

**FORM A: BID**  
(See B8)

1. Contract Title SUPPLY AND DELIVERY OF STUMP GRINDERS

2. Bidder

\_\_\_\_\_  
Name of Bidder

\_\_\_\_\_  
Usual Business Name of Bidder as it appears on Invoice (if different from above)

\_\_\_\_\_  
Street

\_\_\_\_\_  
City

\_\_\_\_\_  
Province

\_\_\_\_\_  
Postal Code

\_\_\_\_\_  
Email Address of Bidder

\_\_\_\_\_  
Facsimile Number

(Mailing address if different)

\_\_\_\_\_  
Street or P.O. Box

\_\_\_\_\_  
City

\_\_\_\_\_  
Province

\_\_\_\_\_  
Postal Code

\_\_\_\_\_  
GST Registration Number (if applicable)

The Bidder is:

(Choose one)

a sole proprietor

a partnership

a corporation

carrying on business under the above name.

3. Contact Person

The Bidder hereby authorizes the following contact person to represent the Bidder for purposes of the Bid.

\_\_\_\_\_  
Contact Person

\_\_\_\_\_  
Title

\_\_\_\_\_  
Telephone Number

\_\_\_\_\_  
Facsimile Number

\_\_\_\_\_  
Email Address

4. Definitions

All capitalized terms used in the Contract shall have the meanings ascribed to them in the General Conditions and D3.

5. Offer The Bidder hereby offers to perform the Work in accordance with the Contract for the price(s), in Canadian funds, set out on Form B: Prices, appended hereto.

6. Commencement of the Work The Bidder agrees that no Work shall commence until he/she is in receipt of a notice of award from the Award Authority authorizing the commencement of the Work.

7. Contract The Bidder agrees that the Bid Opportunity in its entirety shall be deemed to be incorporated in and to form a part of this offer notwithstanding that not all parts thereof are necessarily attached to or accompany this Bid.

8. Addenda The Bidder certifies that the following addenda have been received and agrees that they shall be deemed to form a part of the Contract:

No.	Dated
_____	_____
_____	_____
_____	_____

9. Time This offer shall be open for acceptance, binding and irrevocable for a period of sixty (60) Calendar Days following the Submission Deadline.

10. Signatures The Bidder or the Bidder's authorized official or officials have signed this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

Signature of Bidder or  
Bidder's Authorized Official or Officials

\_\_\_\_\_

(Print here name and official capacity of individual whose signature appears above)

\_\_\_\_\_

(Print here name and official capacity of individual whose signature appears above)

**FORM B: PRICES**  
(See B9)

**SUPPLY AND DELIVERY OF STUMP GRINDERS**

**UNIT PRICES**

ITEM NO.	DESCRIPTION	SPEC. REF.	UNIT	QUANTITY	UNIT PRICE
1.	Towable Stump Grinder (74 HP)	17002	Each	1	
2.	Towable Stump Grinder (60 HP)	17003	Each	1	

\_\_\_\_\_  
Name of Bidder

**FORM N: DETAILED SPECIFICATIONS 17002**  
**TOWABLE STUMP GRINDER (74HP)**

**1.0 DESCRIPTION OF EQUIPMENT**

- 1.1 These specifications describe a **Stump Grinder** and other equipment and features as specified herein. The specifications describe the supply and delivery of a trailer mounted, self-contained, diesel fuelled stump grinder machine.
- 1.2 The **Stump Grinder** shall be a new 2017 model year or newer.
- 1.3 The **Stump Grinder** and all other items/components shall be the manufacturer's latest model. The equipment shall be furnished complete and ready for operation. Any parts or accessories not specifically mentioned, but which are required to complete and place the equipment and associated attachments in successful operation shall be furnished as though specifically mentioned in these specifications. The equipment and associated attachments, and all parts thereof, shall conform in strength and quality of material and workmanship, to the best standards and engineering practice of the industry.
- 1.4 It will be the responsibility of the Bidder to inform the City of any errors or omissions in these specifications, for under this Contract the Contractor shall be held responsible for the satisfactory operational function of the equipment.

