



CITY of NOVI CITY COUNCIL

Agenda Item 5
February 26, 2018

SUBJECT: Approval to purchase a 2019 7400 model single axle chassis from International through the current State of Michigan MiDeal contract; and the up-fit of the RDS box and wing from Truck and Trailer Specialties through the City of Rochester Hills RFP contract, in the amount of \$ 215,542.00.

SUBMITTING DEPARTMENT: Department of Public Services, Fleet Asset Division
Department of Public Services, Field Operations Division

CITY MANAGER APPROVAL:  PA

EXPENDITURE REQUIRED	\$ 215,542.00
AMOUNT BUDGETED	\$ 250,000.00
LINE ITEM NUMBER	101-442.20-984.013 (FLD010 Dump Truck)

BACKGROUND INFORMATION:

This fiscal year includes funding for the purchase of one single axle radius dump truck with a front plow, underbody scraper and wing blade. In an effort to standardize the City's plow fleet, this truck is equipped with computer ground speed controls that mirror the seven previously procured trucks. This technology allows for conservative salt use, operator convenience, and simplified data tracking. This new equipment replaces a 25-year-old truck (#686) that has no advanced technology to assist with winter maintenance operations. The specifications for this equipment enhances service to the community by allowing operators to pre-wet salt, which reduces activation time and the amount of salt that scatters off the road by 40%. In addition, this truck is equipped with an anti-icing spray boom for pre-storm application of liquids, a stainless steel radius dump-box to resist corrosion, a 7-foot wing plow (estimated to clear wide residential streets up to 50% quicker), and a computer system that automatically adjusts salt and liquid application rates based on ground speed and pavement and air temperatures. As this dump truck will be uniform with the heavy-duty fleet, staff will not require additional training, which provides operational benefits.

RECOMMENDED ACTION: Approval to purchase a 2019 7400 model single axle chassis from International through the current State of Michigan MiDeal contract; and the up-fit of the RDS box and wing from Truck & Trailer Specialties through the City of Rochester Hills RFP contract, in the amount of \$ 215,542.00.



CITY OF NOVI
Support Doc
(Vehicle & Other Equipment)

Current Equipment



Requested Equipment



Prepared For:

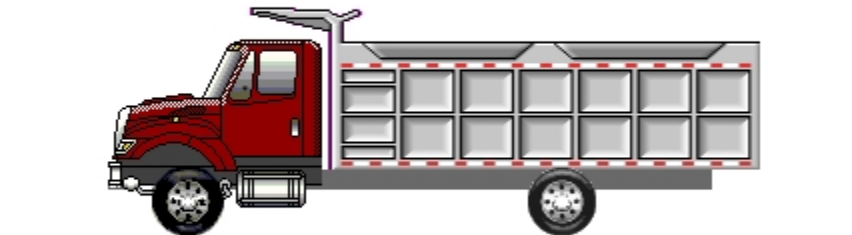
City of Novi
Mike Rhatigan
45175 W 10 Mile Rd.
Novi, MI 48375-3024
(248)735 - 5656
Reference ID: MiDEAL 7400 SA

Presented By:

TRI COUNTY INTL TRUCKS
Mark J Caracciolo
5701 WYOMING St.
DEARBORN MI 48126 -
(313)584-7090

State of Michigan MiDEAL Specification #3958 0160D, Option "B". Updated to 2018MY Price Level; includes all Customer Requested Option Content. Afforded Pricing Includes All Current Navistar-Mandated Transportation and Material Surcharges in effect as of the date of this proposal. Additional Future Surcharges as issued by Navistar may be applicable. Note that pricing also includes 1% MiDEAL fee paid to the State of MI under MiDEAL purchasing program requirements. NOTE: Corrected to 120" CA per M Rhatigan.

Payment for the chassis is due upon delivery of the chassis to the end-user or Body Company; whichever occurs first. If payment is not made in a timely manner additional floorplan (interest) costs may be charged and billed to end-user customer. Please make all purchase orders and checks payable to Tri-County International Trucks, Inc. (address as listed on this proposal).



Model Profile
2019 7400 SBA 4X2 (SA625)

APPLICATION: Construction Dump

MISSION: Requested GVWR: 52000. Calc. GVWR: 41000
Calc. Start / Grade Ability: 31.54% / 1.99% @ 55 MPH
Calc. Geared Speed: 68.6 MPH

DIMENSION: Wheelbase: 187.00, CA: 119.90, Axle to Frame: 75.00

ENGINE, DIESEL: {Cummins L9 330} EPA 2017, 330HP @ 2000 RPM, 1000 lb-ft Torque @ 1400 RPM, 2200 RPM Governed Speed, 330 Peak HP (Max)

TRANSMISSION, AUTOMATIC: {Allison 3500 RDS} 5th Generation Controls, Wide Ratio, 6-Speed with Double Overdrive, with PTO Provision, Less Retarder, Includes Oil Level Sensor, with 80,000-lb GVW and GCW Max, On/Off Highway

CLUTCH: Omit Item (Clutch & Control)

AXLE, FRONT NON-DRIVING: {Meritor MFS-18-133A} Wide Track, I-Beam Type, 18,000-lb Capacity

AXLE, REAR, SINGLE: {Meritor RS-26-185} Single Reduction, 26,000-lb Capacity, Driver Controlled Locking Differential, R Wheel Ends Gear Ratio: 6.14

CAB: Conventional

TIRE, FRONT: (2) 315/80R22.5 Load Range L UNISTEEL G291 (GOODYEAR), 491 rev/mile, 68 MPH, All-Position

TIRE, REAR: (4) 12R22.5 Load Range H G622 RSD (GOODYEAR), 482 rev/mile, 75 MPH, Drive

SUSPENSION, RR, SPRING, SINGLE: Vari-Rate; 31,000-lb Capacity, Includes 4500-lb Capacity Multileaf Auxiliary

FRAME REINFORCEMENT: Outer "C" Channel, Heat Treated Alloy Steel (120,000 PSI Yield); 10.813" x 3.892" x 0.312"; (274.6mm x 98.9mm x 8.0mm); 480.0" (12192mm) Maximum OAL

