

FORM A: BID
(See B7)

1. Contract Title SUPPLY AND DELIVERY OF SELF-PROPELLED ICE RESURFACERS

2. Bidder

Name of Bidder

Street

City

Province

Postal Code

Facsimile Number

(Mailing address if different)

Street or P.O. Box

City

Province

Postal Code

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

E-mail 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 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 B8)

SUPPLY AND DELIVERY OF SELF-PROPELLED ICE RESURFACERS

UNIT PRICES

ITEM NO.	DESCRIPTION	SPEC. REF.	UNIT	APPROX. QUANTITY	UNIT PRICE	AMOUNT
1.	S & D of a Self-Propelled Ice Resurfacer	09098	Each	7	\$ _____	\$ _____
2.	Engine Diagnostic Software and Equipment	09098 (17.1)	Each	3	\$ _____	\$ _____
TOTAL BID PRICE (GST and MRST extra) (in figures) \$ _____ (in words) _____ _____						

 Name of Bidder

FORM N: DETAILED SPECIFICATIONS 09098

SELF-PROPELLED ICE RESURFACER

1.0 **TYPE**

- 1.1 Shall be a self-propelled, 4-wheel drive, propane powered, pneumatic tired ice resurfacer complete with a wash water system, front dumping snow hopper, board brush, and other features as specified herein.
- 1.2 State make and model being bid: _____
- 1.3 The unit shall be furnished complete and ready for use. All parts not specifically mentioned, but which are required to complete and place the unit into successful operation, shall be furnished as though specifically mentioned in these specifications. The complete unit 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 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 unit.
- 1.5 The ratings specified herein merely state the minimum values acceptable to the City. There is no intent of implying that these values are sufficient for the design of the unit being bid.

2.0 **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.

3.0 **INSTRUCTIONS FOR COMPLETION OF SPECIFICATIONS**

- 3.1 All items in these specifications must be answered indicating compliance or non-compliance. **Bidders shall state "yes" for compliance or state deviation, or give a reply where requested to do so.** Deviations shall be clearly stated and fully detailed. Alternatives will be considered subject to evaluation.
- 3.2 Each bidder is required to fill in every blank. **Failure to do so may be used as a basis for rejection of bid.**

4.0 **WEIGHTS AND DIMENSIONS**

- 4.1 Operating weight, empty – 5,500 lbs. approx., state. _____
- 4.1.1 Operating weight, with full water tank – state. _____
- 4.1.2 Operating weight, with full snow hopper – state. _____
- 4.2 Overall length – state. _____
- 4.3 Overall width, operating – 84 in., state. _____
- 4.4 Overall height, operating – state. _____

4.4.1 Overall height, dumping – 140 in. approx. state. _____

4.5 Wheelbase – 65 in. approx., state. _____

5.0 PERFORMANCE DATA

5.1 Maximum resurfacing speed – state. _____

5.1.1 Normal resurfacing speed – state. _____

5.2 Maximum travel speed – state. _____

5.3 Turning radius at conditioner – state. _____

6.0 ENGINE

6.1 Type – propane fuelled or electric. State type. _____

Note: If electric, skip to Section 7.0

6.2 Engine – liquid cooled, 4-cycle, 3.0 L approx. _____

6.2.1 State make and model of engine being bid. _____

6.2.2 Net horsepower as per SAE J1349. _____

6.3 Fuel management system – required. _____

6.3.1 Fuel consumption – state fuel consumption (lbs./hr) at normal resurfacing speed. _____

6.4 Oil filter – replaceable, spin-on. _____

6.5 Air filter – dry cartridge type. _____

6.6 Coolant – Long Life Coolant, antifreeze to -35°C. _____

6.7 Exhaust system – designed to minimize emissions and shall include a three-way catalytic purifier/converter. _____

6.7.1 Exhaust discharge – vertical, to extend approx. 96 in. above ground level, recessed in body on right hand side. _____

6.8 Fuel tanks – two (2) aluminum propane tanks, 30 lbs. capacity each, fully fuelled upon delivery. _____

6.8.1 Manifold with propane tank selector switch mounted within driver's reach. _____

6.8.2 Stand with locating pins for propane tanks. _____

6.9 Engine shall provide easy accessibility for adjustment and normal routine servicing without removal from the ice resurfer. _____

7.0 TRANSMISSION AND DRIVE TRAIN

- 7.1 Transmission – hydrostatic. _____
- 7.1.1 Hydrostatic transmission to have bypass valve to allow towing if engine is inoperative. _____
- 7.2 Drive train – full time four wheel drive. _____
- 7.3 Wheels and tires – four (4) with ice-grip studs, load rating to match maximum overall weight (of ice resurfacer). _____
- 7.3.1 State tire size and ply rating. _____
- 7.3.2 Spare wheel and tire – same as front and rear wheels and tires, one (1) per machine. _____
- 7.4 Tire wash – required. _____
- 7.5 Brakes – power or hydrostatic, state type. _____
- 7.6 Steering – power or power assist. _____

