

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

1. Contract Title SUPPLY AND DELIVERY OF AG TRACTORS

2. Bidder

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

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

\_\_\_\_\_  
Street

\_\_\_\_\_  
City

\_\_\_\_\_  
Province

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

(Mailing address if different)

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

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

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

\_\_\_\_\_  
City

\_\_\_\_\_  
Province

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

(Choose one)

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

The Bidder is:

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 AG TRACTORS**

**UNIT PRICES**

ITEM NO.	DESCRIPTION	SPEC. REF.	UNIT	QUANTITY	UNIT PRICE
1.	Ag Tractor 40HP PTO (Open Station)	14040	Each	2	
1a.	Ag Tractor 40HP PTO (Open Station) w/Option 1: Ag Tires	14040	Each	2	
2.	Ag Tractor 40HP PTO with Cab	14041	Each	2	
3.	Ag Tractor 60HP PTO (Open Station)	14042	Each	3	
4.	Ag Tractor 60HP PTO with Cab	14043	Each	3	
5.	Ag Tractor 20HP PTO with Cab	14045	Each	1	

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

## FORM N: DETAILED SPECIFICATIONS 14040

### AG TRACTOR (40HP PTO) OPEN STATION

#### **1.0 DESCRIPTION OF EQUIPMENT**

- 1.1 These specifications describe an **Ag Tractor** and other equipment and features as specified herein.
- 1.2 The **Ag Tractor** shall be a new 2014 model year or newer.
- 1.3 The **Ag Tractor** 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 **Ag Tractor** 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/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.

---

---

---

---

---

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

- 5.1 **State** make 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 **Ag Tractor**, 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 **Ag Tractor** 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 **Ag Tractor** 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 **Ag Tractor and associated attachments** of the type being offered.

**10.0 SPECIFICATIONS:**

**ENGINE**

10.1	Engine Type	Diesel, <b>state</b> manufacturer	_____
10.2	Tier	Tier IV interim or final, <b>state</b>	_____
10.3	Engine HP (Gross)	48 HP	_____
10.4	PTO HP	40 HP	_____
10.5	Rated speed, RPM	<b>State</b> rated RPM Speed	_____
10.6	Air cleaner	Dry type air cleaner	_____
10.7	Fuel tank capacity	<b>State</b> capacity	_____
10.8	Throttle	Hand or foot throttle control, <b>state</b>	_____
10.9	Engine block heater	Cold weather operation	_____

**ELECTRICAL**

10.10	Alternator	Approx. 60 Amps, <b>State</b>	_____
-------	------------	-------------------------------	-------

**DRIVE TRAIN**

10.11	Transmission	Hydrostatic transmission 4 wheel drive	_____
10.12	No. of speeds	<b>State</b> , No. of speeds for forward and reverse	_____
10.13	Brakes	Wet, multi disc	_____
10.14	Steering	Hydrostatic power steering	_____
10.15	Drive	4x4 (4 wheel drive)	_____

**PTO**

10.16	Type	Full independent of manual	_____
10.17	Rear (rpm)	Approx. 540 rpm	_____

**HYDRAULICS**

10.18	Hydraulic pump gpm	<b>State</b> gpm	_____
-------	--------------------	------------------	-------

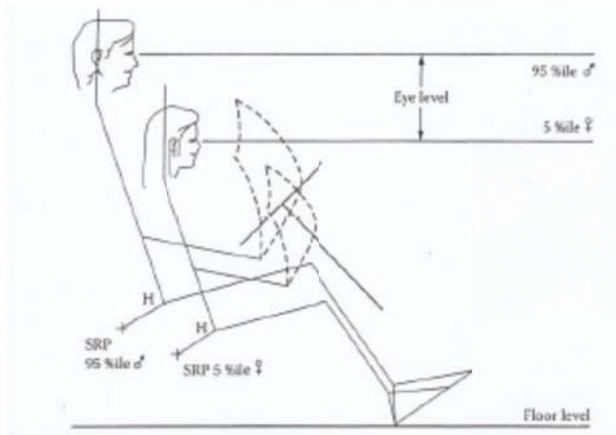
10.19	Total flow	<b>State</b> total gpm flow	_____
10.20	Hitch lift	<b>State</b> hitch lift capacity	_____
10.21	Hitch category	Category I (3) point hitch	_____
10.22	Adjustable stabilizer linkage	To secure rear mounted attachments (check chains not acceptable).	_____

**OPERATOR STATION**

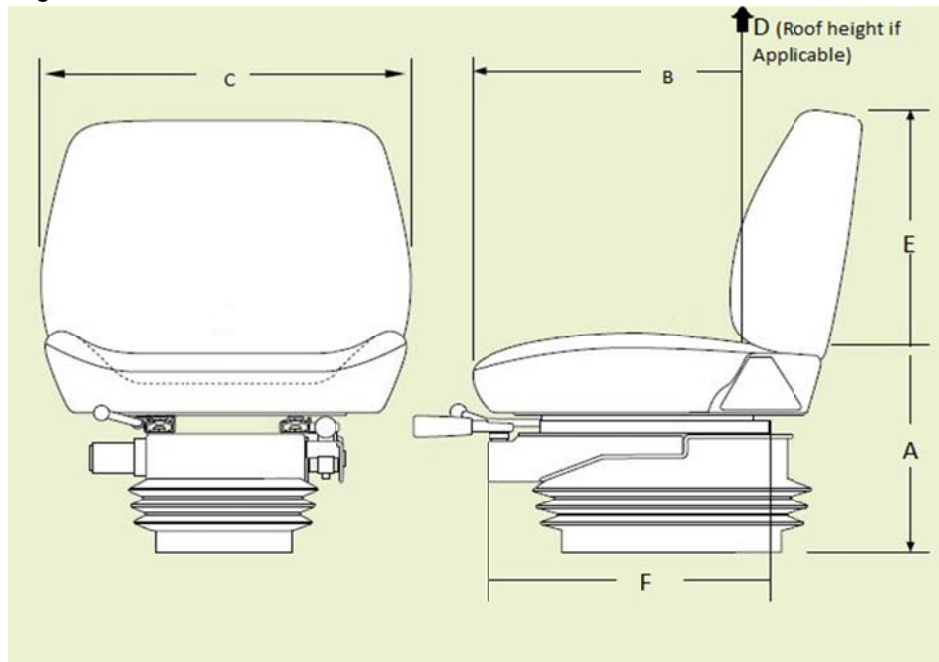
10.23	Instrumentation	Alternates, warning light- engine oil pressure light. Gauges – water, fuel, tachometer w/ hour meter	_____
10.24	Work lights	Front and rear work lights	_____
10.25	Seat	Adjustable seat, with suspension air or mechanical, <b>state</b> type	_____
10.26	Fire extinguisher	Five (5) lbs. High volume ABC type, <b>State</b> location	_____
10.27	First aid kit	<b>State</b> location	_____
10.28	Safety lighting	Make and Model: Whelen L32 Series Super-LED, SAE Class 1 (or equivalent) Blue/Amber (individual control) Low Dome Beacon, permanent mount on top of ROPS. Wired through ignition, lights shall be wired for separate amber and separate blue labelled independently "winter", "off", "summer". The winter mode will turn on both blue and the summer will only turn on the amber lights.	_____
10.29	Signal lights	Safety flasher and turn signals	_____
10.30	Slow moving sign	Slow-moving vehicle warning triangle	_____
10.31	Light socket	7 pin connector implement light socket	_____
10.32	Remote control valves	Two (2) pairs	_____