**2.0 OTHER SPECIFICATIONS AND STANDARDS**

- 2.1 All applicable SAE standards form an integral part of these specifications and shall have precedence in any conflict concerning minimum acceptable standards.
- 2.2 The **Stump Grinder** shall comply with the applicable regulations:

National Safety Mark, NSM = <http://www.tc.gc.ca/eng/acts-regulations/acts-road.htm>

Manitoba Safety and Health Act, Parts 12, 22 =  
<http://web2.gov.mb.ca/laws/statutes/ccsm/w210e.php> and <http://www.gov.mb.ca/labour/safety/>

Canadian Standards Association, CSA = <http://www.csa.ca/about/Default.asp?language=english>

Under Writers of Canada, U/L = <http://www.ulc.ca/>

Society of Automotive Engineers, SAE = <http://www.sae.org/>

City of Winnipeg Lighting Visibility  
Standard=<http://winnipeg.ca/matmgmt/pdfs/PublicWorksEquipLightingVisibility.pdf>.

- 2.3 It will be the responsibility of the Bidder to inform the City of any deficiencies in these specifications, for under this Contract the Contractor shall be held responsible for the design, performance, reliability and satisfactory operational function of the units.

**3.0 SERVICE FACILITY**

- 3.1 For the purpose of warranty repairs, the Bidder shall have an authorized service facility located within 10 km of the boundaries of the City of Winnipeg. The facility, or a portion thereof, shall be dedicated to the service and maintenance of the type equipment being offered. Further to B9.1, Bidders shall provide a description of the service facility including, but not limited to, number of qualified service staff, years of service experience, and general service capabilities within three (3) Business Days upon request of the Contract Administrator.

#### **4.0 REFERENCES**

- 4.1 Provide five (5) Canadian references where this equipment is used in a working environment where climatic conditions are similar to the City of Winnipeg.

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#### **5.0 MAKE & MODEL**

- 5.1 **State** make, year and model of the equipment bid- \_\_\_\_\_

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#### **6.0 INSTRUCTIONS FOR COMPLETION OF SPECIFICATIONS**

- 6.1 Each bid will be evaluated based on adherence to all terms, conditions and requirements outlined in the Bid Opportunity package.

- 6.2 All items in these specifications must be answered indicating compliance or non-compliance. **BIDDERS SHALL STATE "YES" FOR COMPLIANCE OR STATE DEVIATION**, or give reply where requested to do so. Deviations shall be clearly stated and fully detailed. Alternatives will be considered subject to evaluation.

- 6.3 **EACH BIDDER IS REQUIRED TO FILL IN EVERY BLANK. FAILURE TO DO SO MAY BE USED AS A BASIS FOR REJECTION OF BID**

#### **7.0 PERFORMANCE RELIABILITY**

- 7.1 The responsibility for the design of the **Stump Grinder**, its performance and reliability shall rest upon the Contractor.

- 7.2 The term "repeated failures" as used herein is defined to mean that the same component, subassembly, or assembly develops repeated defects, breakdowns and/or malfunctions rendering the vehicle inoperative, or requiring repeated shop correction, service and/or replacement during the warranty period applicable for said component, subassembly, of assembly. Minor items or ordinary service adjustments are not included, or considered under the scope of "repeated failures", as well as other factors, such as operational damage due to accidents, misuse or lack of proper maintenance, service and lubrication attention by not following the manufacturer's preventative maintenance schedule.

- 7.3 Where the **Stump Grinder** develops "repeated failures" in service, the Contractor shall make any necessary engineering changes, repairs, alterations or modifications in order to guarantee reliability of performance.

- 7.4 The equipment shall be capable of consistent top performance in City of Winnipeg Environment. Note: The City of Winnipeg has four seasons with ambient temperatures ranging from approximately 90°F (32°C) to -40°F (-40°C)

#### **8.0 FUEL**

- 8.1 Where applicable, all equipment must be fully fuelled upon delivery (no exceptions).

