

## FORM N: DETAILED SPECIFICATIONS 25036

### 4-IN-1 SNOW ANGLE BLADE

#### 1. INSTRUCTIONS FOR COMPLETION OF SPECIFICATIONS

- 1.1 All items in these specifications should be answered indicating compliance or non-compliance.
- 1.2 **Bidder/Proponents shall state “yes” for compliance or state “deviation”**, or give a reply where requested to do so. Deviations and/or equivalents shall be clearly stated and fully detailed. Deviations and/or equivalents will be considered subject to evaluation. In every instance where a brand name or design specifications is used, the City will also consider deviations and/or equivalents.
- 1.3 Lengthy explanations of deviations may be included in a separate document and must reference the appropriate Detailed Specification.
- 1.4 Each Bidder/Proponent is required to fill in every blank. Failure to do so may be used as a basis for rejection of bid/proposal.
- 1.5 It will be the responsibility of the Bidder/Proponent to inform the City of any errors or omissions in these Detailed Specifications, for under this Contract, the Contractor shall be held responsible to ensure that the manufacturer will be responsible for the design, performance, reliability and satisfactory operational function of the unit.

#### 2. DESCRIPTION OF EQUIPMENT

- 2.1 These specifications describe a **4-in-1 Snow Angle Blade** and other equipment and features as specified herein.
- 2.2 The **4-in-1 Snow Angle Blade** shall be a new 2025 model year or newer.
- 2.3 The **4-in-1 Snow Angle Blade** 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.
- 2.4 The **4-in-1 Snow Angle Blade** shall be the manufacturer's latest model, as may be modified by these specifications. The **4-in-1 Snow Angle Blade**, including all auxiliary equipment, shall be installed and furnished complete and ready for use. All parts not specifically mentioned but which are required for the complete the unit shall conform in strength, quality of material and workmanship, to the best standards and engineering practice in the industry.
- 2.5 The ratings specified herein merely state the minimum values acceptable to the City, not implying that those values are sufficient for the design of the particular equipment being bid/Proposed.

#### 3. OTHER SPECIFICATIONS AND STANDARDS

- 3.1 All applicable SAE Standards form an integral part of the vehicle specifications and shall have precedence in any conflict concerning minimum acceptable standards.
- 3.2 The 4-in-1 snow angle blade shall comply with the applicable regulations:
  - Manitoba Highway Traffic Act [https://web2.gov.mb.ca/laws/statutes/archive/h060\(2009-08-31\)\\_2e.php](https://web2.gov.mb.ca/laws/statutes/archive/h060(2009-08-31)_2e.php)
  - Canadian Motor Vehicle Safety Standards, CMVSS Transport Canada <https://tc.canada.ca/en/road-transportation/safety-standards-vehicles-tires-child-car-seats/safety-standards-vehicles>
  - National Safety Mark, NSM [https://tc.canada.ca/en/road-transportation/safety-standards-vehicles-tires-child-car-seats/safety-standards-vehicles#\\_National\\_Safety\\_Mark](https://tc.canada.ca/en/road-transportation/safety-standards-vehicles-tires-child-car-seats/safety-standards-vehicles#_National_Safety_Mark)
  - Manitoba/Winnipeg Safety and Health Act, Parts 12, 22 <https://www.gov.mb.ca/labour/safety/wshl.html>

- Canadian Standards Association, CSA  
[https://www.csagroup.org/store/?gclid=EAlaIqObChMIqK3GzYiC9wIVBQx9Ch2EmQOjEAAYASAAEglcp\\_D\\_BwE](https://www.csagroup.org/store/?gclid=EAlaIqObChMIqK3GzYiC9wIVBQx9Ch2EmQOjEAAYASAAEglcp_D_BwE)
- Under Writers of Canada, U/L  
[https://canada.ul.com/#:~:text=Underwriters%20Laboratories%20of%20Canada%20\(ULC\)%20is%20an%20independent%20product%20safety,the%20Standards%20Council%20of%20Canada](https://canada.ul.com/#:~:text=Underwriters%20Laboratories%20of%20Canada%20(ULC)%20is%20an%20independent%20product%20safety,the%20Standards%20Council%20of%20Canada)
- Society of Automotive Engineers, SAE <https://www.sae.org/>

- 3.3 All welding and welding designs of the load supporting elements shall conform to the requirements of the Canadian Standards Association Standard (CSA) W47.1-03 and W59-03.