**OPERATOR STATION  
 ERGONOMICS**

10.33 Cab or station layout should provide a comfortable seating position for the 5<sup>th</sup> to the 95<sup>th</sup> percentile of personnel. Figure 1 below illustrates the variance between a 5<sup>th</sup> to a 95<sup>th</sup> percentile of North American males and females when seated.



10.34 Figure 2: Use the below diagram to answer the specifications for Operator Station Ergonomics.



- |       |   |  |       |
|-------|---|--|-------|
| 10.35 | Sitting height range from floor (where feet rest) (A) | <b>State</b> , seat height range in inches | _____ |
| 10.36 | Seat length/depth (B)                                 | <b>State</b> , seat length/depth in inches | _____ |
| 10.37 | Seat width (C)  | <b>State</b> , seat width in inches        | _____ |
| 10.38 | Cab height from seat to roof (if applicable) (D)      | <b>State</b> , cab height range in inches  | _____ |



- |       |  |   |       |
|-------|--|---|-------|
| 10.39 | Back rest height (E)   | <b>State</b> , back rest height in inches | _____ |
| 10.40 | Seat travel range (F)  | <b>State</b> , seat travel in inches      | _____ |
| 10.41 | Include any other relevant ergonomic specifications and applicable range of adjustment |   | _____ |
- 

### **TIRES**

#### **Note: Options to be priced only as indicated on From B: Prices**

- |       |   |   |       |
|-------|---|---|-------|
| 10.42 | Tire size, turf                         | Turf tires Tread-R3, <b>state</b> tire size, make/model, front and rear         | _____ |
| 10.43 | Option 1: Tire size, agricultural tires | Agricultural tires Tread-R1, <b>state</b> tire size, make/model, front and rear | _____ |

### **DIMENSIONS**

- |       |                        |   |       |
|-------|------------------------|---|-------|
| 10.44 | Length                 | <b>State</b> overall length with 3 point hitch              | _____ |
| 10.45 | Width                  | <b>State</b> overall width in inches                        | _____ |
| 10.46 | Wheelbase              | <b>State</b> wheelbase in inches                            | _____ |
| 10.47 | Height                 | <b>State</b> height to top of open station (ROPS) in inches | _____ |
| 10.48 | Total operating weight | <b>State</b> total weight with ROPS                         | _____ |
| 10.49 | Radius                 | <b>State</b> turning radius                                 | _____ |
| 10.50 | Total operating weight | <b>State</b> weight with ROPS                               | _____ |

### 11.0 **WARRANTY**

- |      |  |  |       |
|------|--|--|-------|
| 11.1 | Basic coverage   | (Complete Machine) Warranty 2 years, 2000 hours    | _____ |
| 11.2 | Power train  | (Engine, Transmission) Warranty 2 years 2000 hours | _____ |
| 11.3 | Hydraulics warranty  | (Hydraulics) Warranty 2 years, 2000 hours          | _____ |
| 11.4 | Batteries warranty   | (Batteries) Warranty 1 year                        | _____ |
| 11.5 | Tires warranty   | (Tires) Warranty 1 year                            | _____ |
| 11.6 | Electrical warranty  | (Electrical) Warranty 2 years, 2000 hours          | _____ |
| 11.7 | 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. |  | _____ |

### 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: **Sixteen to eighteen (16-18) calendar weeks** from the date of award. Equipment shall be delivered between 8:00 am and 3:00 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 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 are preferred. \_\_\_\_\_

## FORM N: DETAILED SPECIFICATIONS 14041

### AG TRACTOR (40HP PTO) WITH CAB

#### **1.0 DESCRIPTION OF EQUIPMENT**

- 1.1 These specifications describe an **Ag Tractor** and other equipment and features as specified herein.
- 1.2 The **Ag Tractor** shall be a new 2014 model year or newer.
- 1.3 The **Ag Tractor** 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 **Ag Tractor** 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/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.

---

---

---

---

---

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

- 5.1 **State** make 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 **Ag Tractor**, 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 **Ag Tractor** 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 **Ag Tractor** 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 **Ag Tractor and associated attachments** of the type being offered.

## 10.0 **SPECIFICATIONS:**

### **ENGINE**

10.1	Engine type	Diesel, <b>state</b> manufacturer	_____
10.2	Tier	Tier IV interim or final, <b>state</b>	_____
10.3	Engine HP (Gross)	48 HP	_____
10.4	PTO HP	40 HP	_____
10.5	Rated speed, RPM	<b>State</b> rated RPM Speed	_____
10.6	Air cleaner	Dry type air cleaner	_____
10.7	Fuel tank capacity	<b>State</b> capacity	_____
10.8	Throttle	Hand or foot throttle control, <b>state</b>	_____
10.9	Engine block heater	Cold weather operation	_____

### **ELECTRICAL**

10.10	Alternator	Approx. 75 Amps, <b>State</b>	_____
-------	------------	-------------------------------	-------

### **DRIVE TRAIN**

10.11	Transmission	Hydrostatic transmission 4 wheel drive	_____
10.12	No. of speeds	<b>State</b> , No. of speeds for forward and reverse	_____
10.13	Brakes	Wet, multi disc	_____
10.14	Steering	Hydrostatic power steering	_____
10.15	Drive	4x4 (4 wheel drive)	_____