#### **9.0 QUALIFICATIONS OF MANUFACTURER & CONTRACTOR**

- 9.1 The manufacturer of the **Stump Grinder** shall have five (5) years continuous experience manufacturing the equipment.
- 9.2 The manufacturer shall have in effect a documented quality control program ensuring that the quality of materials and workmanship, including welding, conforms to the best standards and engineering practice of the industry.
- 9.3 The Contractor shall have five (5) years continuous experience servicing, repairing and maintaining **Stump Grinder** of the type being offered.

10.0 **SPECIFICATIONS:**

**DIMENSIONS AND WEIGHTS**

- |      |                        |                   |       |
|------|------------------------|-------------------|-------|
| 10.1 | Operating weight       | Approx. 4400 lbs. | _____ |
| 10.2 | Maximum overall length | Approx. 234 in.   | _____ |
| 10.3 | Maximum overall height | Approx. 79 in.    | _____ |
| 10.4 | Maximum overall width  | Approx. 79 in.    | _____ |
| 10.5 | Tongue weight          | Approx. 450 lbs.  | _____ |

**ENGINE**

- |       |                                       |  |       |
|-------|---------------------------------------|--|-------|
| 10.6  | Engine                                | Diesel fueled engine.  | _____ |
| 10.7  | Make and model                        | <b>State.</b>  | _____ |
| 10.8  | Horsepower                            | Approx. 74 HP, <b>state.</b>   | _____ |
| 10.9  | Torque                                | Approx. 185 ft-lb., <b>state.</b>  | _____ |
| 10.10 | Displacement                          | <b>State.</b>  | _____ |
| 10.11 | Oil filters                           | Full flow spin-on type.  | _____ |
| 10.12 | Air filters                           | Dry-type with precleaner, restriction indicator, evacuator valve and safety element. | _____ |
| 10.13 | Exhaust                               | Muffled  | _____ |
| 10.14 | Fuel tank capacity                    | Approx. 25 US gal. (95L).  | _____ |
| 10.15 | Clutch type                           | Electric clutch with brake.  | _____ |
| 10.16 | Battery                               | Accessible for servicing, <b>state</b> CCA   | _____ |
| 10.17 | Alternator                            | Approx. 95 Amp.  | _____ |
| 10.18 | Hour meter                            | Non-resettable type  | _____ |
| 10.19 | Maximum angle of continuous operation | 30 degrees.  | _____ |

**CUTTER WHEEL SYSTEM**

- |       |                       |                               |       |
|-------|-----------------------|-------------------------------|-------|
| 10.20 | Cutter wheel diameter | Approx. 28 in. without teeth. | _____ |
|-------|-----------------------|-------------------------------|-------|

10.21	Cutter wheel thickness	Approx. 0.9 in.	_____
10.22	Cutter wheel speed	Approx. 880 rpm	_____
10.23	Cutter wheel straight line dimension	Approx. 96 in.	_____
10.24	Cut above ground	Approx. 35 in.	_____
10.25	Cut below ground	Approx. 25 in.	_____
10.26	Number of teeth	Approx. 42.	_____
10.27	Cutter wheel Guard	Required	_____
10.28	Chip containment capacity	Approx. 68 cu-ft.	_____
10.29	Drive type	Gearbox driven direct drive system	_____
10.30	Flow control system	Monitors engine speed and automatically adjusts cutter wheel sweep rate.	_____

#### **HYDRAULIC SYSTEM**

10.31	Type	Gear pump, pressure balanced	_____
10.32	Pump flow at max. RPM	Approx. 3.2 gpm.	_____
10.33	System relief pressure	Approx. 2000 psi.	_____
10.34	Flow and directional control	Required.	_____

#### **ELECTRICAL SYSTEM AND LIGHTING**

10.35	Gauges	Multifunctional LCD display.	_____
10.36	Shutdown system	Low oil pressure, high engine coolant temp.	_____
10.37	Switches	For ignition, throttle and clutch.	_____
10.38	Wireless remote control		_____
10.39	12-Volt negative ground electrical and lighting system. Meeting all applicable Manitoba Highway Traffic Act and C.M.V.S.S. requirements.		_____
10.40	Combination turn/stop and taillights P/N 44302R, one (1) per side with 40700 mounting grommets.		_____
10.41	Light cluster: three (3) P/N 10250R with P/N 10700 mounting grommets, located to be protected from damage.		_____
10.42	Clearance lamps: flush mounted P/N 10250R and 10250Y with P/N 10700 mounting grommets.		_____
10.43	License plate lamp: P/N 36140 with license plate bracket P/N 36710		_____