PAINT:

Cab schematic 100GN
Location 1: 2303, Red (Std)
Chassis schematic N/A

Code	Description	F/R Wt (lbs)	Tot Wt (lbs)
SA62500	Base Chassis, Model 7400 SBA 4X2 with 187.00 Wheelbase, 119.90 CA, and 75.00 Axle to Frame.	7125/3517	10642
1570	TOW HOOK, FRONT (2) Frame Mounted	8/0	8
1572	TOW HOOK, REAR (2)	0/10	10
1CBU	FRAME RAILS Heat Treated Alloy Steel (120,000 PSI Yield); 10.125" x 3.580" x 0.312" (257.2mm x 90.9mm x 8.0mm); 480.0" (12192) Maximum OAL	47/257	304
1GBP	FRAME REINFORCEMENT Outer "C" Channel, Heat Treated Alloy Steel (120,000 PSI Yield); 10.813" x 3.892" x 0.312"; (274.6mm x 98.9mm x 8.0mm); 480.0" (12192mm) Maximum OAL	386/570	956
1LLK	BUMPER, FRONT Omit Item	-84/14	-70
1WDS	FRAME EXTENSION, FRONT Integral; 20" In Front of Grille	137/-32	105
1WGR	WHEELBASE RANGE 138" (350cm) Through and Including 187" (475cm)	0/0	0
2ARZ	AXLE, FRONT NON-DRIVING {Meritor MFS-18-133A} Wide Track, I-Beam Type, 18,000-lb Capacity	186/0	186
	<u>Notes</u> : The following features should be considered when calculating Front GAWR: Front Axles; Front Suspension; Brake System; Brakes, Front Air Cam; Wheels; Tires.		
3ADG	SUSPENSION, FRONT, SPRING Parabolic, Taper Leaf; 18,000-lb Capacity; with Shock Absorbers	122/0	122
	<u>Includes</u> : SPRING PINS Rubber Bushings, Maintenance-Free		
	<u>Notes</u> : The following features should be considered when calculating Front GAWR: Front Axles; Front Suspension; Brake System; Brakes, Front Air Cam; Wheels; Tires.		
4091	BRAKE SYSTEM, AIR Dual System for Straight Truck Applications	0/0	0
	<u>Includes</u> : BRAKE LINES Color and Size Coded Nylon : DRAIN VALVE Twist-Type : GAUGE, AIR PRESSURE (2) Air 1 and Air 2 Gauges; Located in Instrument Cluster : PARKING BRAKE CONTROL Yellow Knob, Located on Instrument Panel : PARKING BRAKE VALVE For Truck : QUICK RELEASE VALVE On Rear Axle for Spring Brake Release: 1 for 4x2, 2 for 6x4 : SLACK ADJUSTERS, FRONT Automatic (with Air Cam Brakes) : SLACK ADJUSTERS, REAR Automatic (with Air Cam Brakes) : SPRING BRAKE MODULATOR VALVE R-7 for 4x2, SR-7 with relay valve for 6x4/8x6		
	<u>Notes</u> : Rear Axle is Limited to 23,000-lb GAWR with Code 04091 BRAKE SYSTEM, AIR and Standard Rear Air Cam Brakes Regardless of Axle/Suspension Ordered		
4193	BRAKES, FRONT, AIR CAM 16.5" x 6", Includes 24 Sqn Long Stroke Brake Chambers	0/0	0
	<u>Notes</u> : The following features should be considered when calculating Front GAWR: Front Axles; Front Suspension; Brake System; Brakes, Front Air Cam; Wheels; Tires.		

<u>Code</u>	<u>Description</u>	<u>F/R Wt</u> (lbs)	<u>Tot Wt</u> (lbs)
4722	DRAIN VALVE {Bendix DV-2} Automatic, with Heater, for Air Tank <u>Includes</u> : DRAIN VALVE Mounted in Wet Tank	0/0	0
4AZA	AIR BRAKE ABS {Bendix AntiLock Brake System} Full Vehicle Wheel Control System (4-Channel)	0/0	0
4EBD	AIR DRYER {Wabco System Saver 1200} with Heater <u>Includes</u> : AIR DRYER LOCATION Inside Left Rail, Back of Cab	12/6	18
4EVH	BRAKE CHAMBERS, REAR AXLE {MGM TR3030LP3TSHD} 30/30 Spring Brake <u>Includes</u> : BRAKE CHAMBERS, SPRING (2) Rear Parking; WITH TRUCK BRAKES: All 4x2, 4x4; WITH TRACTOR BRAKES: All 4x2, 4x4; 6x4 & 6x6 with Rear Tandem Axles Less Than 46,000-lb. or GVWR Less Than 54,000-lb.	0/0	0
4EXV	BRAKE CHAMBERS, FRONT AXLE {Bendix} 24 SqIn	0/0	0
4LAA	SLACK ADJUSTERS, FRONT {Haldex} Automatic	6/0	6
4LGA	SLACK ADJUSTERS, REAR {Haldex} Automatic	0/0	0
4NDH	BRAKES, REAR, AIR CAM S-Cam; 16.5" x 8.625" Includes 30/30 Sq.In. Long Stroke Brake Chambers and Spring Actuated Parking Brake <u>Notes</u> : The following features should be considered when calculating Rear GAWR: Rear Axles; Rear Suspension; Brake System; Brakes, Rear Air Cam; Brake Shoes, Rear; Special Rating, GAWR; Wheels; Tires.	0/10	10
4SPA	AIR COMPRESSOR {Cummins} 18.7 CFM Capacity	0/0	0
4VHZ	AIR TANK LOCATION (2) Mounted Under Cab, Outside Left Rail, on Step Bracket, with Ground Clearance	12/4	16
5708	STEERING COLUMN Tilting	0/0	0
5CAL	STEERING WHEEL 2-Spoke, 18" Dia., Black	0/0	0
5PTB	STEERING GEAR (2) {Sheppard M100/M80} Dual Power	124/-5	119
6DAX	DRIVESHAFT {Dana Spicer} SPL170XL in lieu of 1710 Series	0/2	2
7BEV	AFTERTREATMENT COVER Steel, Black	0/0	0
7BLG	EXHAUST SYSTEM Single Horizontal Aftertreatment Device, Frame Mounted Right Side Under Cab; Includes Single Vertical Tail Pipe, Frame Mounted Right Side Back of Cab, for Improved Ground Clearance	0/0	0
7WAZ	TAIL PIPE (1) Turnback Type, Non-Bright, for Single Exhaust	0/0	0
7WDM	EXHAUST HEIGHT 10'	0/0	0
7WDN	MUFFLER/TAIL PIPE GUARD (1) Non-Bright Aluminum	0/0	0
7WZY	SWITCH, FOR EXHAUST 2 Position, Lighted & Latching, On/Off Type, Mounted in IP, Inhibits Diesel Particulate Filter Regeneration as Long as Switch is in On Position	2/0	2
8000	ELECTRICAL SYSTEM 12-Volt, Standard Equipment <u>Includes</u>	0/0	0