### **PTO**

10.16	Type	Full independent of manual	_____
10.17	Rear (rpm)	Approx. 540 rpm	_____

### **HYDRAULICS**

10.18	Pump gpm	<b>State</b> gpm	_____
-------	----------	------------------	-------

10.19	Total flow	<b>State</b> total gpm flow	_____
10.20	Hitch lift	<b>State</b> hitch lift capacity	_____
10.21	Hitch category	Category I (3) point hitch	_____
10.22	Adjustable stabilizer linkage	To secure rear mounted attachments (check chains not acceptable).	_____

**CAB**

10.23	Instrumentation	Alternates, warning light- engine oil pressure light. Gauges – water, fuel, tachometer w/ hour meter	_____
10.24	Cab	Cab with heat and A/C with ROPS with seat belt	_____
10.25	Radio	AM/FM/CD or MP3	_____
10.26	Work lights	Front and rear work lights	_____
10.27	Seat	Adjustable seat, with suspension air or mechanical, <b>state</b> type	_____
10.28	Wipers	Front and rear wiper/washer	_____
10.29	Air circulation	Cab air recirculation	_____
10.30	Roof vent	Preferred but not required, <b>state</b>	_____
10.31	Cutter/breaker	Combination seat belt cutter and glass breaker	_____
10.32	Fire extinguisher	Five (5) lbs. High volume ABC type, <b>State</b> location	_____
10.33	First aid kit	<b>State location</b>	_____
10.34	Safety lighting	Make and Model: Whelen L32 Series Super-LED, SAE Class 1 (or equivalent) Blue/Amber (individual control) Low Dome Beacon, 360 degree visibility. Wired through ignition, lights shall be wired for separate amber and separate blue labelled independently “winter”, “off”, “summer”. The winter mode will turn on both blue and the summer will only turn on the amber lights.	_____
10.35	Slow moving sign	Slow-moving vehicle warning triangle	_____

**OPERATOR STATION  
 ERGONOMICS**

10.36 Cab or station layout should provide a comfortable seating position for the 5<sup>th</sup> to the 95<sup>th</sup> percentile of personnel. Figure 1 below illustrates the variance between a 5<sup>th</sup> to a 95<sup>th</sup> percentile of North American males and females when seated.

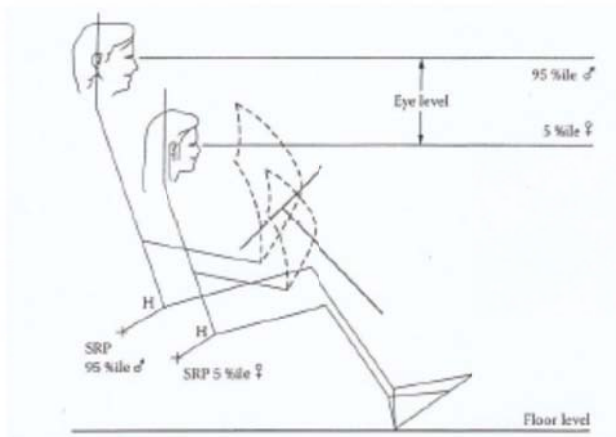
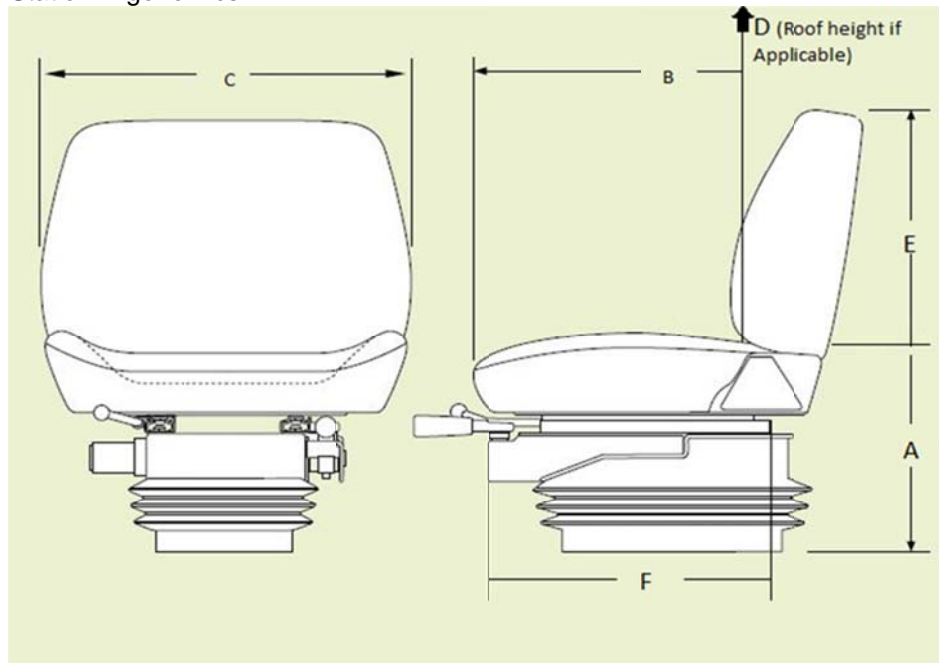


Figure 2: Use the below diagram to answer the specifications for Operator Station Ergonomics.



- |       |   |  |       |
|-------|---|--|-------|
| 10.37 | Sitting height range from floor (where feet rest) (A) | <b>State</b> , seat height range in inches | _____ |
| 10.38 | Seat length/depth (B)                                 | <b>State</b> , seat length/depth in inches | _____ |
| 10.39 | Seat width (C)  | <b>State</b> , seat width in inches        | _____ |
| 10.40 | Cab height from seat to roof (if applicable) (D)      | <b>State</b> , cab height range in inches  | _____ |
| 10.41 | Back rest height (E)                                  | <b>State</b> , back rest height in inches  | _____ |

- 10.42 Seat travel range (F) **State**, seat travel in inches \_\_\_\_\_
- 10.43 Include any other relevant ergonomic specifications and applicable range of adjustment \_\_\_\_\_
- 

**ELECTRICAL & REMOTE VALVES**

- 10.44 Light socket 7 pin connector implement light socket \_\_\_\_\_
- 10.45 Remote control valves Two (2) pairs \_\_\_\_\_

