



AGENDA ITEM SUMMARY FORM

MEETING DATE: 8/22

PREPARED BY: R. Corey Almas, Director of Public Services

AGENDA ITEM CONTENT: DPS - Scheduled Replacement of Street Sweeper #408

AGENDA ITEM SECTION: Bid Awards/Purchases

BUDGETED AMOUNT: \$300,000

FUNDS REQUESTED: \$258,190

FUND: 101-528-985-0000

EXECUTIVE SUMMARY:

The FY 2022-23 Budget includes the final phase of funding for the scheduled replacement of Street Sweeper #408, a 2012 Elgin Whirlwind on an Autocar chassis.

RECOMMENDATION:

Staff recommends that Council award the purchase of one Bucher CityCat 5006 to MTech, of Cleveland, Ohio for a total purchase price of \$258,190 under the Wayne County RESA CoPro+ Contract #2018-WR-060-M. Funding is budgeted and available.

MEMORANDUM

DATE: August 16, 2022

TO: Melissa R. Marsh, City Manager

FROM: Sean P. Ballantine, Public Works Supervisor
Dan Yamarino, Motor Pool Supervisor
R. Corey Almas, Director of Public Services

SUBJECT: Purchase – Scheduled Replacement of Street Sweeper #408

The FY 2022-23 Budget includes the final phase of funding for the scheduled replacement of Street Sweeper #408, a 2012 Elgin Whirlwind on an Autocar chassis. Although Elgin has been a tried-and-true performer for the DPS for many years, Staff routinely investigates other offerings on the market as part of the purchase process. This allows us to determine the best option for operations, value for money, and in this case, to investigate the technical advancements in street sweeper technology over the last five years.

Several different sweepers were delivered and utilized by staff, representing different makes and models, and different types of machine (mechanical, regenerative, vacuum, etc.) The operators who demonstrated the machines were drawn to the Bucher CityCat 5006 due to its ease of use, and high quality of the debris pickup and overall cleaning. The Motor Pool staff were also drawn to this machine due to its overall construction, and apparent ease of maintenance and repair.

The CityCat is a versatile machine, which will not only perform routine street maintenance tasks, but will significantly augment the annual splashblock cleaning operation, due to its unique floating broom design, and the leaf collection operation due to its suction design. It is the consensus of Staff that this machine will be an excellent fit for our operations. Additionally, it has a lead time of only one month, as opposed to 18-24 months as quoted from the other offerings. It is also within the budgeted amount.

The Bucher CityCat is available through a CoPro+ cooperative bid, through the MTech company. MTech is a vendor whom we have had prior experience with and have been very pleased with their overall performance and product support. The price of the sweeper is \$258,190 as quoted.

Staff recommends that Council award the purchase of one Bucher CityCat 5006 to MTech, of Cleveland, Ohio for a total purchase price of \$258,190 under the Wayne County RESA CoPro+ Contract #2018-WR-060-M. Funding is budgeted and available.

Department of Public Services

City of Madison Heights
801 Ajax Drive
Madison Heights, Michigan 48071

p (248) 589-2294 | f (248) 589-2679



Dealer

MTech

Date

6/5/22

End User

City of Madison Heights, MI

Contract

Wayne County RESA CoPro+ Contract #2018-WR-060-M

CityCat 5006 Standard Sweeper Equipment

Standard Factory Warranty: 2 years or 2,000 Hours

7.3 Cubic Yard 4003 Stainless Steel Hopper & Fan Case	In Cab Noise Level - 63 dB(A)
Invenco Turbo 4 cylinder in-line Diesel; Tier 4 Final; 141 HP @ 2200 rpm	Electrical System - 24 volt
Full Hydrostatic Transmission with 31 mph Transit Speed	Gradeability - up to 30%
GVM 23,150 lbs; Payload 11,025 lbs with a turning radius of 9.5 ft curb to curb	Sweep Path: (2) Gutter Brooms and Suction Nozzle = 8 feet
31" Stainless Steel Vacuum Nozzle with 10" suction hose and Leaf flap.	Steering Column - Tilt and Height Adjustment
Hydrostatic Controlled 4-Wheel Steering; turning radius 9' 5" curb to curb.	Heated Windshield
Two (2) 35" Poly/Steel Gutter Brooms; variable speed adjustment 0-150 rpm; impact proof suspension.	Heater with Two (2) Speed Fan
37" Standard Dump Height; Optional High Dump 61"; tipping angle 50 degrees.	Body Painted In Standard Factory White
Spacious High Visibility Custom Cab, with window in cabin floor to always view working suction nozzle.	Bucher Data Capture USB Flash Drive
Ergonomically positioned 7" CANview Display System and data capture	1 Sweeper Parts/Service CD In English
235 gallon water tank; In-Cab Nozzle volume adjustment.	1 Sweeper Operator's Manual In English
Engine Fuel Tank - 30 gallons with 8 gallon Ad Blue tank	Tires - 4 Wheels 265/70 R 19.5