<u>Code</u>	<u>Description</u>	<u>F/R Wt</u> (lbs)	<u>Tot Wt</u> (lbs)
	: DATA LINK CONNECTOR For Vehicle Programming and Diagnostics In Cab : HAZARD SWITCH Push On/Push Off, Located on Top of Steering Column Cover : HEADLIGHT DIMMER SWITCH Integral with Turn Signal Lever : HEADLIGHTS (2) Halogen, Round, with Chrome Plated Bezels : JUMP START STUD Located on Positive Terminal of Outermost Battery : PARKING LIGHT Integral with Front Turn Signal and Rear Tail Light : STARTER SWITCH Electric, Key Operated : STOP, TURN, TAIL & B/U LIGHTS Dual, Rear, Combination with Reflector : TURN SIGNAL SWITCH Self-Cancelling for Trucks, Manual Cancelling for Tractors, with Lane Change Feature : WINDSHIELD WIPER SWITCH 2-Speed with Wash and Intermittent Feature (5 Pre-Set Delays), Integral with Turn Signal Lever : WINDSHIELD WIPERS Single Motor, Electric, Cowl Mounted : WIRING, CHASSIS Color Coded and Continuously Numbered		
8518	CIGAR LIGHTER Includes Ash Cup	1/0	1
8695	SNOW SHIELD (2) Chrome; for Dual Air Horns	2/0	2
8718	POWER SOURCE Cigar Type Receptacle without Plug and Cord	1/0	1
8GXD	ALTERNATOR {Leece-Neville AV1160P2013} Brush Type; 12 Volt 160 Amp. Capacity, Pad Mount, with Remote Sense	0/0	0
8HAB	BODY BUILDER WIRING Back of Standard or Sleeper Cab at Left Frame or Under Extended or Crew Cab at Left Frame; Includes Sealed Connectors for Tail/Amber Turn/Marker/ Backup/Accessory Power/Ground and Sealed Connector for Stop/ Turn	2/0	2
8HAH	ELECTRIC TRAILER BRAKE/LIGHTS Accommodation Package to Rear of Frame; for Combined Trailer Stop, Tail, Turn, Marker Light Circuits; Includes Electric Trailer Brake Accommodation Package with Cab Connections for Mounting Customer Installed Electric Brake Unit, Less Trailer Socket	0/2	2
8MUE	BATTERY SYSTEM {International} Maintenance-Free, (4) 12-Volt 2600CCA Total	86/23	109
8RGA	2-WAY RADIO Wiring Effects; Wiring with 20 Amp Fuse Protection, Includes Ignition Wire with 5 Amp Fuse, Wire Ends Heat Shrink and Routed to Center of Header Console in Cab	1/0	1
8RMH	BATTERY DISCONNECT SWITCH {Cole-Hersee 75920-06} 300 Amp; Battery Box Mounted, Disconnects Charging Circuits, Locks with Padlock	2/0	2
8THJ	AUXILIARY HARNESS 3.0' for Auxiliary Front Head Lights and Turn Signals for Front Plow Applications	2/0	2
8VAY	HORN, ELECTRIC Disc Style	0/0	0
8VUJ	BATTERY BOX Steel with Plastic Cover, 18" Wide, 2, 3, or 4 Battery Capacity, Mounted Right Side Back of Cab	-27/7	-20
8VZR	SWITCH, BODY CIRCUITS, MID for Bodybuilder, 6 Momentary Switches in Instrument Panel; One Power Module with 6 Channels, 20 Amp Max. Per Channel, 80 Amp Max Output, Switches Control Power Module Through Multiplex Wiring, Mounted in Cab Behind Driver Seat	1/0	1
8WBW	JUMP START STUD Remote Mounted	2/0	2
	<u>Includes</u> : JUMP START STUD Mounted to Battery Box		
8WDG	BACK-UP ALARM {Preco 1059} Electronic; Solid State, Dual Function, 112 dBA	0/1	1