**TIRES**

- 10.46 Tire size, turf Turf tires, **state** tire size, make/model, front and rear \_\_\_\_\_

**DIMENSIONS**

- 10.47 Length **State** overall length with 3 point hitch \_\_\_\_\_
- 10.48 Width **State** overall width in inches \_\_\_\_\_
- 10.49 Wheelbase **State** wheelbase in inches \_\_\_\_\_
- 10.50 Height **State** height to top of cab in inches \_\_\_\_\_
- 10.51 Weight **State** total operating weight \_\_\_\_\_
- 10.52 Radius **State** turning radius \_\_\_\_\_

**11.0 WARRANTY**

- 11.1 Basic coverage (Complete Machine) Warranty 2 years, 2000 hours \_\_\_\_\_
- 11.2 Power train (Engine, Transmission) Warranty 2 years 2000 hours \_\_\_\_\_
- 11.3 Hydraulics warranty (Hydraulics) Warranty 2 years, 2000 hours \_\_\_\_\_
- 11.4 Batteries warranty (Batteries) Warranty 1 year \_\_\_\_\_
- 11.5 Tires warranty (Tires) Warranty 1 year \_\_\_\_\_
- 11.6 Electrical warranty (Electrical) Warranty 2 years, 2000 hours \_\_\_\_\_
- 11.7 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. \_\_\_\_\_

**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: **Sixteen to eighteen (16-18) calendar weeks** from the date of award. Equipment shall be delivered between 8:00 am and 3:00 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 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 are preferred. \_\_\_\_\_

## FORM N: DETAILED SPECIFICATIONS 14042

### AG TRACTOR (60HP PTO) OPEN STATION

#### **1.0 DESCRIPTION OF EQUIPMENT**

- 1.1 These specifications describe an **Ag Tractor** and other equipment and features as specified herein.
- 1.2 The **Ag Tractor** shall be a new 2014 model year or newer.
- 1.3 The **Ag Tractor** 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 **Ag Tractor** 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/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.

---

---

---

---

---

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

- 5.1 **State** make 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 **Ag Tractor**, 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 **Ag Tractor** 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 **Ag Tractor** 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 **Ag Tractor and associated attachments** of the type being offered.

## 10.0 **SPECIFICATIONS**

### **ENGINE**

10.1	Engine Type	Diesel, <b>state</b> manufacturer	_____
10.2	Tier	Tier IV interim or final, <b>state</b>	_____
10.3	Engine HP (Gross)	70 HP	_____
10.4	PTO HP	60 HP	_____
10.5	Rated speed, RPM	<b>State</b> rated RPM Speed	_____
10.6	Air cleaner	Dry type air cleaner	_____
10.7	Fuel tank capacity	<b>State</b> capacity	_____
10.8	Throttle	Hand or foot throttle control, <b>state</b>	_____
10.9	Engine block heater	Cold weather operation	_____

### **ELECTRICAL**

10.10	Alternator	Approx. 60 Amps, <b>State</b>	_____
-------	------------	-------------------------------	-------

### **DRIVE TRAIN**

10.11	Transmission	Hydrostatic transmission 4 wheel drive	_____
10.12	No. of speeds	<b>State</b> , No. of speeds for forward and reverse	_____
10.13	Brakes	Wet, multi disc	_____
10.14	Steering	Hydrostatic power steering	_____
10.15	Drive	4x4 (4 wheel drive)	_____

### **PTO**

10.16	Type	Full independent of manual	_____
10.17	Rear (rpm)	Approx. 540 rpm	_____

### **HYDRAULICS**

10.18	Hydraulic pump gpm	<b>State</b> gpm	_____
-------	--------------------	------------------	-------

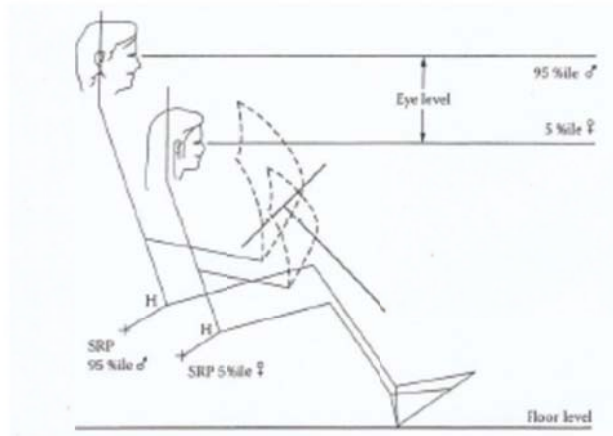
10.19	Total flow	<b>State</b> total gpm flow	_____
10.20	Hitch lift	<b>State</b> hitch lift capacity	_____
10.21	Hitch category	Adjustable category I and II (3) point hitch	_____
10.22	Adjustable stabilizer linkage	To secure rear mounted attachments (check chains not acceptable).	_____