- 10.44 Wiring harness: Truck-Lite 50 Series Harness System, properly routed and secured. \_\_\_\_\_
- 10.45 All harnesses shall be internally grounded. \_\_\_\_\_
- 10.46 Junction box: P/N 50400, complete with necessary compression fittings, required for all vehicle lighting harness connections. Location to be protected from damage and road spray. \_\_\_\_\_
- 10.47 All plug-in connectors shall be coated with Truck-Lite NYK compound prior to assembly. \_\_\_\_\_
- 10.48 All wiring for trailer connector and accessories shall be colour coded, loomed and properly secured. \_\_\_\_\_
- 10.49 All joining of wires shall be soldered and sealed using heat shrink tubing or approved OEM weather tight connections (crimp on electrical connectors for joining wires are not acceptable). \_\_\_\_\_
- 10.50 Trailer connector: 7-way round pin connector. \_\_\_\_\_
- 10.51 Any holes required to run wires through shall be drilled (not punched) grommetted and sealed as required. \_\_\_\_\_

#### TRAILER

- 10.52 Frame Heavy duty welded steel frame to match GVWR. \_\_\_\_\_
- 10.53 Axle Axle rated to match GVWR, **state** rating. \_\_\_\_\_
- 10.54 Suspension Spring or Torsion type, **state** \_\_\_\_\_
- 10.55 Wheel and tires Floatation tires 10x16.5LT tubeless, bias ply, load ranged D, **state** size. \_\_\_\_\_
- 10.56 Brake type Self-adjusting electric with breakaway switch, max. total capacity approx.. 6000 lbs. \_\_\_\_\_
- 10.57 Hitch type Pintle type. \_\_\_\_\_
- 10.58 Safety chains Two (2) chains conforming with CMVSS and the Manitoba Highway Traffic Act. Eye hooks complete with spring closures. \_\_\_\_\_
- 10.59 Control station Swing-out. \_\_\_\_\_
- 10.60 Operator shield See through: abrasion-resistant coated poly carbonate. \_\_\_\_\_
- 10.61 Fenders Weld-on. \_\_\_\_\_
- 10.62 Toolbox **State** dimensions. \_\_\_\_\_
- 10.63 Tongue Extendable to approx. 60 in. \_\_\_\_\_



10.64 Trailer lighting LED: brake, turn signals and stop lamps. \_\_\_\_\_

**FINISH**

10.65 The entire trailer shall be sandblasted, prepared and primed with suitable primer prior to painting. \_\_\_\_\_

10.66 Paint: entire trailer shall be painted with two coats of polyurethane enamel, DuPont Imron or equivalent. \_\_\_\_\_

**SAFETY**

10.67 Fire extinguisher: Five (5) pound high volume ABC type securely mounted with quick release, **State location**. \_\_\_\_\_

10.68 Warning beacon: PRECO 4261A, 360° visibility, wired through chipper ignition switch, fused, c/w heavy duty on-off switch, labelled with a permanent type, engraved style label. \_\_\_\_\_

10.69 Reflective striping: DOT, on sides and rear. \_\_\_\_\_

11.0 **WARRANTY**

11.1 All warranty information shall be detailed and include all exclusions. The successful bidder shall provide all published warranty information upon delivery of the equipment. Bidder shall state all warranty information. \_\_\_\_\_

11.2 The warranty for the Stump Grinder shall cover the complete equipment, and all parts thereof against any defects of workmanship, construction and materials, for a period of 12 months. Any article that has become defective during said warranty period and has not proven to have been caused by negligence on the part of the user shall be repaired or replaced at no cost to the City. The warranty shall be effective from the date the equipment is put into service by the City of Winnipeg. Please provide complete warranty details with the bid submission. \_\_\_\_\_