8.0 ELECTRIC AND LIGHTING

- 8.1 Type – 12-Volt negative ground. _____
- 8.2 Starter – electric with keyed starter switch. _____
- 8.2.1 Ignition keys – three (3) sets required. _____
- 8.3 Battery – 600 CCA capacity. _____
- 8.4 Alternator – state capacity. _____
- 8.5 Headlights – two (2) front. _____
- 8.6 Combination tail/brake lights – two (2) rear. _____
- 8.7 Back-up alarm – required, 97 dB. _____

9.0 OPERATOR STATION

- 9.1 Operator station located on left hand side of ice resurfacer. _____
- 9.2 Controls for all functions of ice resurfacer located within easy reach of operator in seated position. _____
- 9.3 Seat – bucket type with vinyl upholstery, fore/aft adjustment. _____
- 9.3.1 Set belt – required. _____
- 9.4 Horn – required, electric. _____
- 9.5 Instrumentation – shall include the following:

9.5.1 Coolant temperature gauge. _____

9.5.2 Oil pressure gauge. _____

9.5.3 Tachometer. _____

9.5.4 Hourmeter – non-resetable type. _____

9.5.5 Ammeter or Voltmeter. _____

10.0 STORAGE TANKS

10.1 Snow tank – front dumping with hydraulic powered dump. _____

10.1.1 Snow tank capacity – 90 ft.³ (2.55 m³). _____

10.1.2 Snow tank material – steel construction, epoxy coated. _____

10.1.3 Snow tank prop bar – designed to support tank in the raised position. _____

10.2 Ice making water tank – stainless steel or polyethylene construction. _____

10.2.1 Tank capacity – 125 Imp. gal. (568 L). _____

10.2.2 Tank level gauge – external type. _____

10.2.3 Tank filler spout – easily accessible, state location. _____

10.3 Wash water tank – 40 Imp. gal. (182 L). _____

10.3.1 Wash water pump – self priming. _____

11.0 CONDITIONER

11.1 Ice shaving blade – heavy duty with external blade adjustments. _____

11.2 Vertical auger for loading snow into hopper. _____

11.3 Horizontal auger for snow transfer to 11.2. State raised height of horizontal auger box in travel position. _____

11.4 State raised height of horizontal auger box in travel position. _____

11.5 Horizontal and vertical augers to be driven by variable speed hydraulic motors. _____

11.6 White guide wheel or plastic runner to maintain proper board to conditioner clearance. _____

11.7 Squeegee type wiper to contain and spread water. _____

11.8 Sprinkler pipe – galvanized steel. _____

11.9 Conditioner width – 84 in., state. _____

12.0 BOARD BRUSH

12.1 Type – hydraulically driven, mounted on left side between front and rear wheels. _____

12.2 Hydraulically extendable and retractable. _____

12.2.1 Ground clearance in retracted position – 1½ in. _____

12.3 Brush diameter – 15 in. approx., state. _____

13.0 HYDRAULIC SYSTEM

13.1 Hydraulic system shall have sufficient capacity to serve all functions at any vehicle speed. _____

13.2 Hydraulic pump – engine driven, state capacity. _____

13.2.1 Hand pump – to raise conditioner in case of engine or hydraulic pump failure. _____

13.3 Oil reservoir – vented, with oil level indicator and replaceable suction strainer. _____

13.3.1 Reservoir capacity – 65 L approx., state. _____

13.3.2 Drain plug – ¾ in. diameter approx. _____

13.3.3 Shut-off valve – ball type, located between reservoir and inlet side of pump, secured in open position with a bracket and bolt. _____

13.4 Return line filter – replaceable, serviceable without oil loss. _____

13.5 Hydraulic hoses – wire braid reinforced, protected at wear and scuff locations. _____

13.6 Hose fittings – crimp on, non-reusable type. _____

14.0 ACCESSORIES

14.1 White guide wheel to maintain proper clearance, mounted at left front corner of ice resurfacers. _____

14.2 Two (2) spare heavy-duty ice shaving blades. _____

15.0 NOISE LEVELS

15.1 Entire machine shall be below 85 dB rating when operating in a stationary position. State level. _____

15.2 Entire machine shall be below 85 dB rating when moving and operating. State level. _____

16.0 **COLOUR AND FINISH**

16.1 Unit shall be painted using automotive type rust preventative primer, finished with acrylic urethane automotive type paint or equivalent. _____