<u>Code</u>	<u>Description</u>	<u>F/R Wt</u> (lbs)	<u>Tot Wt</u> (lbs)
8WGL	WINDSHIELD WIPER SPD CONTROL Force Wipers to Slowest Intermittent Speed When Park Brake Set and Wipers Left on for a Predetermined Time	0/0	0
8WMA	SWITCH, TOGGLE, FOR WORK LIGHT Lighted; on Instrument Panel and Wiring Effects for Customer Furnished Back of Cab Light	2/1	3
8WML	HEADLIGHTS Long Life Halogen; for Two Light System	0/0	0
8WPH	CLEARANCE/MARKER LIGHTS (5) {Truck Lite} Amber LED Lights, Flush Mounted on Cab or Sunshade	0/0	0
8WPZ	TEST EXTERIOR LIGHTS Pre-Trip Inspection will Cycle all Exterior Lamps Except Back-up Lights	0/0	0
8WRB	HEADLIGHTS ON W/WIPERS Headlights Will Automatically Turn on if Windshield Wipers are turned on	0/0	0
8WTK	STARTING MOTOR {Delco Remy 38MT Type 300} 12 Volt; less Thermal Over-Crank Protection	0/0	0
8WVP	HORN, AIR (2) Single Tone, Rectangular; Chrome. Roof Mounted	0/0	0
8WWJ	INDICATOR, LOW COOLANT LEVEL with Audible Alarm	0/0	0
8WXD	ALARM, PARKING BRAKE Electric Horn Sounds in Repetitive Manner When Vehicle Park Brake is "NOT" Set, with Ignition "OFF" and any Door Opened	0/0	0
8XAH	CIRCUIT BREAKERS Manual-Reset (Main Panel) SAE Type III with Trip Indicators, Replaces All Fuses	0/0	0
8XJE	TURN SIGNALS, FRONT {Sound Off} Dual Face, LED, Amber/Amber, Mounted on Top of Fender, Used with Standard Flush Mounted Front Turn Signal, Side Marker Lamps, Parking Lights and Reflectors	0/0	0
9585	FENDER EXTENSIONS Rubber	6/0	6
9HAN	INSULATION, UNDER HOOD for Sound Abatement	10/0	10
9HBM	GRILLE Stationary, Chrome	0/0	0
9HBN	INSULATION, SPLASH PANELS for Sound Abatement	2/0	2
9WBC	FRONT END Tilting, Fiberglass, with Three Piece Construction; for WorkStar/HV	0/0	0
10060	PAINT SCHEMATIC, PT-1 Single Color, Design 100	0/0	0
	<u>Includes</u> : PAINT SCHEMATIC ID LETTERS "GN"		
10761	PAINT TYPE Base Coat/Clear Coat, 1-2 Tone	0/0	0
10WJH	PROMOTIONAL PACKAGE Government and Municipal Silver Package; Two Year Limited Subscription of On-Command Service Information (Formerly Fleet ISIS), and On-Command Parts Information (Formerly Fleet Parts Catalog), Requires Specific Feature Combinations	0/0	0
11001	CLUTCH Omit Item (Clutch & Control)	-64/-11	-75
12703	ANTI-FREEZE Red, Extended Life Coolant; To -40 Degrees F/ -40 Degrees C, Freeze Protection	0/0	0
12851	PTO EFFECTS, ENGINE FRONT Less PTO Unit, Includes Adapter Plate on Engine Front Mounted	10/0	10
12926	RADIATOR HOSES Silicone; Molded	0/0	0

<u>Code</u>	<u>Description</u>	<u>F/R Wt</u> (lbs)	<u>Tot Wt</u> (lbs)
12EHV	ENGINE, DIESEL {Cummins L9 330} EPA 2017, 330HP @ 2000 RPM, 1000 lb-ft Torque @ 1400 RPM, 2200 RPM Governed Speed, 330 Peak HP (Max)	0/0	0
12THT	FAN DRIVE {Horton Drivemaster} Direct Drive Type, Two Speed with Residual Torque Device for Disengaged Fan Speed <u>Includes</u> : FAN Nylon	-36/2	-34
12UWZ	RADIATOR Cross Flow, Series System; 1228 SqIn Aluminum Radiator Core with Internal Water to Oil Transmission Cooler and 1167 In Charge Air Cooler <u>Includes</u> : DEAERATION SYSTEM with Surge Tank : HOSE CLAMPS, RADIATOR HOSES Gates Shrink Band Type; Thermoplastic Coolant Hose Clamps : RADIATOR HOSES Premium, Rubber	40/-14	26
12VAL	AIR CLEANER Dual Element, with Integral Snow Valve and In-Cab Control <u>Includes</u> : GAUGE, AIR CLEANER RESTRICTION Air Cleaner Mounted	6/0	6
12VGN	FEDERAL EMISSIONS {Cummins L9} EPA, OBD and GHG Certified for Calendar Year 2018	0/0	0
12VXT	THROTTLE, HAND CONTROL Engine Speed Control; Electronic, Stationary, Variable Speed; Mounted on Steering Wheel	0/0	0
12VYL	ACCESSORY WIRING, SPECIAL for Road Speed Wire Coiled Under Instrument Panel for Customer Use	0/0	0
12VYP	ENGINE CONTROL, REMOTE MOUNTED - No Provision Furnished for Remote Mounted Engine Control	0/0	0
12WZE	EMISSION COMPLIANCE Federal, Does Not Comply with California Clean Air Idle Regulations	0/0	0
13AVL	TRANSMISSION, AUTOMATIC {Allison 3500 RDS} 5th Generation Controls, Wide Ratio, 6-Speed with Double Overdrive, with PTO Provision, Less Retarder, Includes Oil Level Sensor, with 80,000-lb GVW and GCW Max, On/Off Highway	200/49	249
13WLP	TRANSMISSION OIL Synthetic; 29 thru 42 Pints	0/0	0
13WUC	ALLISON SPARE INPUT/OUTPUT for Rugged Duty Series (RDS); General Purpose Trucks, Construction	0/0	0
13WVN	TRANSMISSION SHIFT CONTROL {Allison} Bump Shifter Type; for Allison 3000 & 4000 Transmission	0/0	0
13WYH	TRANSMISSION TCM LOCATION Located Inside Cab	0/0	0
13WYU	SHIFT CONTROL PARAMETERS Allison 3000 or 4000 Series Transmissions, 5th Generation Controls, Performance Programming	0/0	0
13XAL	PTO LOCATION Left Side of Transmission	0/0	0
14ASA	AXLE, REAR, SINGLE {Meritor RS-26-185} Single Reduction, 26,000-lb Capacity, Driver Controlled Locking Differential, R Wheel Ends . Gear Ratio: 6.14 <u>Includes</u> : REAR AXLE DRAIN PLUG (1) Magnetic, For Single Rear Axle <u>Notes</u>	0/320	320