QTY	ID Number	DESCRIPTION	Available	Selected
1	KF511	City Cat 5006 Purpose Built Street Sweeper	\$206,400	\$206,400
1	KCC01	Air Conditioning - Fully Integrated	\$4,300	\$4,300
0	KCC32	Camera Single Rear Displaying on JVM	\$1,398	\$0
1	KCC33	Cameras - Rear and Nozzle Displaying on JVM	\$2,258	\$2,258
1	KCC12	Radio / CD Player	\$860	\$860
0	KE025	Overload Indicator	\$2,150	\$0

QTY	ID Number	DESCRIPTION	Available	Selected
0	KCC36	Deluxe Driver Seat - Isri. Weight, height and Lumbar adjustments.	\$3,870	\$0
0	KE006	Electronic Battery Isolator	\$1,075	\$0
0	KZ005	Fire Extinguisher (5lbs. dry powder)	\$414	\$0
0	KAC39	Wanderhose - 360 degree Top turn-table mounted, spring balanced with 6" diameter & 16 feet long hose.	\$8,063	\$0
0	KAC79	Wanderhose w/ Hydraulic Supported; 360 degree Top turn-table mounted; 8" diameter & 21 feet long	\$21,204	\$0
1	KAC40	Hopper Easy Clean - Flushes hopper, fan & mesh.	\$2,473	\$2,473
1	KAC38	Hopper Mesh Lift Kit - hand pump	\$1,398	\$1,398
1	KGC52	High Dump Hopper - 4003 Stainless Steel; Dump Height - 61"	\$5,590	\$5,590
0	KGC59	Additional Water Tank Standard Dump - 296 gallons; total water capacity - 530 gallons	\$10,965	\$0
0	KGC60	Additional Water Tank High Dump - 296 gallons; total water capacity - 530 gallons	\$16,233	\$0
1	KAC28	Front Mounted 3rd Brush, Dual Rotation,	\$12,040	\$12,040
1	KAC25	In-Cab Dual Gutter Broom Tilt - Hydraulic Controlled	\$2,795	\$2,795
1	KAC53	In-Cab Dual Gutter Broom Down Pressure Control. Includes Independent Lift Control	\$4,193	\$4,193
0	KAC48	Rubber Lined Nozzle, Intake Seat & Inlet Duct. Lined with 5mm thick increase wear rubber.	\$2,365	\$0
1	KW027	HD High Pressure Water System - Includes hand lance & reel. 2900 PSI / 8 GPM to 1500 PSI / 5 GPM	\$6,343	\$6,343
1	KW014	High Pressure Spray Bar Behind Suction Nozzle	\$1,935	\$1,935

0	KX065	Centralized & Auto Grease System - all grease points; Standard Dump	\$4,838	\$0
1	KX067	Centralized & Auto Grease System - all grease points; High Dump	\$5,268	\$5,268
1	KCC11	Sweeping Mirror Right Hand Side	\$349	\$349
0	KX071	1 Extra Set of Keys - Ignition, Fuel and Cab Door	\$376	\$0

QTY	ID Number	DESCRIPTION	Available	Selected
2	BMNA 105	Rotating LED Beacon - Cab or Rear Mounted. Each Pricing. Advise Location Upon Ordering	\$430	\$860
0	KX070	Data Capture via USB Memory Stick	\$699	\$0
3	KE041	Working LED Light - RH or LH Gutter Broom or Suction Nozzle. Each Pricing. Advise Location Upon on ordering.	\$376	\$1,128
0	KDC50/51	Additional Operating or Spare Parts Manuals - English only ... Each Pricing	\$215	\$0
0	BMNA 300	Custom Paint Color: Dealer must provide a 3x5 paint sample and the RAL or PPG paint code.	\$5,913	\$0
Sweeper Options Subtotal				\$258,190

QTY	SPECIAL OPTIONS AND MODIFICATIONS	Price
0		\$0
0		\$0
0		\$0
0		\$0
0		\$0
0		\$0
0		\$0

DISCOUNTS

0	Trade In (If Applicable)	\$0	\$0
0	Additional Discounts	\$0	\$0
Total with Body and Discounts			\$258,190

Print Name

Signature

Date

Vehicle Replacement Guidelines & Evaluation Worksheet

(Only those fields shaded in yellow need to be completed.)

