklift via body locks during the entire dump cycle, and increased mounting leverage at the beginning of the container lift cycle

Hooklift jib to reach rearward to the A-frame lifting bar by means of double articulating hinge points (dual rear pivot) incorporated into the hoist mechanism

All lift sections shall lock into a common rigid full-length frame to support the body/container when in a dump mode. This must be accomplished by mechanical operated latches, which lock the mast It has a jib lockout valve to prevent jib operation while in dump mode

#### **Hydraulic cylinders:**

Dump/lift cylinders are double acting, twin cylinders, sized for the unit capacity with dual integral counterbalance valves

Dump/lift cylinders are 5.5" bore, 2.5" rod diameter and 39" stroke

Telescopic jib cylinder shall be double-acting, single cylinder, sized for unit capacity with a single counterbalance valve

Jib cylinder to be a 4" bore, 2" rod diameter and 24" stroke

Hydraulic operating pressure not to exceed 2800 PSI

#### Mainframe design:

The mainframe of the hoist is constructed of a "Z" rail configuration

The "Z" rail mainframe is a maximum of 8.5" in height and constructed of 1/4" thick A572 50 KSI steel Hoist "Z" frame rails to include 6 (or 3 per side) 11-3/4" x 2-3/4" x 1/2"

Nylatron wear pads for container/body support

Nylatron pads allow containers/bodies to slide back and forth horizontally on "Z" rail of hoist with ease **Jib hook design:** 

Vertical Jib is constructed of an 8" x 8" x 3/8" wall square tube of A500 46 KSI steel

Jib hook height is 54" from bottom of container/body subframe rails to the bottom of the A-frame lift bar Hooklift is to be able to pick up a container/body that rests 21" below the grade that the truck chassis is on (assumes a 41" truck frame height)



Jib hook is designed to secure container/body to hoist without the need for a hook latch mechanism to cover the hook opening

Jib hook to be permanently welded to jib

#### Pins

All hooklift pins are constructed of high-strength CFR steel bar

All pinned connections are greaseable to both lubricate the joint and flush out all contaminates

#### **Body locks:**

Hooklift has passive integral slide through body locks to secure the container/body latch plates to the hooklift in dump and transport positions; to accommodate different length bodies and to allow for weight distribution changes while remaining in body locks when in the transport or in dump cycle

#### **Hooklift warranty:**

The complete mechanism, including hydraulics, will be factory warranted free of defects in material and workmanship for a period of forty-eight (48) months on parts, and twelve (12) months on labor from the date of installation

## Origin of Manufacture:

Hooklift is engineered, manufactured, and assembled in the U.S.A.

## Install Central Hydraulic System including the following:

#### Rexroth A10VO100 Load-sense Piston Pump

Spicer drive line with companion flange for easy removal

12-volt auto shutdown block

Low-oil shutdown valve and override circuit

Rexroth 9m4-12 Load-sense Hydraulic Valve with pressure-compensated flow controls for the following:

EPC motor-spooled section for hoist up/down

EPC cylinder-spooled section for jib in/out

EPC section for scraper up/down with A and B port load-sense limit

EPC section for scraper swing with A and B port load-sense limit

EPC section for front plow with A and B port load-sense limit

EPC section for front plow angle with A and B port load-sense limit

EPC section for conveyor B port load-sense limit

EPC section for spinner B port load-sense limit

EPC asymmetrical section for pre-wet/anti-ice with A and B port load-sense limit

Install stainless steel hydraulic couplers for plow and spreader circuits

## Install Monroe Hydraulic Oil Reservoir/Valve Enclosure Combination unit including the following:

Type 201 stainless steel construction (mos. 00141843 & 15570)