**OPERATOR STATION**

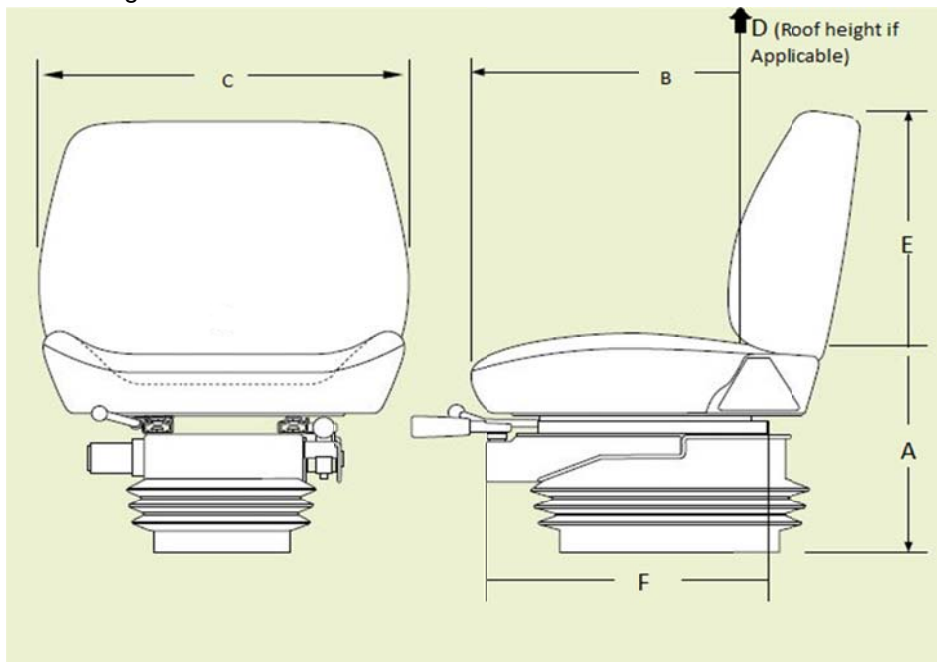
10.23	Instrumentation	Alternates, warning light- engine oil pressure light. Gauges – water, fuel, tachometer w/ hour meter	_____
10.24	Work lights	Front and rear work lights	_____
10.25	Seat	Adjustable seat, with suspension air or mechanical, <b>state</b> type	_____
10.26	Fire extinguisher	Five (5) lbs. High volume ABC type, <b>State</b> location	_____
10.27	First aid kit	<b>State location</b>	_____
10.28	Safety lighting	Make and Model: Whelen L32 Series Super-LED, SAE Class 1 (or equivalent) Blue/Amber (individual control) Low Dome Beacon, permanent mount on top of ROPS. Wired through ignition, lights shall be wired for separate amber and separate blue labelled independently "winter", "off", "summer". The winter mode will turn on both blue and the summer will only turn on the amber lights .	_____
10.29	Signal lights	Safety flasher and turn signals	_____
10.30	Slow moving sign	Slow-moving vehicle warning triangle	_____
10.31	Light socket	7 pin connector implement light socket	_____
10.32	Remote control valves	Two (2) pairs	_____

**OPERATOR STATION**  
**ERGONOMICS**

10.33 Cab or station layout should provide a comfortable seating position for the 5<sup>th</sup> to the 95<sup>th</sup> percentile of personnel. Figure 1 below illustrates the variance between a 5<sup>th</sup> to a 95<sup>th</sup> percentile of North American males and females when seated.



10.34 Figure 2: Use the below diagram to answer the specifications for Operator Station Ergonomics.



- |       |   |  |       |
|-------|---|--|-------|
| 10.35 | Sitting height range from floor (where feet rest) (A) | <b>State</b> , seat height range in inches | _____ |
| 10.36 | Seat length/depth (B)                                 | <b>State</b> , seat length/depth in inches | _____ |
| 10.37 | Seat width (C)  | <b>State</b> , seat width in inches        | _____ |
| 10.38 | Cab height from seat to roof (if applicable) (D)      | <b>State</b> , cab height range in inches  | _____ |

- 10.39 Back rest height (E) **State**, back rest height in inches \_\_\_\_\_
- 10.40 Seat travel range (F) **State**, seat travel in inches \_\_\_\_\_
- 10.41 Include any other relevant ergonomic specifications and applicable range of adjustment \_\_\_\_\_
- 

**TIRES**

- 10.42 Tire size, turf Turf tires, **state** tire size, make/model, front and rear \_\_\_\_\_

**DIMENSIONS**

- 10.43 Length **State** overall length with 3 point hitch \_\_\_\_\_
- 10.44 Width **State** overall width in inches \_\_\_\_\_
- 10.45 Wheelbase **State** wheelbase in inches \_\_\_\_\_
- 10.46 Height **State** height to top of open station (ROPS) in inches \_\_\_\_\_
- 10.47 Total operating weight **State** total weight with ROPS \_\_\_\_\_
- 10.48 Radius **State** turning radius \_\_\_\_\_
- 10.49 Total operating weight **State** weight with ROPS \_\_\_\_\_

11.0 **WARRANTY**

- 11.1 Basic coverage (Complete Machine) Warranty 2 years, 2000 hours \_\_\_\_\_
- 11.2 Power train (Engine, Transmission) Warranty 2 years 2000 hours \_\_\_\_\_
- 11.3 Hydraulics warranty (Hydraulics) Warranty 2 years, 2000 hours \_\_\_\_\_
- 11.4 Batteries warranty (Batteries) Warranty 1 year \_\_\_\_\_
- 11.5 Tires warranty (Tires) Warranty 1 year \_\_\_\_\_
- 11.6 Electrical warranty (Electrical) Warranty 2 years, 2000 hours \_\_\_\_\_
- 11.7 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. \_\_\_\_\_

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: **Sixteen to eighteen (16-18) calendar weeks** from the date of award. Equipment shall be delivered between 8:00 am and 3:00 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 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 are preferred. \_\_\_\_\_



## FORM N: DETAILED SPECIFICATIONS 14043

### AG TRACTOR (60HP PTO) WITH CAB

#### **1.0 DESCRIPTION OF EQUIPMENT**

- 1.1 These specifications describe an **Ag Tractor** and other equipment and features as specified herein.
- 1.2 The **Ag Tractor** shall be a new 2014 model year or newer.
- 1.3 The **Ag Tractor** 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 **Ag Tractor** 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/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.

---

---

---

---

---

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

- 5.1 **State** make 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 **Ag Tractor**, 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 **Ag Tractor** 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 **Ag Tractor** 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 **Ag Tractor and associated attachments** of the type being offered.

**10.0 SPECIFICATIONS**

**ENGINE**

10.1	Engine type	Diesel, <b>state</b> manufacturer	_____
10.2	Tier	Tier IV interim or final, <b>state</b>	_____
10.3	Engine HP (Gross)	70 HP	_____
10.4	PTO HP	60 HP	_____
10.5	Rated speed, RPM	<b>State</b> rated RPM Speed	_____
10.6	Air cleaner	Dry type air cleaner	_____
10.7	Fuel tank capacity	<b>State</b> capacity	_____
10.8	Throttle	Hand or foot throttle control, <b>state</b>	_____
10.9	Engine block heater	Cold weather operation	_____

**ELECTRICAL**

10.10	Alternator	Approx. 75 Amps, <b>State</b>	_____
-------	------------	-------------------------------	-------

**DRIVE TRAIN**

10.11	Transmission	Hydrostatic transmission 4 wheel drive	_____
10.12	No. of speeds	<b>State</b> , No. of speeds for forward and reverse	_____
10.13	Brakes	Wet, multi disc	_____
10.14	Steering	Hydrostatic power steering	_____
10.15	Drive	4x4 (4 wheel drive)	_____