16.2 Colour – blue operator station and chassis, white hopper. _____

17.0 **DIAGNOSTIC EQUIPMENT**

17.1 The ice resurfer shall be supplied with computer diagnostic/information software, suitable for use with City owned laptop computers. The software shall be complete with all cabling required to connect to the ice resurfer's ECU by means of a link. Further to Section 18.1 below, the Contractor's training shall include the utilization of the diagnostic software. Quantities of software and cabling is listed on Form B: Prices. _____

17.2 State the name and details of the software being bid. _____

18.0 **TRAINING**

18.1 The Contractor shall be required to provide, at their expense, operator and preventative maintenance training by qualified staff, for City of Winnipeg operator and maintenance personnel at or near the time of delivery of the equipment. The training shall be conducted in a separate or combined session/s for each group of personnel. The session/s shall be sufficient in duration and shall provide adequate familiarization and orientation of the equipment, to the satisfaction of the Contract Administrator. The training shall be conducted within two (2) calendar weeks from the date of delivery and shall be coordinated through the Contract Administrator. The training shall be conducted in Winnipeg at a location designated by the Contract Administrator. _____

18.1.1 Pricing should be based on two (2) working days for maintenance personnel and two (2) working days for operating personnel.

Note: Final payment of the equipment will not be issued until successful completion of training has been conducted to the satisfaction of the Contract Administrator.

18.2 Training aides – the Contractor shall provide DVD training aides, online and/or training manuals no later than four (4) calendar weeks prior to conducting the training sessions. _____

18.3 State if other training aides are available. _____

19.0 **PERFORMANCE RELIABILITY**

19.1 The responsibility for the design of the complete ice resurfer vehicle,

it's performance and reliability shall rest upon the Contractor.

19.2 The term "*repeated failures*" as used herein is defined to mean that the same component, assembly, or sub-assembly develops repeated defects, breakdowns and/or malfunctions rendering the unit inoperative, or requiring repeated shop correction, service and/or replacement during the warranty period applicable for said component, assembly, or sub-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 schedules.

19.3 Where the unit develops "repeated failures" in service, the Contractor shall make any necessary engineering changes, repairs, alterations or modifications in order to guarantee reliability of performance.

20.0 MANUALS

20.1 The following manuals shall be supplied with the unit when delivered. The manuals shall be in English and shall cover the complete machine including the engine.

20.1.1 Operator's manual – one (1) per unit plus one (1) extra.

20.1.2 Parts, repair and service manuals including preventative maintenance schedules for life of unit, CDs preferred – one (1) per unit.

21.0 DELIVERY

21.1 Delivery – the unit shall be serviced, ready for operation, fully fuelled and delivered F.O.B. with the freight prepaid to the Winnipeg Fleet Management Agency, 185 Tecumseh Street, Winnipeg, Manitoba within **thirty-eight (38) calendar weeks** from the date of official notification of award of Contract. The Contractor shall contact the Contract Administrator prior to delivery of the equipment. Equipment shall be delivered within 8:00 am and 3:00 pm on Business Days.

21.2 A pre-delivery inspection shall be performed by the Contractor on all equipment.

21.3 The delivery time specified above shall include the Contractor's time to rectify any deficiencies documented in the inspection process (see D7. Inspection). Final delivery will be considered completed upon the successful completion of the

22.0 PERFORMANCE RELIABILITY

22.1 The responsibility for the design of the ice resurfacers, its performance and reliability shall rest upon the Contractor.

22.2 The term "*repeat failures*" as used herein is defined to mean that the same component, assembly, or sub-assembly develops repeated defects, breakdowns and/or malfunctions rendering the unit inoperative, or requiring repeated shop correction, service and/or

replacement during the warranty period applicable for said component, assembly, or sub-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 schedules.

- 22.3 Where the unit develops "repeated failures" in service, the Contractor shall make any necessary engineering changes, repairs, alterations or modifications in order to guarantee reliability of performance.
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23.0 WARRANTY

- 23.1 For the purpose of warranty repairs, the Contractor 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 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 on ice resurfacer equipment, and general service capabilities. A description of the service facility shall be provided within 3-Calendar Days upon request of the Contract Administrator.

- 23.2 If a suitable warranty facility is not available within 10 km of the boundaries of the City of Winnipeg, the Bidder may propose that warranty work be performed by the City of Winnipeg Repair Facilities. Any work performed by the City of Winnipeg Repair Facilities shall be charged to the Contractor at the Facility's shop rate in effect at the time the work is performed (for example, shop rate for 2010: \$82.00/hr regular time, \$112.00/hr overtime and callout).

- 23.3 The Contractor shall warrant **all equipment** and all parts thereof, against any defects of workmanship, construction and materials, and agrees to repair or replace without cost to the City any article that has become defective and not proven to have been caused by negligence on the part of the user within **two (2) years** from the date the equipment is put into service by the City of Winnipeg.
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- 23.4 Upon delivery of the equipment, the Contractor shall provide a written warranty claim procedure with all applicable forms and contact personnel.
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