

## CITY OF NOVI CITY COUNCIL DECEMBER 18, 2023

**SUBJECT:** Consideration of approval to purchase a Toro Groundsmaster 4700 Wide Area Mower through Spartan Distributors in the amount of \$104,995.02 utilizing a cooperative purchasing agreement with Omnia Partners.

**SUBMITTING DEPARTMENT:** Integrated Solutions – Parks Management

EXPENDITURE REQUIRED	\$ 104,995.02
AMOUNT BUDGETED	\$ 105,550.00
APPROPRIATION REQUIRED	\$0
LINE ITEM NUMBER	101-265.10-982.037

#### **BACKGROUND INFORMATION:**

The Parks and Municipal Grounds Management Department is responsible for the mowing and grounds maintenance at 23 separate municipal properties on nearly 1,000 acres of land. Recent land acquisitions including Bosco Fields, the development of Northwest Park, and Beacon Hill Park have exhausted the capabilities of our mowing fleet. The current fleet of nine Toro Z mowers dating back to 2006 is constantly overutilized and prone to frequent breakdowns. This request is for the purchase of a 2024 Toro Groundsmaster 4700 Wide Area Mower. The purchase of this mower allows maintenance staff to mow larger areas in a third of the time at various locations due to its three mowing decks versus one deck on a standard mower. Another benefit is that other mowers can be routinely taken out of service for maintenance. This mower comes with a two-year limited warranty and matches the parts and maintenance of the current Toro mower fleet in Parks Management. This purchase is made utilizing a cooperative purchasing agreement through Omnia Partners and Toro.

**RECOMMENDED ACTION:** Approval to purchase a Toro Groundsmaster 4700 Wide Area Mower through Spartan Distributors in the amount of \$104,995.02 utilizing a cooperative purchasing agreement with Omnia Partners.



## Groundsmaster® 4500-D/4700-D

CONTOUR ROTARY MOWERS

### FEATURES

- 55 hp (41.1 kW) Yanmar® turbo-diesel engine
- Contour™ Plus rotary cutting units for virtually no scalping
- Full-length striping rear rollers
- 9' (2.7 m) and 12.5' (3.8 m) width of cut
- 6.5" (16.5 cm) cutting unit overlap to eliminate streaking
- Smart Power® optimized mowing in all conditions
- SmartCool® system with auto reversing cooling fan
- 4-Way Adjustable Seat and Air Ride Suspension
- Integrated ControlHub™ with fingertip electronic controls
- InfoCenter™ displays simple operating info while monitoring machine health

• Full-time, bi-directional 4WD

 4-wheel drive traction assist (optional)

 Reliable planetary gear wheel drive system

# More production, same extraordinary cut.

The Groundsmaster® 4500-D and 4700-D continue to provide the clean quality of cut of a reel mower but with the maintenance ease of a rotary. Toro's SmartCool® system keeps your machine on the job and moving forward. Before things get too hot, SmartCool briefly reverses the cooling fan to blast chaff and debris from the intake screens. Smart? You know it. Cool? Definitely! With a 55 hp (41.1 kW) turbo-diesel under the hood and Smart Power® technology that maximizes power to the Contour™ Plus cutting decks, the Groundsmaster 4500-D and 4700-D are an unprecedented blend of powerful productivity and refined results.