**PTO**

10.16	Type	Full independent of manual	_____
10.17	Rear PTO (rpm)	Approx. 540 rpm	_____
10.18	Mid PTO (rpm)	Approx. 2000 rpm	_____

**HYDRAULICS**

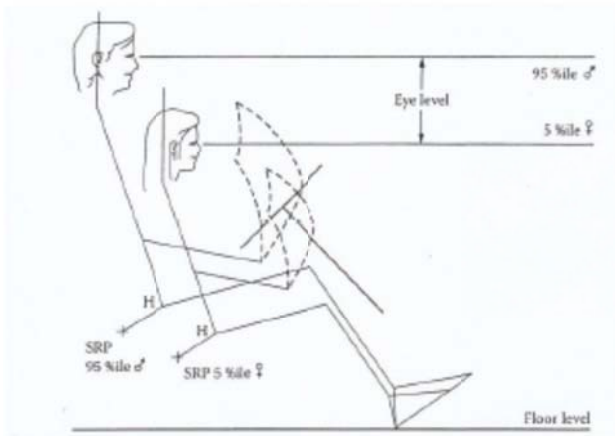
10.19	Pump gpm	<b>State</b> gpm	_____
10.20	Total flow	<b>State</b> total gpm flow	_____
10.21	Hitch lift	<b>State</b> hitch lift capacity	_____
10.22	Hitch category	Adjustable category I and II (3) point hitch	_____
10.23	Adjustable stabilizer linkage	To secure rear mounted attachments (check chains not acceptable).	_____

**CAB**

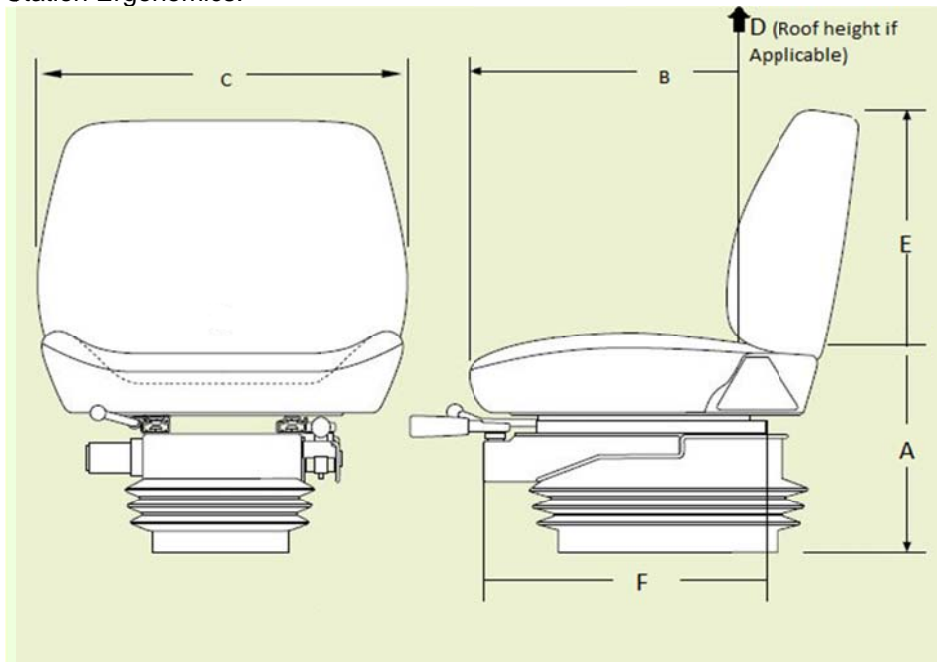
10.24	Instrumentation	Alternates, warning light- engine oil pressure light. Gauges – water, fuel, tachometer w/ hour meter	_____
10.25	Cab	Cab with heat and A/C with ROPS with seat belt	_____
10.26	Radio	AM/FM/CD or MP3	_____
10.27	Work lights	Front and rear work lights	_____
10.28	Seat	Adjustable seat, with suspension air or mechanical, state type	_____
10.29	Wipers	Front and rear wiper/washer	_____
10.30	Air circulation	Cab air recirculation	_____
10.31	Roof vent	Preferred but not required, <b>state</b>	_____
10.32	Cutter/breaker	Combination seat belt cutter and glass breaker	_____
10.33	Fire extinguisher	Five (5) lbs. High volume ABC type, <b>State</b> location	_____
10.34	First aid kit	<b>State</b> location	_____
10.35	Safety lighting	Make and Model: Whelen L32 Series Super-LED, SAE Class 1 (or equivalent) Blue/Amber (individual control) Low Dome Beacon, 360 degree visibility. Wired through ignition, lights shall be wired for separate amber and separate blue labelled independently "winter", "off", "summer". The winter mode will turn on both blue and the summer will only turn on the amber lights.	_____
10.36	Slow moving sign	Slow-moving vehicle warning triangle	_____

**OPERATOR STATION**  
**ERGONOMICS**

10.37 Cab or station layout should provide a comfortable seating position for the 5<sup>th</sup> to the 95<sup>th</sup> percentile of personnel. Figure 1 below illustrates the variance between a 5<sup>th</sup> to a 95<sup>th</sup> percentile of North American males and females when seated.



10.38 Figure 2: Use the below diagram to answer the specifications for Operator Station Ergonomics.



- |       |   |  |       |
|-------|---|--|-------|
| 10.39 | Sitting height range from floor (where feet rest) (A) | <b>State</b> , seat height range in inches | _____ |
| 10.40 | Seat length/depth (B)                                 | <b>State</b> , seat length/depth in inches | _____ |
| 10.41 | Seat width (C)  | <b>State</b> , seat width in inches        | _____ |
| 10.42 | Cab height from seat to roof (if applicable) (D)      | <b>State</b> , cab height range in inches  | _____ |
| 10.43 | Back rest height (E)                                  | <b>State</b> , back rest height in inches  | _____ |

- |       |  |                                      |       |
|-------|--|--------------------------------------|-------|
| 10.44 | Seat travel range (F)  | <b>State</b> , seat travel in inches | _____ |
| 10.45 | Include any other relevant ergonomic specifications and applicable range of adjustment |                                      | _____ |

**ELECTRICAL & REMOTE VALVES**

- |       |                       |  |       |
|-------|-----------------------|--|-------|
| 10.46 | Light socket          | 7 pin connector implement light socket | _____ |
| 10.47 | Remote control valves | Two (2) pairs                          | _____ |