Date of Evaluation:8/16/2022

Vehicle #:408

Department / Division:Solid Waste

Year / Make / Model:2012Street Sweeper WhirlWind MV

Vehicle Type:C

Type A = Sedans / Light Trucks ≤ 1 Ton

Type B = Medium / Heavy Duty > 1 Ton

Type C = Off Road Equipment

Age: One point for each year of chronological age beginning with in-service date

In Service Date:6/14/2012

Age in Months:122

Age in Years (rounded):10

Score:10

Usage: Type A = 1 point per 10,000 miles; Type B = 1 point per 5,000 miles; Type C = 1 point per 250 hours used

Actual Mileage:

Actual Hours:4,099

as of8/16/2022

Score:16

Service Type: Type A		Type C	
Points	Description	Points	Description
1	Standard sedans and light pickups.	1	Standard duties as equipped.
2	Standard vehicles with occasional off-road usage.	2	Standard duties when used with attachments (sickle bar, backhoes, rear bushhogs).
3	Any vehicle that pulls trailers, hauls heavy loads, continued off-road usage.	3	Multiple duties based on seasons (snow, mowing, leaf).
4	Any vehicle involved in snow removal.	4	Extreme duties in harmful atmosphere (dust, salt, water).
5	Police, Fire, and Rescue service vehicles.	5	Heavy construction work including snow removal.

Type B	
Points	Description
1	Standard use including basic job site duties, some light duty hauling.
2	Standard use with attachments (compressors, lights, etc.) including job site duties, standard load hauling, some towing.
3	Above standard use including job site duties that include idling, standard load hauling, light trailer/equipment towing, leaf collection.
4	Above standard use including job side idling and hauling above standard loads, towing equipment and heavy trailers, light snow removal.
5	Extreme service, high job site idling and duties with attachments, heavy load hauling, heavy trailer/equipment towing, major snow removal duties, refuse collection, etc. (Examples: Sign Truck, Tandem or Single Dump Truck, Snow Removal Truck).

Score: 5

Reliability: Note: Based on current conditions. Preventative Maintenance work is not included.

Points	Description
1	In shop 0 or 1 time within the last 3 months, and no major breakdowns or road calls.
2	In shop 1 time within the last 3 months, and 1 breakdown/road call within the last 3 months.
3	In shop more than twice within the last month, and no major breakdowns or road calls.
4	In shop more than once within the last month, and 2 or more breakdowns/road calls within the last month.
5	In shop more than twice monthly within the last 3 months, and 2 or more breakdowns within the last month.

Number of times in shop within the last month:1

Number of times in shop within the last 3 months:2

Any Road Calls or Breakdowns (Y or N):Y

Road Calls / Breakdowns within the last month:0

Road Calls / Breakdowns within the last 3 months:1

In shop more than twice monthly within the last 3 months (Y or N):Y

Score:1

Points	Description
1	Maintenance costs are less than or equal to 20% of replacement cost.
2	Maintenance costs are 21-40% of replacement cost.
3	Maintenance costs are 41-60% of replacement cost.
4	Maintenance costs are 61-80% of replacement cost.
5	Maintenance costs are greater than or equal to 81% of replacement cost.

Total Maintenance Cost: \$135,894 as of 8/16/2022

Estimated Purchase Price - New Veh.: \$275,000 as of 8/16/2022

Est. Resale Value of Car to be sold: \$20,000 as of 8/16/2022

Estimated Net Replacement Cost: \$255,000 as of 8/16/2022

Maintenance Cost as % of Replacement Cost: 53.3% as of 8/16/2022

Score:3

Condition: Type A	
Points	Description
1	No visual damage or rust and a good drive train
2	Minor imperfections in body and paint, interior fair (no rips, tears, burns), and a good drive train.
3	Noticeable imperfections in body and paint surface, some minor rust, minor damage from add-on equipment, worn interior (one or more rips, tears, burns), and a weak or noisy drive train.
4	Previous accident damage, poor paint and body condition, rust (holes), bad interior (tears, rips, cracked dash), major damage from add-on equipment, and one drive train component bad.
5	Previous accident damage, poor paint, bad interior, drive train that is damaged or inoperative, and major damage from add-on equipment

Type B	
Points	Description
1	No visual damage or rust, good paint, good interior, no damage from add-on equipment, no body modification, good drive train.
2	Minor imperfections in body and paint, interior fair (no rips, tears, burns), good drive train, minor body modification.
3	Noticeable imperfections in body and paint surface, some minor rust, fair interior, weak/fair drive train, minor body modification, minor damage from add-on equipment.
4	Previous accident damage, poor paint & body condition, major rust/corrosion, poor interior, damage from add-on equip., moderate body modification evidence, 1 drive train component bad.
5	Previous accident damage, poor paint & body condition, bad interior, drive train damaged or inoperative, major body modifications, major damage from add-on equipment and attachments.

Points	Description	Number of Notable Accidents:1	(list number)
1	Good condition, fully functional.	Paint / Body:Fair	comment
2	Fair body, functional.	Interior:Fair	comment
3	Minor body damage, weak operating system.	Drive Train:Poor	comment
4	Severe damage, component not functional.	General Condition:3	(pick number from table)
5	Extreme damage, inoperable.		

Score: 4

Overall: Total Score: 39

0 - 17	Excellent	Do not replace.
18 - 22	Good	Re-evaluate for future budget(s).
23 - 27	Fair	Qualifies for replacement if budget allows.
28+	Poor	Needs priority replacement.