<u>Code</u>	<u>Description</u>	<u>F/R Wt</u> (lbs)	<u>Tot Wt</u> (lbs)
	: Axle Lead Time is 60 Days : The following features should be considered when calculating Rear GAWR: Rear Axles; Rear Suspension; Brake System; Brakes, Rear Air Cam; Brake Shoes, Rear; Special Rating, GAWR; Wheels; Tires. : When Specifying Axle Ratio, Check Performance Guidelines and TCAPE for Startability and Performance		
14SAL	SUSPENSION, RR, SPRING, SINGLE Vari-Rate; 31,000-lb Capacity, Includes 4500-lb Capacity Multileaf Auxiliary	0/88	88
	<u>Notes</u> : The following features should be considered when calculating Rear GAWR: Rear Axles; Rear Suspension; Brake System; Brakes, Rear Air Cam; Brake Shoes, Rear; Special Rating, GAWR; Wheels; Tires.		
15LMR	FUEL/WATER SEPARATOR {Racor 400 Series,} with Primer Pump, Includes Water-in-Fuel Sensor	0/0	0
15LMU	LOCATION FUEL/WATER SEPARATOR Mounted Outside Left Rail, 8" Back of Cab	0/0	0
15SSC	FUEL TANK Temporary, Top Draw, Non-Polished Aluminum, D-Style, 16" Tank Depth, 50 US Gal (189L), with Quick Connect Outlet, Mounted Left Side, Back of Cab	12/-1	11
15WDG	DEF TANK 7 U.S. Gal. 26.5L Capacity, Frame Mounted Outside Left Rail, Under Cab	0/0	0
16030	CAB Conventional	0/0	0
	<u>Includes</u> : ARM REST (2) Molded Plastic; One Each Door : COAT HOOK, CAB Located on Rear Wall, Centered Above Rear Window : CUP HOLDERS Two Cup Holders, Located in Lower Center of Instrument Panel : DOME LIGHT, CAB Rectangular, Door Activated and Push On-Off at Light Lens, Timed Theater Dimming, Integral to Console, Center Mounted : GLASS, ALL WINDOWS Tinted : GRAB HANDLE, CAB INTERIOR (1) "A" Pillar Mounted, Passenger Side : GRAB HANDLE, CAB INTERIOR (2) Front of "B" Pillar Mounted, One Each Side : INTERIOR SHEET METAL Upper Door (Above Window Ledge) Painted Exterior Color : STEP (4) Two Steps Per Door		
16975	HEATER HOSES Silicone	0/0	0
16HBA	GAUGE CLUSTER English with English Electronic Speedometer	0/0	0
	<u>Includes</u> : GAUGE CLUSTER (6) Engine Oil Pressure (Electronic), Water Temperature (Electronic), Fuel (Electronic), Tachometer (Electronic), Voltmeter, Washer Fluid Level : ODOMETER DISPLAY, Miles, Trip Miles, Engine Hours, Trip Hours, Fault Code Readout : WARNING SYSTEM Low Fuel, Low Oil Pressure, High Engine Coolant Temp, and Low Battery Voltage (Visual and Audible)		
16HGH	GAUGE, OIL TEMP, AUTO TRANS for Allison Transmission	1/0	1
16HHE	GAUGE, AIR CLEANER RESTRICTION {Filter-Minder} with Black Bezel Mounted in Instrument Panel	2/0	2

<u>Code</u>	<u>Description</u>	<u>F/R Wt</u> (lbs)	<u>Tot Wt</u> (lbs)
16HKT	IP CLUSTER DISPLAY On Board Diagnostics Display of Fault Codes in Gauge Cluster	0/0	0
16HLJ	GAUGE, DEF FLUID LEVEL	0/0	0
16JNV	SEAT, DRIVER {National 2000} Air Suspension, High Back with Integral Headrest, Cloth, Isolator, 1 Chamber Lumbar, 2 Position Front Cushion Adjust, -3 to +14 Degree Back Angle Adjust <u>Includes</u> : SEAT BELT 3-Point, Lap and Shoulder Belt Type	28/11	39
16SEE	GRAB HANDLE Chrome; Towel Bar Type with Anti-Slip Rubber Inserts; for Cab Entry Mounted Left Side Only at "B" Pillar	3/0	3
16SMM	SEAT, PASSENGER {National} Non Suspension, High Back, Fixed Back, Integral Headrest, Cloth	16/7	23
16SNB	MIRRORS (2) {Lang Mekra} Rectangular, Thermostatically Controlled Heated Heads, Black Heads, Brackets and Arms, Breakaway Type, 7.55" x 14.1" Integral Convex Both Sides, 102" Inside Spacing	-3/0	-3
16WBY	ARM REST, RIGHT, DRIVER SEAT	3/0	3
16WCT	AIR CONDITIONER {Blend-Air} with Integral Heater & Defroster <u>Includes</u> : HEATER HOSES Premium : HOSE CLAMPS, HEATER HOSE Mubea Constant Tension Clamps : REFRIGERANT Hydrofluorocarbon HFC-134A	42/5	47
16WHJ	HOSE CLAMPS, HEATER HOSE {Breeze} Belleville Washer Type	0/0	0
16WJT	INSTRUMENT PANEL Center Section, Ergonomic Panel	0/0	0
16WJU	WINDOW, POWER (2) and Power Door Locks, Left and Right Doors, Includes Express Down Feature	5/0	5
16WKY	HVAC FRESH AIR FILTER	0/0	0
16WLS	FRESH AIR FILTER Attached to Air Intake Cover on Cowl Tray in Front of Windshield Under Hood	0/0	0
16WRZ	CAB INTERIOR TRIM Premium <u>Includes</u> : CAB INTERIOR TRIM PANELS Cloth Covered Molded Plastic, Full Height; All Exposed Interior Sheet Metal is Covered Except for the Following: with a Two-Man Passenger Seat or with a Full Bench Seat the Back Panel is Completely Void of Covering : CAB SOUND INSULATION Includes Dash and Engine Cover Insulators : CAB, INTERIOR TRIM, CLOSEOUT Lower Dash Closeout Panel; Molded Plastic; Under Instrument Panel Driver Side : CONSOLE, OVERHEAD Molded Plastic; With Dual Storage Pockets with Retainer Nets, CB Radio Pocket, Speakers, and Reading Lights : COURTESY LIGHT (2) Mounted In Front Map Pocket Left and Right Side : DOOR TRIM PANELS with Cloth Insert on Bolster Driver and Passenger Doors : FLOOR COVERING Rubber, Black : GAUGE, TEMPERATURE, AMBIENT Includes Wiring and Sensor With Display Unit Mounted in Cluster : HEADLINER Soft Padded Cloth : INSTRUMENT PANEL TRIM Molded Plastic with Black Center Section	0/0	0