Mounted behind cab above frame with ship and car channel mounting brackets

Tank-mounted Zinga-type return filter

2" suction line with a 100-mesh suction strainer

Ball valve shutoff on hydraulic tank for case drain and suction ports

18" Low oil sensor mounted inside the tank

40-gallon oil capacity, filled with 35-gallon AW32 hydraulic oil

Tank is full of AW32 hydraulic oil

Sight gauge/Temperature gauge

Tank label

Stainless steel step installed on the end of the tank

Stainless steel coupler plate for lighting attachments with 7-way RV for anti-ice, 7-way round for lighting

Stainless steel couplers for auger, return, anti-ice, pre-wet and spinner

#### Install Rexroth CS660 Electric Spreader Controller including the following:

Touch screen

Closed-loop operation for spreader, spinner and pre-wet operations

Programmable blast and pause

Data download and programming is with a thumb drive



Training is included

# Install RoadWatch with adapter & wire into the CS660 controller, mount sensor on driver's-side mirror bracket Install Rexroth CS160 controller including the following functions:

Button 1 is pause

Button 2 is hoist up/down & jib up/down

Button 3 is plow up/down & plow swing

Button 4 is scraper up/down & scraper swing

Button 5 is open

Button 6 is blast

#### Control console switches include the following:

Switch 1 is camera air

Switch 2 is low oil override/low oil shutdown

Switch 3 is low oil indicator light/body-up indicator light

Switch 4 is SPARE

Switch 5 is SPARE

Switch 6 is momentary on/off/momentary on for tarp

Additional standalone switch for air tailgate with safety cap (rightside of console)

# Install Monroe 34" Husting-type Front Hitch (mount at 38-39" pin height) including the following:

Tapered front bumper

Stirrup steps on each side with stainless steel pooched step in stirrup steps

Stainless steel open grating in area between bumper and grill

Front tow hooks fastened to frame rails with bumper cut-outs

### Install Monroe 10' Underbody Scraper (mo. MS4510) including the following:

1" thick x 20" high moldboard

1/2" thick hanger board with grease manifold brackets installed

2-1/2" O.D. hinge shaft

Two heavy-duty shock absorbers

Bolt-in trunnion caps for canisters; outer arm remains bolt-on style

Two 3-1/2" x 10" actuating cylinders; Socatri rods

Cushion valve

1" solid circle with 5" center pin

Center pin is piloted into hanger board

Two 4" x 12" reversing cylinders; Socatri rods

Three hinge anchor points

Hydraulic pipes

20.5" x 7" poly hold-down blocks

Mounting hardware

Parts-installation manual

Hose kit and j-50 type relief valve

¾" solid hanger plates

Grease line kit with manifolds

Install protective stainless steel guards on grease manifolds, both sides

Install two (2) Kennametal carbide curbguards, one each end of moldboard

Install Kennametal single-insert carbide cutting edges

Install Ray Stop moldboard protection kit

Paint Orange bands on ends of moldboard to match cab

#### Install Custom Lighting & Electrical including the following:

Utilize OEM switches for front flasher, rear flashers, scraper lights and spreader lights

Install plow lights with aluminum mounting brackets on the hood, mount at approximately 68" to the base of the plow lights

One (1) SoundOff Pinnacle (mo. EPL7PDAC) amber-only mini lightbar & weather-pack on cab roof riser



Install four (4) Code3 MR6 (mo. MR6MC-AG) amber/green LED flashers, surfaced-mounted:

Two (2) on chassis grille on separate switch

Two (2) side-facing on rear light boxes

Install two (2) Weldex LED work lights, one on each side for scraper

Install two (2) Weldex LED work lights rear-facing on top of stainless steel light bars

SoundOff LED marker lights

3-light cluster in the middle above the hinge

Install proximity switch for body-up light

Install backup alarm

Install Betts junction box at the rear for chassis lighting circuits and trailer wiring circuits

### Install Frame-mounted (3) hole stainless steel light boxes at chassis rear including the following:

6" oval LED STT lights, LED back-up lights & SoundOff nForce (mo. ENFSLSRV12) amber/green flashers

Mounted aft of rear tires/fender both sides of chassis

Attachment plug on driverside lightbox for Tarp, SS 3/8" coupler for air gate, 7-way round plug for lighting