12.0 **DELIVERY**

12.1 Delivery Point: The complete unit shall be serviced, ready for operation and delivered F.O.B. with the freight prepaid, including invoice and N.I.V.S. (if applicable) to the WFMA 185 Tecumseh Street, Winnipeg MB. The successful bidder shall be notified by the Contractor Administrator the delivery address prior to issuance of the purchase order \_\_\_\_\_

12.2 Delivery Time: **Six to Eight (6-8) calendar weeks** from the date of award. Equipment shall be delivered between 8:00 am and 2:00 pm on Business Days. \_\_\_\_\_

12.3 Delivery Contact: The Contractor shall contact the Contract Administrator prior to delivery of the equipment. \_\_\_\_\_

12.4 P.D.I: A pre-delivery inspection shall be performed by the Contractor on the equipment. Proof upon inspection including completed check list \_\_\_\_\_

13.0 **MANUALS**

13.1 Manuals supplied under this Contract. The manuals shall cover the complete equipment including all components thereof, CD or USB flash drive is preferred where available. \_\_\_\_\_

13.2 The following manuals shall be supplied with the units when delivered:

a) Operator's manual – Two (2) per unit (one operator manual shall be sent to the Equipment Operator Training Branch \_\_\_\_\_

b) Parts and service manuals – One (1) complete sets including preventative maintenance schedules. CDs or USB flash drive are preferred. \_\_\_\_\_

14.0 **FIRST SERVICE PREVENTATIVE MAINTENANCE KIT**

14.1 In order to assure minimum downtime of the equipment in future service, the Contractor shall provide one (1) complete replacement set of new OEM filters for each unit purchased. The set of required filters shall include (if applicable to the equipment type) air, fuel, oil, cab and hydraulic, or otherwise all known necessary common replacement filters required for the first preventative maintenance servicing. \_\_\_\_\_

14.2 The Contractor shall provide a list of factory recommended lubricants to be used with the equipment, as well as a complete cross reference guide for all warranty approved lubricants and filters that can be used during preventative maintenance servicing. \_\_\_\_\_

**FORM N: DETAILED SPECIFICATIONS 17003**  
**TOWABLE STUMP GRINDER (60HP)**

**1.0 DESCRIPTION OF EQUIPMENT**

- 1.1 These specifications describe a **Stump Grinder** and other equipment and features as specified herein. The specifications describe the supply and delivery of a trailer mounted, self-contained, diesel fuelled stump grinder machine.
- 1.2 The **Stump Grinder** shall be a new 2017 model year or newer.
- 1.3 The **Stump Grinder** and all other items/components shall be the manufacturer's latest model. The equipment shall be furnished complete and ready for operation. Any parts or accessories not specifically mentioned, but which are required to complete and place the equipment and associated attachments in successful operation shall be furnished as though specifically mentioned in these specifications. The equipment and associated attachments, and all parts thereof, shall conform in strength and quality of material and workmanship, to the best standards and engineering practice of the industry.
- 1.4 It will be the responsibility of the Bidder to inform the City of any errors or omissions in these specifications, for under this Contract the Contractor shall be held responsible for the satisfactory operational function of the equipment.

**2.0 OTHER SPECIFICATIONS AND STANDARDS**

- 2.1 All applicable SAE standards form an integral part of these specifications and shall have precedence in any conflict concerning minimum acceptable standards.
- 2.2 The **Stump Grinder** shall comply with the applicable regulations:

National Safety Mark, NSM = <http://www.tc.gc.ca/eng/acts-regulations/acts-road.htm>

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<http://web2.gov.mb.ca/laws/statutes/ccsm/w210e.php> and <http://www.gov.mb.ca/labour/safety/>

Canadian Standards Association, CSA = <http://www.csa.ca/about/Default.asp?language=english>

Under Writers of Canada, U/L = <http://www.ulc.ca/>

Society of Automotive Engineers, SAE = <http://www.sae.org/>

City of Winnipeg Lighting Visibility  
Standard=<http://winnipeg.ca/matmgt/pdfs/PublicWorksEquipLightingVisibility.pdf>.

- 2.3 It will be the responsibility of the Bidder to inform the City of any deficiencies in these specifications, for under this Contract the Contractor shall be held responsible for the design, performance, reliability and satisfactory operational function of the units.