**TIRES**

- |       |                 |  |       |
|-------|-----------------|--|-------|
| 10.48 | Tire size, turf | Turf tires, <b>state</b> tire size, make/model, front and rear | _____ |
|-------|-----------------|--|-------|

**DIMENSIONS**

- |       |           |  |       |
|-------|-----------|--|-------|
| 10.49 | Length    | <b>State</b> overall length with 3 point hitch | _____ |
| 10.50 | Width     | <b>State</b> overall width in inches           | _____ |
| 10.51 | Wheelbase | <b>State</b> wheelbase in inches               | _____ |
| 10.52 | Height    | <b>State</b> height to top of cab in inches    | _____ |
| 10.53 | Weight    | <b>State</b> total operating weight            | _____ |
| 10.54 | Radius    | <b>State</b> turning radius                    | _____ |

**WARRANTY**

- |      |  |  |       |
|------|--|--|-------|
| 11.1 | Basic coverage   | (Complete Machine) Warranty 2 years, 2000 hours    | _____ |
| 11.2 | Power train  | (Engine, Transmission) Warranty 2 years 2000 hours | _____ |
| 11.3 | Hydraulics warranty  | (Hydraulics) Warranty 2 years, 2000 hours          | _____ |
| 11.4 | Batteries warranty   | (Batteries) Warranty 1 year                        | _____ |
| 11.5 | Tires warranty   | (Tires) Warranty 1 year                            | _____ |
| 11.6 | Electrical warranty  | (Electrical) Warranty 2 years, 2000 hours          | _____ |
| 11.7 | 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. |  | _____ |

**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: **Sixteen to eighteen (16-18) calendar weeks** from the date of award. Equipment shall be delivered between 8:00 am and 3:00 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 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 are preferred. \_\_\_\_\_

## FORM N: DETAILED SPECIFICATIONS 14045

### AG TRACTOR (20HP PTO) WITH CAB

#### **1.0 DESCRIPTION OF EQUIPMENT**

- 1.1 These specifications describe an **Ag Tractor** and other equipment and features as specified herein.
- 1.2 The **Ag Tractor** shall be a new 2014 model year or newer.
- 1.3 The **Ag Tractor** 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 **Ag Tractor** 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/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.

---

---

---

---

---

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

- 5.1 **State** make 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 **Ag Tractor**, 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 **Ag Tractor** 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 **Ag Tractor** 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 **Aq Tractor and associated attachments** of the type being offered.

## 10.0 **SPECIFICATIONS**

### **ENGINE**

- |      |                     |   |       |
|------|---------------------|---|-------|
| 10.1 | Engine type         | Diesel, <b>state</b> manufacturer           | _____ |
| 10.2 | Tier                | Tier IV interim or final, <b>state</b>      | _____ |
| 10.3 | Engine HP (Gross)   | 30 HP                                       | _____ |
| 10.4 | PTO HP              | 23 HP                                       | _____ |
| 10.5 | Rated speed, RPM    | <b>State</b> rated RPM Speed                | _____ |
| 10.6 | Air cleaner         | Dry type air cleaner                        | _____ |
| 10.7 | Fuel tank capacity  | <b>State</b> capacity                       | _____ |
| 10.8 | Throttle            | Hand or foot throttle control, <b>state</b> | _____ |
| 10.9 | Engine block heater | Cold weather operation                      | _____ |

### **ELECTRICAL**

- |       |            |                               |       |
|-------|------------|-------------------------------|-------|
| 10.10 | Alternator | Approx. 60 Amps, <b>State</b> | _____ |
|-------|------------|-------------------------------|-------|

### **DRIVE TRAIN**

- |       |               |  |       |
|-------|---------------|--|-------|
| 10.11 | Transmission  | Hydrostatic transmission 4 wheel drive               | _____ |
| 10.12 | No. of speeds | <b>State</b> , No. of speeds for forward and reverse | _____ |
| 10.13 | Brakes        | Wet, multi disc                                      | _____ |
| 10.14 | Steering      | Hydrostatic power steering                           | _____ |
| 10.15 | Drive         | 4x4 (4 wheel drive)                                  | _____ |

### **PTO**

- |       |                |                            |       |
|-------|----------------|----------------------------|-------|
| 10.16 | Type           | Full independent of manual | _____ |
| 10.17 | Rear PTO (rpm) | Approx. 540 rpm            | _____ |
| 10.18 | Mid PTO (rpm)  | Approx. 2000 rpm           | _____ |

**HYDRAULICS**

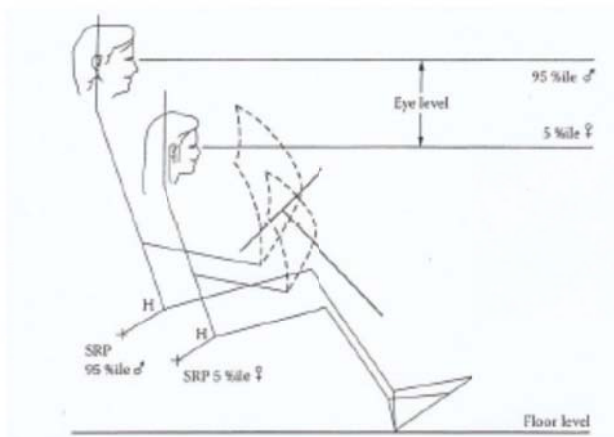
10.19	Pump gpm	<b>State</b> gpm	_____
10.20	Total flow	<b>State</b> total gpm flow	_____
10.21	Hitch lift	<b>State</b> hitch lift capacity	_____
10.22	Hitch category	Adjustable category I (3) point hitch	_____
10.23	Adjustable stabilizer linkage	To secure rear mounted attachments (check chains not acceptable).	_____