<u>Code</u>	<u>Description</u>	<u>F/R Wt</u> (lbs)	<u>Tot Wt</u> (lbs)
	: STORAGE POCKET, DOOR (2) Molded Plastic (Carpet Texture), Full-Length; Driver and Passenger Doors : SUN VISOR (3) Padded Vinyl: 2 Moveable (Front-to-Side) Primary Visors, Driver Side with Vanity Mirror and Toll Ticket Strap, plus 1 Auxiliary Visor (Front Only), Driver Side		
16WSK	CAB REAR SUSPENSION Air Bag Type	0/0	0
16XWD	SUNSHADE, EXTERIOR Aerodynamic, Painted Roof Color; Includes Integral Clearance/Marker Lights	15/2	17
27DPN	WHEELS, FRONT {Accuride 29039} DISC; 22.5x9.00 Rims, Powder Coat Steel, 5-Hand Hole, 10-Stud, 285.75mm BC, Hub-Piloted, Flanged Nut, with Steel Hubs, Non-Standard Offset, with .5" Thick Disc	0/0	0
28DUK	WHEELS, REAR {Accuride 29169} DUAL DISC; 22.5x8.25 Rims, Powder Coat Steel, 5-Hand Hole, 10-Stud, 285.75mm BC, Hub-Piloted, Flanged Nut, with .472" Thick Increased Capacity Disc and Steel Hubs	0/0	0
7382158102	(4) TIRE, REAR 12R22.5 Load Range H G622 RSD (GOODYEAR), 482 rev/mile, 75 MPH, Drive	0/72	72
7772540190	(2) TIRE, FRONT 315/80R22.5 Load Range L UNISTEEL G291 (GOODYEAR), 491 rev/mile, 68 MPH, All-Position	24/0	24
Services Section:			
40115	WARRANTY Standard for WorkStar 7300/7400 (4x2, 4x4, 6x4, 6x6), Effective with Vehicles Built January 2, 2015 or Later, CTS-2002U	0/0	0
Total Component Weight:		8480/4917	13397
	1% MiDEAL Fee Paid to State of MI Under MiDEAL Purchasing Program Requirements	0/0	0
Total Goods Purchased:		0/0	0

The weight calculations included in this proposal are an estimate of future vehicle weight. The actual weight as manufactured may be different from the estimated weight. Navistar, Inc. shall not be liable for any consequences resulting from any differences between the estimated weight of a vehicle and the actual weight.

<u>Description</u>	<u>(US DOLLAR)</u>	<u>Price</u>
Factory List Prices:		
Product Items	\$132,745.00	
Service Items	\$0.00	
Total Factory List Price Including Options:		\$132,745.00
Total Goods Purchased:		\$748.10
Document Fee	\$190.00	
Total Preparation And Delivery:		\$190.00
Freight	\$2,200.00	
Total Freight:		\$2,200.00
Total Factory List Price Including Freight:		\$135,883.10
Less Customer Allowance:		(\$45,473.10)
Total Vehicle Price:		\$90,410.00
Total Warranty:		\$425.00
Total Sale Price:		\$90,835.00
Total Per Vehicle Sales Price:		\$90,835.00
Total Net Sales Excluding Taxes:		\$90,835.00
Michigan Title Fee	\$15.00	
Total License, Title:		\$15.00
Net Sales Price:		\$90,850.00

PLEASE REVIEW THIS PROPOSAL VERY CAREFULLY! Your signature below indicates that you accept the specifications and payment terms (listed on page one) contained herein as written and that you are able approve said order specifications and payment terms. Please include this proposal number on all correspondence and purchase orders.

This proposal contains in its entirety our offer to you for this purchase at the given dollar amount. No other offers, spec additions, warranties or other additional items are made or implied. Other additional desired items may be available; contact your local dealer representative for further details.

Approved by Seller:

Accepted by Purchaser:

Official Title and Date

Firm or Business Name

Authorized Signature

Authorized Signature and Date

TRI COUNTY INTL TRUCKS
5701 WYOMING St.
DEARBORN MI 48126 -
(313)584-7090

This proposal is not binding upon the seller without Seller's Authorized Signature

Official Title and Date

The TOPS FET calculation is an estimate for reference purposes only. The seller or retailer is responsible for calculating and reporting/paying appropriate FET to the IRS.

TRUCK & TRAILER *Specialties, Inc.*

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January 8, 2018

City of Novi
Attn: Mike Rhatigan, Fleet Asset Manager
45175 Ten Mile Road
Novi, MI 48375-3024

Equipment Quotation

The following pricing is based on City of Rochester Hills RFP-RH-13-030 contract awarded November 2013

Chassis: Single Axle

Install Monroe 11' model RDS-132-96-56 (Radius Dump Spreader) Body with front & rear discharge capability including the following:

Overall length is 132", outside width is 96" and overall side height is 56"
Tailgate height is 50", side height is 44" and 50" at the front
Body shell, head sheet and inner tailgate constructed of 3/16" type 201 stainless steel
Body top rail, corner posts and tailgate supports constructed of 3/16" 201 stainless steel
Body longitudinal is constructed of ¼" type 201 stainless steel
Floor is constructed of ¼", type 201 stainless steel
667XH conveyor chain with ½ x 1-½" crossbars on every other link on 4.5" centers
Conveyor chain housing is 34" in width
Chain shields shall be replaceable
Twin Rawson-type gear boxes
17.9 CID drive motors with built-in application rate sensor- 100 pulse type
2" drive and idler shafts
Tailgate is air-operated and includes an air cylinder mounted at the front of the body with latch rods extending to the rear and over center finger latches
Tailgate construction is 3/16" type 201 stainless steel
4 oval hole lights in stainless steel light wedges mounted to each rear pillar post
7 ga type 201 stainless steel single axle fenders mounted integrally to the body
Front and rear grease extension kits for bearings, tailgate cam and hoist trunnions
Install 24" cabshield 10 ga. 201 stainless steel continuously welded to body
Install floor cover constructed of ¼" AR400 steel
Install body prop kit on each side of the frame
Proximity switch for body-up light
Install air-operated series/parallel valve with in-cab control
Install Cougar model 3200 DC box vibrator
Install ½ of stainless steel ladder mounted on driver-side, front of RDS body with grab handle
Install stainless steel carryover frame covers with grab handles
Install mudflaps fore and aft of rear driver tires with no advertising
Install bracket for the license plate on the rear tailgate on the left side