Groundsmaster® 4700-D



## **Groundsmaster® 4500-D & 4700-D Specifications®**

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	GROUNDSMASTER 4500-D, MODEL 30885	GROUNDSMASTER 4700-D, MODEL 30887	
ENGINE	Yanmar' 4-cylinder liquid-cooled, turbo-charged diesel. Power: 55 hp (41.1 kW) power at rated speed of 2700 rpm. Torque peak: 125 ft-lbs (169 Nm) @ 2000 rpm. Displacement: 127 cu. in. (2.1 liters). EPA Tier IV Final and Stage V Compliant.		
AIR CLEANER	Dry, replaceable primary and safety elements.		
RADIATOR	Rear-mount, single pass, 7-row, 6.3 fins per inch, 13 quart (12.3 liters) capacity.		
FUEL CAPACITY	22 gallons (83 liters) diesel fuel. Biodiesel-Ready for use up to B-20 (20% biodiesel and 80% petroleum blend).		
TRACTION DRIVE	Parallel hydrostatic, closed loop system with full-time 4WD forward/reverse in low (mow) and high (transport) range with optional full-time, optional full-time or momentary traction flow divider momentary traction flow divider (forward only) (Model 31529). Variable displacement piston pump with electronic servo control powers dual speed piston motor drive into double reduction planetary in front, and mechanical axle in rear. Smart Power' feature controls traction speed to maintain optimal cutting blade speed.		
HYDRAULICS/COOLING	8.25 gallon (31.3 liter) capacity with 10 micron remote spin-on filter, single-pass cooler, 6.3 fins per inch. Variable speed SmartCool hydraulic fan drive with automatic (based on coolant and oil temps) and auto/manual reversing capabilities.		
DIAGNOSTICS	Diagnostics pressure test ports: forward and reverse traction, deck circuit 1 & 2, reverse 4WD, lift, steering, traction charge, and counter balance.		
GROUND SPEED	Transport: 0-13 mph (0-21 km/h) forward, 0-8.0 mph (0-12.8 km/h) reverse. Mow: 0-8.0 mph (0-12.8 km/h) forward, 0-6.5 mph (0-10.4 km/h) reverse. (Max speeds adjustable by both operator and supervisor.)		
TIRES	Front: 29 x 14-15, 6-ply ultra-tread. Rear: 20 x 10-10, 4-ply Multi-Trac tread.		
MAIN FRAME	All welded formed-steel frame with integral tie-down anchors.		
BRAKES	Dynamic through hydrostatic transmission, plus mechanically-actuated, internal wet disc brakes on input to each planetary drive. Individual foot-operated steering brake control of left and right front wheel. Lock pedals together and latch to engage parking brake.		
SEAT	Premium seat with adjustments for operator weight via air ride suspension, seat fore/aft position, seat back angle, arm rest height and retractable seat belt.		
STEERING	Power steering with dedicated power source, tilt steering.		
INSTRUMENTATION	InfoCenter" System: Onboard LCD display shows gauges, alerts/faults, service reminders, electrical system diagnostics. Indicates fuel level, coolant temperature, intake temperature, low oil pressure, alternator, engine hours, engine rpm, hydraulic oil temperature, voltage and fuel usage.		
CONTROLS	Ignition switch, traction range selection switch, PTO switch, light switch, cruise control switch. Foot-operated traction pedal, individual foot-operated steering brake control of left and right wheels with parking brake lock. Lift Switches: One 2-position switch (GM 4500-D). Three 2-position switches (GM 4700-D).		
CRUISE CONTROL	Off/on/engage switch with on-screen adjustable speed control through the InfoCenter while engaged. Auto-disengage with PTO deactivation or braking.		
ELECTRICAL	12-volt, 650 cold cranking amps battery, 40 amp alternator. Overload protection with automotive type fuses.		
INTERLOCKS	Prevents engine from starting unless traction pedal is in neutral and deck is disengaged. If operator leaves seat with deck engaged, engine stops. Machine automatically switches to low range if decks are lowered. Engine stops if parking brake engaged and traction pedal not in neutral. Prevents switching mow to transport unless stopped to protect turf.		
OPERATOR AREA	Beverage holder, radio holder, 12-volt power point, storage box (tools, jackets, golf balls, etc.), seat belt.		
WORK LIGHT	Standard, LEDs, 650 lumens.		
ROPS	2-post foldable, standard.		
DIMENSIONS W/ CUTTING UNITS	Overall length w/decks down         145.8" (370 cm)           Overall width, lowered/raised         112.8" (286 cm)/88.3" (21           Height w/2-post ROPS         88.8" (216 cm) upright, 65.2" (1           Wheelbase         67.5" (172 cm)           Track Width, front/rear         88.3" (224 cm)/55.5" (14           Ground clearance         6" (15.3 cm)	65 cm) folded 88.8" (216 cm) upright, 65.2" (165 cm) folded 67.5" (172 cm)	
WEIGHT	4,495 lbs. (2038 kg) - with full fluids.	5,045 lbs. (2288 kg) - with full fluids.	
MOWING RATE**	8.8 acres/hr (3.6 hectares/hr)	12.1 acres/hr (4.9 hectares/hr)	
SAFETY	Complies with American National Standards Institute (ANSI B71.4-2017) and applicable ISO EN 5395 (CE) standards (machine directive 89/392, 91/368, 93/44, 84/538, 89/336) requirements.		
WARRANTY	Two-year limited warranty. Refer to the Operator's Manual for further details.		
		G UNITS	
TYPE	Five Contour™ Plus 27" (68.6 cm), rear-discharge rotary cutting units with standard full-length striping rear rollers.	Seven Contour™ Plus 27" (68.6 cm), rear-discharge rotary cutting units with standard full-length striping rear rollers.	
WIDTH OF CUT	109" (277 cm), overlap 6.5" (16.5 cm), overhang 10.4" (26.4 cm).	150" (381 cm), overlap 6.5" (16.5 cm), overhang 30.9" (78.4 cm).	
MOWING CONFIGURATIONS	Five fixed decks, 109" (277 cm) cutting width.	Operate-on-the-fly mowing configurations of 5, 6, or 7 decks utilizing the independently-operable outboard cutting units, resulting in cutting widths of 109" (276.8 cm), 129.5" (328.9 cm), or 150" (381 cm).	
HEIGHT OF CUT	0.75"-4" (1.9-10.2 cm) in 0.25" (.6 cm) increments. 3-position 0.030" (0.08 cm) incremental calibration		
CONSTRUCTION	10-gauge steel constructed chambers with 12-gauge welded reinforcements. Heavy-duty exoskeleton deck carrier frame, 1.5" (3.8 cm) square x .25" (.6 cm) wall tube with 7-gauge side supports protects deck shell from impact damage. Spindle support 3/16" (.48 cm) high-strength steel and 10-gauge exterior channels.		
SPINDLE ASSEMBLY	Ductile cast iron spindle housing. Dual greaseable tapered roller bearings. 1.25" (3.2 cm) diameter solid cold finished steel spindle shaft. Splined connection between spindle shaft and deck motor. Welded blade retainer plus anti-scalp cups.		
GROUND FOLLOWING	6" (15.3 cm) anti-scalp cups on each blade. On each deck: two 5" (12.7 cm) diameter front rollers, one 3" (7.6 cm) diameter rear roller.		
BLADES	27" (68.6 cm) long, 2.5" (6.4 cm) wide, 0.25" (.64 cm) thick. Standard combo blade, optional Atomic, high sail and angle sail blades.		
WING PROTECTION	Groundsmaster 4700-D has an impact absorption device on wing decks.		