**CAB**

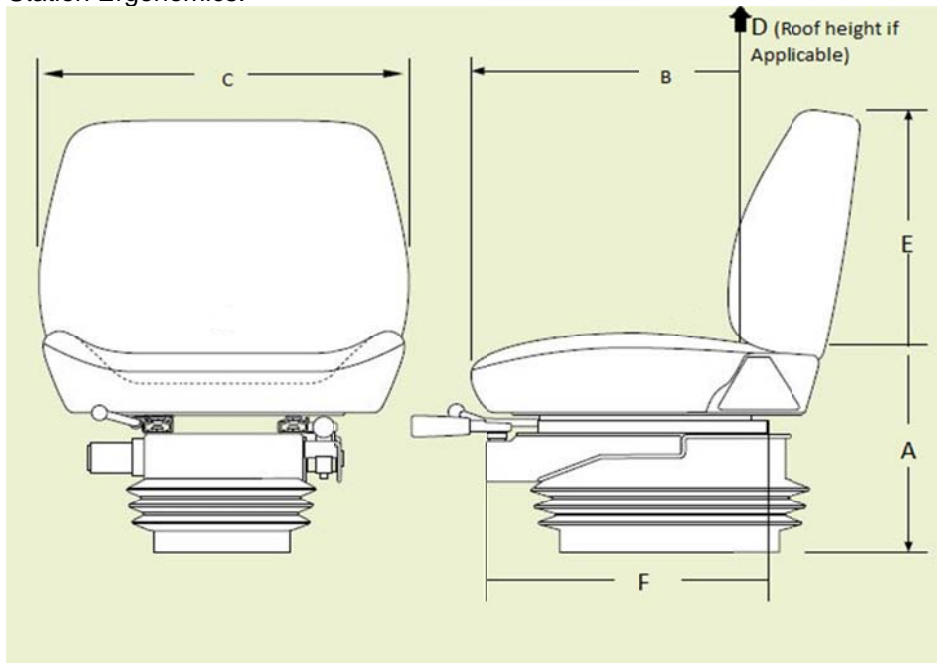
10.24	Instrumentation	Alternates, warning light- engine oil pressure light. Gauges – water, fuel, tachometer w/ hour meter	_____
10.25	Cab	Cab with heat and A/C with ROPS with seat belt	_____
10.26	Radio	AM/FM/CD or MP3	_____
10.27	Work lights	Front and rear work lights	_____
10.28	Seat	Adjustable seat, with suspension air or mechanical, state type	_____
10.29	Wipers	Front and rear wiper/washer	_____
10.30	Air circulation	Cab air recirculation	_____
10.31	Roof vent	Preferred but not required, <b>state</b>	_____
10.32	Cutter/breaker	Combination seat belt cutter and glass breaker	_____
10.33	Fire extinguisher	Five (5) lbs. High volume ABC type, <b>State</b> location	_____
10.34	First aid kit	<b>State</b> location	_____
10.35	Safety lighting	Make and Model: Whelen L32 Series Super-LED, SAE Class 1 (or equivalent) Blue/Amber (individual control) Low Dome Beacon, 360 degree visibility. Wired through ignition, lights shall be wired for separate amber and separate blue labelled independently “winter”, “off”, “summer”. The winter mode will turn on both blue and the summer will only turn on the amber lights.	_____
10.36	Slow moving sign	Slow-moving vehicle warning triangle	_____

**OPERATOR STATION  
 ERGONOMICS**

10.37 Cab or station layout should provide a comfortable seating position for the 5<sup>th</sup> to the 95<sup>th</sup> percentile of personnel. Figure 1 below illustrates the variance between a 5<sup>th</sup> to a 95<sup>th</sup> percentile of North American males and females when seated.



10.38 Figure 2: Use the below diagram to answer the specifications for Operator Station Ergonomics.



- |       |   |  |       |
|-------|---|--|-------|
| 10.39 | Sitting height range from floor (where feet rest) (A) | <b>State</b> , seat height range in inches | _____ |
| 10.40 | Seat length/depth (B)                                 | <b>State</b> , seat length/depth in inches | _____ |
| 10.41 | Seat width (C)  | <b>State</b> , seat width in inches        | _____ |
| 10.42 | Cab height from seat to roof (if applicable) (D)      | <b>State</b> , cab height range in inches  | _____ |
| 10.43 | Back rest height (E)                                  | <b>State</b> , back rest height in inches  | _____ |

- 10.44 Seat travel range (F) **State**, seat travel in inches \_\_\_\_\_
- 10.45 Include any other relevant ergonomic specifications and applicable range of adjustment \_\_\_\_\_
- 

**ELECTRICAL & REMOTE VALVES**

- 10.46 Light socket 7 pin connector implement light socket \_\_\_\_\_
- 10.47 Remote control valves Two (2) pairs \_\_\_\_\_

**TIRES**

- 10.48 Tire size, Agricultural Turf tires, **state** tire size, make/model, front and rear \_\_\_\_\_

**DIMENSIONS**

- 10.49 Length **State** overall length with 3 point hitch \_\_\_\_\_
- 10.50 Width **State** overall width in inches \_\_\_\_\_
- 10.51 Wheelbase **State** wheelbase in inches \_\_\_\_\_
- 10.52 Height **State** height to top of cab in inches \_\_\_\_\_
- 10.53 Weight **State** total operating weight \_\_\_\_\_
- 10.54 Radius **State** turning radius \_\_\_\_\_

**ATTACHMENTS**

- 10.55 Front loader with bucket Width approx. 53 inches, **state** \_\_\_\_\_
- 10.56 Snow blower (front) Width approx. 54 inches, **state** \_\_\_\_\_
- 10.57 Blade (front) Width approx. 54 inches, **state** \_\_\_\_\_
- 10.58 Rotor tiller (rear) Width approx. 48 inches, **state** \_\_\_\_\_
- 10.59 Power Angle Broom (front) Width approx. 52 inches, **state** \_\_\_\_\_
- 10.60 Power Angle Broom (rear) Width approx. 60 inches, **state** \_\_\_\_\_

11.0 **WARRANTY**

- 11.1 Basic coverage (Complete Machine) Warranty 2 years, 2000 hours \_\_\_\_\_
- 11.2 Power train (Engine, Transmission) Warranty 2 years 2000 hours \_\_\_\_\_
- 11.3 Hydraulics warranty (Hydraulics) Warranty 2 years, 2000 hours \_\_\_\_\_

11.4 Batteries warranty (Batteries) Warranty 1 year \_\_\_\_\_

11.5 Tires warranty (Tires) Warranty 1 year \_\_\_\_\_

11.6 Electrical warranty (Electrical) Warranty 2 years,  
2000 hours \_\_\_\_\_

11.7 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. \_\_\_\_\_

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: **Sixteen to eighteen (16-18) calendar weeks** from the date of award. Equipment shall be delivered between 8:00 am and 3:00 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 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 are preferred. \_\_\_\_\_