**3.0 SERVICE FACILITY**

- 3.1 For the purpose of warranty repairs, the Bidder shall have an authorized service facility located within 10 km of the boundaries of the City of Winnipeg. The facility, or a portion thereof, shall be dedicated to the service and maintenance of the type equipment being offered. Further to B9.1, Bidders shall provide a description of the service facility including, but not limited to, number of qualified service staff, years of service experience, and general service capabilities within three (3) Business Days upon request of the Contract Administrator.

#### **4.0 REFERENCES**

- 4.1 Provide five (5) Canadian references where this equipment is used in a working environment where climatic conditions are similar to the City of Winnipeg.

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#### **5.0 MAKE & MODEL**

- 5.1 **State** make, year and model of the equipment bid- \_\_\_\_\_

#### **6.0 INSTRUCTIONS FOR COMPLETION OF SPECIFICATIONS**

- 6.1 Each bid will be evaluated based on adherence to all terms, conditions and requirements outlined in the Bid Opportunity package.

- 6.2 All items in these specifications must be answered indicating compliance or non-compliance. **BIDDERS SHALL STATE "YES" FOR COMPLIANCE OR STATE DEVIATION**, or give reply where requested to do so. Deviations shall be clearly stated and fully detailed. Alternatives will be considered subject to evaluation.

- 6.3 **EACH BIDDER IS REQUIRED TO FILL IN EVERY BLANK. FAILURE TO DO SO MAY BE USED AS A BASIS FOR REJECTION OF BID**

#### **7.0 PERFORMANCE RELIABILITY**

- 7.1 The responsibility for the design of the **Stump Grinder**, its performance and reliability shall rest upon the Contractor.

- 7.2 The term "repeated failures" as used herein is defined to mean that the same component, subassembly, or assembly develops repeated defects, breakdowns and/or malfunctions rendering the vehicle inoperative, or requiring repeated shop correction, service and/or replacement during the warranty period applicable for said component, subassembly, of assembly. Minor items or ordinary service adjustments are not included, or considered under the scope of "repeated failures", as well as other factors, such as operational damage due to accidents, misuse or lack of proper maintenance, service and lubrication attention by not following the manufacturer's preventative maintenance schedule.

- 7.3 Where the **Stump Grinder** develops "repeated failures" in service, the Contractor shall make any necessary engineering changes, repairs, alterations or modifications in order to guarantee reliability of performance.

- 7.4 The equipment shall be capable of consistent top performance in City of Winnipeg Environment. Note: The City of Winnipeg has four seasons with ambient temperatures ranging from approximately 90°F (32°C) to -40°F (-40°C)

#### **8.0 FUEL**

- 8.1 Where applicable, all equipment must be fully fuelled upon delivery (no exceptions).

#### **9.0 QUALIFICATIONS OF MANUFACTURER & CONTRACTOR**

- 9.1 The manufacturer of the **Stump Grinder** shall have five (5) years continuous experience manufacturing the equipment.
- 9.2 The manufacturer shall have in effect a documented quality control program ensuring that the quality of materials and workmanship, including welding, conforms to the best standards and engineering practice of the industry.
- 9.3 The Contractor shall have five (5) years continuous experience servicing, repairing and maintaining **Stump Grinder** of the type being offered.

10.0 **SPECIFICATIONS:**

**DIMENSIONS AND WEIGHTS**

10.1	Operating weight	Approx. 3000 lbs.	_____
10.2	Maximum overall length	Approx. 167 in.	_____
10.3	Maximum overall height	Approx. 72 in.	_____
10.4	Maximum overall width	Approx. 62 in.	_____
10.5	Tongue weight	Approx. 380 lbs.	_____