2



<sup>\*</sup>Specifications and design subject to change without notice.

<sup>\*\*</sup>Assumes max mow speed and 100% efficiency. Actual mowing rates may vary depending on operator and conditions.



## Groundsmaster 4500-D & 4700-D Accessories

TRACTION UNIT ACCESSORIES		
30629	Premium Seat	
31696	Work Light Kit	
30669	Universal Sunshade - White	
30671	Universal Sunshade - Red	
30358	Bimini Canvas Sunshade	
115-8473	90-amp Alternator Kit	
31529	4WD Flow Divider Kit	
03614	Golf Ball Operator Guard	
30670	EU Road Light Kit	

CUTTING DECK ACCESSORIES		
104-5183	High Lift Blade	
105-9810-03	Angle Sail Blade	
107-0235-03	Atomic Blade	
108-9026-03	Combo Blade	
30836	Leaf Mulching Kit	
137-6145	Sectional Rear Roller 27" (68.5 cm)	
104-5168	Roller Scraper Kit	
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Rev. 2/22 3

<sup>\*</sup>Specifications and design subject to change without notice. Products depicted in this literature are for demonstration purposes only.

Actual products offered for sale may vary in use, design, required attachments and safety features. See distributor for details on all warranties.



December 7, 2023

City of Novi Attn: Steve St. James 45175 W. 10 Mile Rd.

Novi, MI 48375

487 W Division Street PO Box 246 Sparta, MI 49345 616.887.7301 Fax: 616.887.6288

We are pleased to provide a quote on the following equipment:

1050 Opdyke Road Auburn Hills, MI 48326 **(1)** 248.373.8800 Fax: 248.373.8899

### TORO Groundsmaster 4700 (#30887)

Total 104,995.02

- (7) Leaf Mulching Kit (#30836)
- (1) 4 WD Flow Divider Kit (#31529)

### The above TORO pricing is based on OMNIA Contract #2017025

Pricing is subject to change at time of shipment.

DELIVERY: As Arranged TERMS: Net 30 Days

Thank you for your interest in our line of equipment. If you have any questions, please feel free to call me at 313-618-9360.

Sincerely,

Stephen Carrier

Stephen Carrier **Commercial Sales** 