# Install Stainless Steel Fender Kit for single axle chassis including the following:

All necessary mounting brackets

1 pair of full radius fenders

Plain mudflaps mounted at the bottom of the fenders

#### Install Rearview Camera with Wash System including the following:

Camera system tying into chassis wiper fluid reservoir

Chassis wiper controls for activating wash system, momentary in-cab switch for air puffer

Air puffer & washer fluid tubing

VCMS24B color camera mounted at the rear

CEC34L1 main cable for monitor

VOSHD6MNT LCD monitor mount

MSF5000 stainless steel camera box

VOM719WP 7" LCD color monitor

#### Install Rear Hitch Assembly including the following:

¾" rear hitch mounting plate

PH20 Pintle hook, multi-drill pattern – 20-ton rated height TBD to cradle

Rear tow hooks to outside of frames

D-rings for safety chains

7-way RV plug

Install Electric Brake Controller

Install Minimizer Floor Mats for Freightliner 108 SD (mo. FKFRTL2B-MIN / 10002265)

Paint All body underfloor, frame attachments, hoist, front hitch and rear bumper assembly Black

Above chassis-installed, non-stainless painted pricing: \$119,895.00 ea.

#### HQ0003234

#### Option Install Monroe 10' Full-Trip Moldboard Reversible Plow (mo. MP41R10-CT) including the following:

10' long x 41" high moldboard

3/16" roll-formed moldboard

Six, ½" x 4" tapered one-piece flame-cut ribs

2" x 3" x 3/8" top moldboard angle

4" x 4" x 34" bottom moldboard angle

Horizontal moldboard brace angles

Dual compression-trip spring assemblies

4" x 4" x 3/8" cross-tube support; full-width with 6-point attachment

3-1/2" x 3-1/2" x ½" semi-circle; additional angle braces to front push tube



Two, 4" x 10" double-acting power-reverse cylinders with 2" nitrided rods

Cushion valve

Moldboard and pushframe 100% continuously welded

Powder coated with the moldboard orange and a black pushframe

3/4" x 8" x 10' one-piece top-punch cutting edge

12" x 10' rubber deflector with steel retainer bar, installed

Husting 34" plow-portion hitch installed

Pair Monroe 42" cable markers

Two (2) Monroe wraparound curbguards with carbide wear strip installed one on each side

Option add: \$12,110.00 ea.

#### HQ0003235

#### Base Attachment #1

## Install Skid-mounted Crysteel Select 11' AR450 Steel Dump Body including the following:

132" length, 84" inside width, 58" front height, 32" side height, 38" rear height (7.6-9.0 cu yd capacity)

Single panel, pressed-in horizontal side braces

Body construction throughout is AR450 steel

3/16" sides and front including tailgate and 1/4" floor with 8" radius

Rear pillars constructed of 7-gauge A1011 steel

Construction of the sides shall include a boxed top rail

14" wide rear pillar

Rear tailgate will be 6-panel design

Tailgate finger latches and pivot plate are mild steel construction

8" floor-to-sides radius

9" cabshield constructed of 10-gauge A1011 steel

Install Cougar 3200 box vibrator

Install side-mounted ladder, fold-down on driver-side rear with interior dump step

Install two (2) stainless steel paddle-style shovel holders on sides of dump

Install branch deflector/tarp-arm guard on passenger side of cabshield

Install banjo-style chain holders on tailgate

Single-acting "pancake-style" air cylinder for air tailgate with stainless steel coupler mounted at rear

## Install Custom Lighting including the following:

3-hole tapered stainless steel light boxes mounted at rear pillar posts

Two (2) SoundOff LED green flashers mounted in top holes

Two (2) SoundOff LED stop/turn/taillights mounted in the middle holes

Two (2) SoundOff LED amber flashers mounted in the bottom holes

LED body marker lights

# Install Roll-Rite Electric 6300 Tarp including the following:

Plug in at the back driver side for clearance when dumping Mesh-type tarp material