#### 4. REFERENCES

- 4.1 Provide five (5) 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. PERFORMANCE RELIABILITY

- 5.1 The responsibility for the design of the **4-in-1 Snow Angle Blade** its performance and reliability shall rest upon the Contractor.
- 5.2 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.
- 5.3 Where the **4-in-1 Snow Angle Blade** develops “repeated failures” in service, the Contractor shall make any necessary engineering changes, repairs, alterations or modifications in order to guarantee reliability of performance.
- 5.4 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).**

#### 6. SERVICE FACILITY

- 6.1 For the purpose of warranty repairs, the Bidder shall have an authorized service facility. The facility, or a portion thereof, shall be dedicated to the service and maintenance of the type equipment being offered. 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.

#### 7. QUALIFICATIONS OF MANUFACTURER & CONTRACTOR

- 7.1 The manufacturer of the **4-in-1 Snow Angle Blade** shall have five (5) years continuous experience manufacturing snow blades of the type being offered.

7.2 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.

7.3 The Contractor shall have five (5) years continuous experience servicing, repairing and maintaining Wheel Loader mounted snow blades of the type being offered.

## 8. SPECIFICATIONS

8.1 **State** year, make and model being bid: \_\_\_\_\_

8.2 Type – 4-in-1 snow angle blade capable of mounting to the front of a wheel loader to be used at a site that has both paved and gravel roads. \_\_\_\_\_

8.3 Closed width – 12 ft. approx., **state**. \_\_\_\_\_

8.4 Open width – 22 ft. approx., **state**. \_\_\_\_\_

8.5 Road width (angled) – 11' 3" approx., **state**. \_\_\_\_\_

8.6 Angle – 35° angle range left and right. \_\_\_\_\_

8.7 Cutting edge – steel bolt-on cutting edge. \_\_\_\_\_

8.8 Skid shoes – required. \_\_\_\_\_

8.9 Weight – 5200 lbs. approx., **state**. \_\_\_\_\_

8.10 Quick Coupler – snow angle blade to mount to City of Winnipeg quick coupler, Weldco Beales Mfg. Assembly no 130-412-0480. \_\_\_\_\_

8.11 Machine Voltage – 24 Volt. \_\_\_\_\_

8.12 Float option – required. \_\_\_\_\_

8.13 Controls – foot switch actuated or 3-way toggle. **State** details of control functions being bid. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

8.14 Installation – wired and installed on wheel loader. \_\_\_\_\_

8.14.1 The snow angle blade shall be installed by the Contractor on City of Winnipeg wheel loader as follows:

### **2022 Hyundai HL 960A** (City Unit # 3562903)

- 4.25 yd<sup>3</sup> yd. general purpose bucket
- Operating weight: 44,160 lbs.
- Wheelbase 10' 10"
- Width (over tires): 9' 1"
- Tire size: 23.5R25
- Breakout force: 36,220 lbs.
- Tipping load (straight): 28,550 lbs.

Note: Bidders are encouraged to view the wheel loader prior to submitting a bid. To schedule a meeting, contact the Contract Administrator listed in D4.1.

## 9. WARRANTY

9.1 4-in-1 snow angle blade warranty – the Contractor shall provide all detailed published Warranty information (including all exclusions) at the time of delivery of the equipment. State the following:

- |     |  |       |       |
|-----|--|-------|-------|
| 9.2 | Basic unit   | State | _____ |
| 9.3 | Electrical warranty  | State | _____ |
| 9.4 | Installation   | State | _____ |
| 9.5 | Provide details on any extended Warranty coverage available. |       | _____ |

## 10. DELIVERY

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|------|---|-------|
| 10.1 | Delivery Point – the complete unit shall be serviced, ready for operation and delivered FOB with the freight prepaid, including invoice and NVIS to the Winnipeg Fleet Management Agency (WFMA) 185 Tecumseh Street, Winnipeg MB. | _____ |
| 10.2 | Delivery Time – Equipment shall be delivered between 8:00 am and 2:00 pm on Business Days. <b>State</b> earliest delivery time from date of award.  | _____ |
| 10.3 | Delivery Contact – the Contractor shall contact the Contract Administrator prior to delivery of the equipment.  | _____ |
| 10.4 | P.D.I. – a pre-delivery inspection shall be performed by the Contractor on the equipment. Proof upon inspection including completed check list.   | _____ |

## 11. MANUALS

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|--------|--|-------|
| 11.1   | The following manuals shall be supplied with the equipment when delivered:             |       |
| 11.1.1 | Operator two (2) copies required.  | _____ |
| 11.1.2 | Parts and Service – one (1) complete set including preventative maintenance schedules. | _____ |

Note: CD or USB flash drive preferred where available.