Install Mailhot-type, front-mounted Telescopic Hoist including the following:

Hoist is double-acting
Hoist includes nitrated cylinders
Hoist includes oscillating mounting collar and is trunnion-mounted
Hoist is NTEA class 90

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Install Roll-Rite Electric Tarp System including the following:

- Heavy-duty mesh cover
- Aluminum tarp with tension bows and offset elbows
- Tarp arms to be mounted to fenders of RDS body
- Aluminum wind deflector

Install Monroe Closed-Loop Pre-Wet System including the following:

- NEMA weather-tight fiberglass pump enclosure
- Hydraulic driven 7 gpm pump assembly with Dickey John flow meter
- 5 PSI in-line check valve for nozzles
- 2 nozzle w/ brass tips and caps
- Twin (2) 100 gallon tanks with stainless steel attaching hardware
- Includes crossover tube, bulk fill adaptor and flush kit
- Remote vent tube for each tank

Install Front Cross Conveyor including the following:

- Conveyor shall have two-ply high-temp belt
- Drive motor can operate in both directions
- Right side discharge shall have stainless steel berm chute

Install Rear Spinner Assembly including the following:

- Dual, receiver-type tubular mounting
- Formed 24" poly spinner disc
- Spinner motor includes seal saver
- Direction chute on inside of spinner with 3 exterior adjustable deflectors
- Construction is type 201 stainless steel
- Install grab handles to the Rear Spinner Assembly to aide removal

Install Monroe Fuel/Oil/Valve Combination Enclosure including the following:

- 120 gallon fuel oil capacity, 35 gallon hydraulic oil capacity
- Fuel/hydraulic tank/valve enclosure is 7 ga. type 201 stainless steel construction
- Hydraulic valve enclosure built into left side of tank
- Valve enclosure to have a weather tight door
- Low-oil sensor in hydraulic tank and wired to a low oil shutdown system
- Top of the tank Zinga-type, tank-mounted return line filter
- Ball valve shutoff on case drain and supply ports
- Sight and temperature gauge
- Hydraulic tank will be full of AW32 hydraulic oil
- "Fuel" and "Hydraulic Oil" stickers shall be installed on the tank
- Install 3-step egress & platform from streetside fender to combination reservoir tank
- Step assemblies shall be painted Red to match cab

Install Central Hydraulic System including the following:

- Force America FASD45L piston pump – 6.0 CID
- Front pump mounting bracket
- Pump flange
- Low-oil shutdown block with override controls
- Monroe-type low-oil sender in tank
- Spicer drive line
- Valve assembly is Force America Add-a-Fold with the following sections:
 - 4 way EPC section for Hoist with LS relief for down pressure
 - 4 way EPC section for Scraper with LS relief for down pressure
 - 4 way EPC section for Scraper swing
 - 4 way EPC section for Front Plow

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- 4 way EPC section for Front Plow swing
- 4 way EPC motor spooled section for Wing Plow
- 4 way EPC section for Main Conveyor
- 4 way EPC section for Front Cross Conveyor
- 3 way EPC section for Pre-wet
- 3 way EPC section for Rear Spinner

Force America CommandAll Single controller armrest compatible

All necessary hoses and fittings will be Parker-type

Stainless steel piping will be used to extend the spreader, spinner, pre-wet and return oil circuits to the rear of the chassis

Return line manifold

Install Force America Control Center including the following:

Force America CommandAll Single joystick controller with a 6100 model spreader

The electronic controller shall be a single-handle design with a minimum of three miniature fully-proportional joysticks in the head of the handle to operate all cylinder functions

The primary joystick handle head shall include LED-backlit momentary pushbuttons for activation of remote standby and remote blast

The electronic spreader control shall be designed for precise, closed-loop control of granular and prewet liquid applications and operate on a CAN Bus protocol

The spreader control interface shall have two, color-coded, continuous rotation encoders for granular and spinner control

The spreader control display shall be a remotely-mounted, 7" diagonal color TFT LCD, with a low-profile 16:9 widescreen format and minimum of 800X480 pixel resolution

The operator menus shall be color-coded to match the encoder knobs on the operator interface

A proportional PWM driver and input module (Valve Module) shall be remotely mounted inside the hydraulic valve enclosure for control of both spreader control and joystick control outputs

Truck diagnostic calibration shall be completed prior to delivery

Supply one USB for firmware and storing calibration data

Install 34" Husting-type Front Hitch including the following:

12" structural C-channel front bumper with tapered back ends

Double-acting lift cylinder with Socatri rod

Serrated bar steps at the front bumper

Installed roller pins, rollers mounted to hitch frame base

Roller Kit Assembly, hitch-portion

Front tow hooks to be mounted on frame with bumper cut-outs

Two expanded metal front bumper steps driver and passenger side

Expanded metal traction strip placed across the top of the front bumper

Chain box to be mounted on the driver's side of the front bumper

Install Monroe model MP36R11-ISCT Snow Plow with mailbox trim on right-end including the following:

11' long on top, 36" across

Moldboard painted powder-coat Orange, with the pushframe painted powder-coat Black

Six (6) ½" x 4" vertical ribs, 4" x 4" x ¾" moldboard bottom angle, 2" x 3" x 3/8" moldboard top angle

Moldboard thickness to be 10 gauge

5/8" x 8" x 11' high carbon steel cutting edge with SHS punching.