Tarp housing mounted on top of cabshield

Tarp arms mounted center of the dump with elbows to clear wing when rolling off

#### Install SwapLoader skid assembly for model SL-2418 including the following:

Front A-frame and longsills for body mounting, A-frame lift bar set at 54"

Skid with rear heavy-duty 6" roller drums, painted Black, mild steel construction

# Paint Dump Body Orange to match cab, underbody and attaching hardware painted Black

Supply Point Scale with Drop Test Indicator & Salt Calibrator Kit

Base Attachment #1 installed pricing: \$35,335.00 ea.



#### HQQ004331

#### **Base Attachment #2**

#### Install Skid-mounted 11' Flatbed Stake Rack Body with Liftgate including the following:

Flatbed deck is 11' long, low-profile

96" wide deck (101" OD) includes a heavy-duty 1/4" treadplate deck

Stake pockets with a 2-1/2" x 3/8" tie rail

54" high front bulkhead with knee braces

Windows built into bulkhead with expanded metal screens

Body is painted Gloss Black

48" Stake Rack Kit including:

Sectional sides for 11' flat, slide-locking hardware

Bulkhead and rear post, powder-coated Black

#### Install Anthony AR RailTrac Liftgate including the following:

AR-2500-94 w/ 90" x 39" + 12" one-piece aluminum platform with fixed ramp

2,500 lb. lift capacity

Level-ride platform with roller chain drive

Marine-duty potted toggle switch

Pressure-compensated flow valve

Spring-assisted platform open/close

Hydraulic and electrical components housed with pump box

Light kit with two lights per side

All necessary wiring and plugs for chassis connection

#### Install SwapLoader skid assembly for model SL-2418 including the following:

Front A-frame and longsills for body mounting, A-frame lift bar set at 54"

Skid with rear heavy-duty roller drums, mild steel construction

Rollers will be mounted at the rear

Base Attachment #2 installed pricing: \$29,315.00 ea.

#### HQQ003236

# **Base Attachment #3**

## Install Skid-mounted Monroe 1,235-gallon Anti-Ice/Dust Control Tank Assembly including the following:

Polyethylene leg style tank with tank hold-down hardware

Tank includes center wall baffle system (no baffle balls included in price)

Three-lane, closed-loop, non-tiered plumbing kit

190 GPM centrifugal pump with hydraulic motor (Needs 12 GPM for proper operation)

Raven-type flow meter

Three-lane electric boom valves

Three-lane stainless steel wet booms with streamer nozzles; telescoping mount with winch

Install three (3) switches mounted with Rexroth 660 controller for left, center and right boom control

2nd spray boom is 2" for dust control with separate boom valve for dust control

Includes 2" full-port electric ball valve, 2" hose, clamps, camlock coupler and 2" stainless spray boom

Fifteen (15) 15 GPM fan nozzles and (2) arc-style spray pattern in boom ends rated at 30 GPM each

Plumb hydraulic circuit from rear to left front corner of skid for hookup and disconnect just behind cab

Wire boom valve circuit, flow meter circuit and lighting circuit from rear of skid to left front corner of the

skid for hook up just behind the cab

Ball valve shutoff on the supply port

Bulk fill kit, 3"



Install Betts Dri-seal junction box for wire termination and pigtail outlets

Install Stainless Steel Light Boxes mounted at the rear of the body including the following:

Install two (2) stainless steel 2-hole light boxes mounted at rear including:

Two (2) SoundOff nForce (mo. ENFSLSRV12) green/amber LED flashers & two (2) STT lights LED marker lights

Lights wired to a junction box with wiring extended to the left front corner for hook up with a plug

Install SwapLoader skid assembly for model SL-2418 including the following:

Front A-frame and longsills for body mounting, A-frame lift bar set at 54" Skid with rear heavy-duty roller drums, hot-dip galvanized steel construction

Base Attachment #3 installed pricing: \$36,245.00 ea.