**ENGINE**

10.6	Engine	Diesel fueled engine.	_____
10.7	Make and model	<b>State.</b>	_____
10.8	Horsepower	Approx. 60 HP, <b>state.</b>	_____
10.9	Torque	Approx. 140 ft-lb., <b>state.</b>	_____
10.10	Displacement	<b>State.</b>	_____
10.11	Oil filters	Full flow spin-on type.	_____
10.12	Air filters	Dry-type with precleaner, restriction indicator, evacuator valve and safety element.	_____
10.13	Exhaust	Muffled	_____
10.14	Fuel tank capacity	Approx. 12 US gal. (45L).	_____
10.15	Clutch type	Electric clutch with brake.	_____
10.16	Battery	Accessible for servicing, <b>state</b> CCA	_____
10.17	Alternator	Approx. 70 Amp.	_____
10.18	Hour meter	Non-resettable type	_____
10.19	Maximum angle of continuous operation	30 degrees.	_____

**CUTTER WHEEL SYSTEM**

10.20	Cutter wheel diameter	Approx. 23 in. without teeth.	_____
10.21	Cutter wheel thickness	Approx. 0.75 in.	_____
10.22	Cutter wheel speed	Approx. 1080 rpm	_____
10.23	Cutter wheel straight line dimension	Approx. 70 in.	_____
10.24	Cut above ground	Approx. 24 in.	_____
10.25	Cut below ground	Approx. 19 in.	_____
10.26	Number of teeth	Approx. 30.	_____
10.27	Cutter wheel Guard	Required	_____
10.28	Chip containment capacity	Approx. 49 cu-ft.	_____
10.29	Drive type	Gearbox driven direct drive system	_____
10.30	Flow control system	Monitors engine speed and automatically adjusts cutter wheel sweep rate.	_____

#### **HYDRAULIC SYSTEM**

10.31	Type	Gear pump, pressure balanced	_____
10.32	Pump flow at max. RPM	Approx. 3.2 gpm.	_____
10.33	System relief pressure	Approx. 2000 psi.	_____
10.34	Flow and directional control	Required.	_____

#### **ELECTRICAL SYSTEM AND LIGHTING**

10.35	Gauges	Multifunctional LCD display.	_____
10.36	Shutdown system	Low oil pressure, high engine coolant temp.	_____
10.37	Switches	For ignition, throttle and clutch.	_____
10.38	Wireless remote control.		_____
10.39	12-Volt negative ground electrical and lighting system. Meeting all applicable Manitoba Highway Traffic Act and C.M.V.S.S. requirements.		_____
10.40	Combination turn/stop and taillights P/N 44302R, one (1) per side with 40700 mounting grommets.		_____
10.41	Light cluster: three (3) P/N 10250R with P/N 10700 mounting grommets, located to be protected from damage.		_____
10.42	Clearance lamps: flush mounted P/N 10250R and 10250Y with P/N 10700 mounting grommets.		_____
10.43	License plate lamp: P/N 36140 with license plate bracket P/N 36710		_____

- 10.44 Wiring harness: Truck-Lite 50 Series Harness System, properly routed and secured. \_\_\_\_\_
- 10.45 All harnesses shall be internally grounded. \_\_\_\_\_
- 10.46 Junction box: P/N 50400, complete with necessary compression fittings, required for all vehicle lighting harness connections. Location to be protected from damage and road spray. \_\_\_\_\_
- 10.47 All plug-in connectors shall be coated with Truck-Lite NYK compound prior to assembly. \_\_\_\_\_
- 10.48 All wiring for trailer connector and accessories shall be colour coded, loomed and properly secured. \_\_\_\_\_
- 10.49 All joining of wires shall be soldered and sealed using heat shrink tubing or approved OEM weather tight connections (crimp on electrical connectors for joining wires are not acceptable). \_\_\_\_\_
- 10.50 Trailer connector: 7-way round pin connector. \_\_\_\_\_
- 10.51 Any holes required to run wires through shall be drilled (not punched) grommetted and sealed as required. \_\_\_\_\_