Full-moldboard trip assembly with dual-compression trip

Integral shield style moldboard

Screw adjustable skid shoes to be mounted on the plow

A rubber snow shield to be mounted across the top of the plow

Blade guides

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34" Husting plow-portion hitch

Roller Kit Assembly, plow-portion

Install Monroe model 4510 Underbody Scraper with two (2) 1' bolt-on extensions including the following:

10' x 20" x 1" moldboard with two (2) 1' bolt-on extensions, one on each end of moldboard

Moldboard is grade 50, hi-tensile steel, not heat-treated

All cylinder rods are Socatri-type, not nitrated

Replaceable trunnions

Piloted centerpin bolt into hangerboard

Grease line kit is included

Cushion valve and j-50 relief valve included

Install proximity switch for scraper position indication

Install 4" grip-strut scraper step, not bar grating, installed raised with step material

Install Kennametal single-insert carbide cutting edges

Install two (2) Kennametal D-shaped carbide curbguards one each end of the moldboard

Paint Red bands on ends of moldboard to match cab

Install Monroe model MJW-7' mid-mounted 7' Jr. Wing; parallelogram-type wing including the following:

7' moldboard length, 27" intake height, 28" discharge height

Moldboard is powder-coated Orange

Safety chain shall be installed for transport at any adjusted angle

Wing Post is mounted just ahead of front drive tire with rear push arm mounted behind the rear drive tire

Wing Post is parallelogram design and shall mount directly ahead of the drive tire

Rear push arm is to be equipped with a 6" cushion spring

Hydraulic circuit for the wing is equipped with a sequencing valve for proper operation of the wing

Sequencing valve shall have built-in, manually adjustable flow controls

Wing is to be equipped with stainless steel hydraulic disconnects for easy removal

Wing will also be equipped with a cushioned rubber stop to prevent it from hitting the body when

placed in the stored position at any adjusted angle

Install two (2) single-hole stainless steel light boxes mounted on the end of the wing, with a Green 6"

oval flasher and an Amber 6" oval flasher and an LED marker light front-facing

Install recycled tire cutting edge 5" x 10" x 83" including a weld-on 2' round stock curbguard

Install two (2) Monroe wing shoes, one each at toe and heel of tire cutting edge

Install double-reinforced 1/2" thick rubber snow deflector with 9' length

Install proximity switch for wing position indication

Install safety clamp for wing push-arm spring

Install LaserLine model GL3000PMC Wing Plow Guidance Laser including the following:

Green "ultra-bright" laser assembly enclosed in weatherproof housing

Heated front window lens to reduce or eliminate icing

Pneumatic air blast mechanism for lens, blasting every 5 seconds

Control switch installed in-cab for laser on/off and air blast on/off

Laser assembly installed on roof of cab

Install Custom Emergency Lighting & Electrical including the following:

Four-hole rear wedge stainless steel light boxes with LED lights on rear pillars including:

Driver-side 4-hole wedge on RDS body going down:

Star Green, SoundOff STT, SoundOff Backup & Star Amber

Pass-side 4-hole wedge on RDS body going down:

Star Amber, SoundOff STT, SoundOff Backup & Star Green

Flashers hooked up to wig-wag corner-to-corner

Two (2) SoundOff LED mPower (mo. EMPC2STS4) amber/green flashers front-facing, under cabshield

Two (2) SoundOff LED mPower (mo. EMPC2STS4) amber/green flashers side-facing, one per side RDS body

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Two (2) Weldex LED flood lights mounted at rear, angled toward pavement for spreader
Two (2) Weldex LED flood lights mounted above scraper on left and right side
One (1) Weldex LED flood light mounted on RDS body to illuminate wing plow
LED button marker lights on the combination body's light wedges
Plow lights and aluminum plow light brackets mounted on hood
Betts junction box and related wiring

Controls & Switches including the following:

OEM chassis and CommandAll switches shall control the emergency & work lighting

Chassis switches for the following:

- Scraper work lights
- Spreader work lights
- Wing work light

Console switches for the following:

- Tarp in/out
- Air-tailgate

CommandAll programmable switch assembly installed for the following:

- Low-oil pump override
- Front flashers
- Rear flashers
- Plow bracket flashers
- Spreader on/off

Install ¾" Rear Hitch Plate including the following:

PH-20 pintle hook with multi-drill mounting holes for adjustment height (mounted at 22" to cradle)
There shall be two (2) ¾" D-rings welded on each side for tow chains
Rear tow hooks mounted outside of frame rails
Install Preco 1040 back-up alarm
Electric plug 7-way round pin

Install Force wireless temp sensor for pavement and air temp tied into 6100 controller

Install Precise AVL Monitoring System including the following:

City-supplied Precise unit, tying into proximity switches
City to supply unit and cables for wiring (include the serial # on the unit to Mike Rhatigan)

Install Electric Brake Controller

Install One (1) pry bar tube holder, include rubber bumper inside tube to prevent rattling

Install One (1) spade holder mounted to RDS

Install Fire Extinguisher and Triangle Kit

Install Flaming River Electrical Shutdown including the following:

3-minute timed delay switch mounted in-cab
Enclosure with LED indicator 2" round light mounted in cab skirt

Install Rustproof top of floor in-cab, remove floor mat and install rustproofing

Above installed and non-stainless steel painted: \$124,692.00 ea.

Option Install Rearview Camera with Wash System including the following:

M.S. Foster & Associates Inc. system, recess-mounted into rear tailgate frame
NEMA enclosure with air puffer & washer fluid tubing
MSF1128-12.50A camera wash with banjo remote fill
VCMS155B color camera, high performance and waterproof
CEC34L1 loomed 34' main cable for monitor

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VOSHD6MNT double-knuckle monitor mount
MSF5000 stainless steel camera box
VOM74WP 7" LCD color monitor, waterproof

Option add: \$2,092.00 ea.

Chassis requirements to be confirmed prior to order entry:

CA: 120"
6-pack of chassis switches
Delete OEM bumper
Front frame extension
Front of engine PTO
Stationary grille
Highest ground clearance package
Horizontal DPF mounted under the curbside door or behind cab
Right side with a vertical tailpipe
Trailer wiring to the rear for electric brake controller
Temporary fuel tank

Payment Terms: Net 30. Pricing effective for 90 days.

FOB: City of Novi

Delivery: 300-360 days ARO

Thank you for the opportunity to quote.

Respectfully submitted by,
Jon Luea/Brian Bowman