#### TRAILER

- 10.52 Frame Heavy duty welded steel frame to match GVWR. \_\_\_\_\_
- 10.53 Axle Axle rated to match GVWR, **state** rating. \_\_\_\_\_
- 10.54 Suspension Spring or Torsion type, **state** \_\_\_\_\_
- 10.55 Wheel and tires Floatation tires ST215/75D14 tubeless, bias-ply, load range C, **state** size. \_\_\_\_\_
- 10.56 Brake type Self-adjusting electric with breakaway switch, max. total capacity approx.. 3500 lbs. \_\_\_\_\_
- 10.57 Hitch type Pintle type. \_\_\_\_\_
- 10.58 Safety chains Two (2) chains conforming with CMVSS and the Manitoba Highway Traffic Act. Eye hooks complete with spring closures. \_\_\_\_\_
- 10.59 Control station Swing-out. \_\_\_\_\_
- 10.60 Operator shield See through: abrasion-resistant coated poly carbonate. \_\_\_\_\_
- 10.61 Fenders Weld-on. \_\_\_\_\_
- 10.62 Toolbox **State** dimensions. \_\_\_\_\_
- 10.63 Tongue Extendable to approx. 60 in. \_\_\_\_\_

### **FINISH**

- 10.64 The entire trailer shall be sandblasted, prepared and primed with suitable primer prior to painting. \_\_\_\_\_
- 10.65 Paint: entire trailer shall be painted with two coats of polyurethane enamel, DuPont Imron or equivalent. \_\_\_\_\_

### **SAFETY**

- 10.66 Fire extinguisher: Five (5) pound high volume ABC type securely mounted with quick release, **State location** \_\_\_\_\_
- 10.67 Warning beacon: PRECO 4261A, 360° visibility, wired through chipper ignition switch, fused, c/w heavy duty on-off switch, labelled with a permanent type, engraved style label. \_\_\_\_\_
- 10.68 Reflective striping: DOT, all sides. \_\_\_\_\_

### **WARRANTY**

- 11.1 All warranty information shall be detailed and include all exclusions. The successful bidder shall provide all published warranty information upon delivery of the equipment. Bidder shall state all warranty information. \_\_\_\_\_
- 11.2 The warranty for the Stump Grinder shall cover the complete equipment, and all parts thereof against any defects of workmanship, construction and materials, for a period of 12 months. Any article that has become defective during said warranty period and has not proven to have been caused by negligence on the part of the user shall be repaired or replaced at no cost to the City. The warranty shall be effective from the date the equipment is put into service by the City of Winnipeg. Please provide complete warranty details with the bid submission. \_\_\_\_\_

### **DELIVERY**

- 12.1 Delivery Point: The complete unit shall be serviced, ready for operation and delivered F.O.B. with the freight prepaid, including invoice and N.I.V.S. (if applicable) to the WFMA 185 Tecumseh Street, Winnipeg MB. The successful bidder shall be notified by the Contractor Administrator the delivery address prior to issuance of the purchase order \_\_\_\_\_
- 12.2 Delivery Time: **Six to Eight (6-8) calendar weeks** from the date of award. Equipment shall be delivered between 8:00 am and 2:00 pm on Business Days. \_\_\_\_\_
- 12.3 Delivery Contact: The Contractor shall contact the Contract Administrator prior to delivery of the equipment. \_\_\_\_\_
- 12.4 P.D.I: A pre-delivery inspection shall be performed by the Contractor on the equipment. Proof upon inspection including completed check list \_\_\_\_\_

### **MANUALS**



13.1 Manuals supplied under this Contract. The manuals shall cover the complete equipment including all components thereof, CD or USB flash drive is preferred where available. \_\_\_\_\_

13.2 The following manuals shall be supplied with the units when delivered:

a) Operator's manual – Two (2) per unit (one operator manual shall be sent to the Equipment Operator Training Branch \_\_\_\_\_

b) Parts and service manuals – One (1) complete sets including preventative maintenance schedules. CDs or USB flash drive are preferred. \_\_\_\_\_

14.0 **FIRST SERVICE PREVENTATIVE MAINTENANCE KIT**

14.1 In order to assure minimum downtime of the equipment in future service, the Contractor shall provide one (1) complete replacement set of new OEM filters for each unit purchased. The set of required filters shall include (if applicable to the equipment type) air, fuel, oil, cab and hydraulic, or otherwise all known necessary common replacement filters required for the first preventative maintenance servicing. \_\_\_\_\_

14.2 The Contractor shall provide a list of factory recommended lubricants to be used with the equipment, as well as a complete cross reference guide for all warranty approved lubricants and filters that can be used during preventative maintenance servicing. \_\_\_\_\_