

CONTRACT AWARD		STATE OF ALASKA HQ, STATE EQUIPMENT FLEET (Contracting Authority) 2200 E. 42nd Avenue Anchorage, Alaska 99508 (907-269-0800)		CONTRACT AWARD NUMBER 1608303KP	
ORDERING DEPARTMENT HEADQUARTERS, STATE EQUIPMENT FLEET 2200 E 42ND AVENUE ANCHORAGE, ALASKA 99508		COMMODITY CODE		DATE OF CONTRACT 1/31/08	
		NUMBER & PERIOD OF RENEWAL OPTIONS NONE		PR NO./DATE ASSIGNED 16-036-08	
		DATE INITIAL CONTRACT BEGINS 1/31/08		DATE INITIAL CONTRACT ENDS 1/30/11	
CONTRACTOR YUKON EQUIPMENT ADDRESS 2020 EAST 3RD AVENUE ANCHORAGE, AK 99501 CONTACT NAME EARL LACKEY TELEPHONE NUMBER 277-1541		GS VENDOR CODE:			
		ISSUED IN ACCORDANCE WITH BID # SEF- 1277		DATED: 1/2/08	
		PRICE ADJ. REQ. PRIOR TO EACH RENEWAL:			
		CPI/PPI BASE INDEX POINTS & MO/YR:			
		REVIEW DATE:		RENEWALS EXPIRE (MO/YR):	
		ESTIMATED VALUE OF INITIAL TERM: \$500,000.00		REBID: 10/1/10	
SEND INVOICES IN DUPLICATE TO: DOT & PF, STATE EQUIPMENT FLEET, 2200 E. 42ND AVENUE, ANCHORAGE AK 99508					
NOTE: This order constitutes a binding commitment between the State and the contractor listed hereon. Unauthorized modification without the expressed prior approval of the contracting authority will result in a financial obligation on the contractor and/or unauthorized State personnel making the change.					
DESCRIPTION					
3-YEAR CONTRACT FOR THE PURCHASE OF 4X4 ARTICULATING MULTI-PURPOSE MUNICIPAL TRACTORS CONTRACTING OFFICER KRISTI PETTY PHONE: (907) 269-0793 <u>TABLE OF CONTENTS</u> SECTION I. STANDARD TERMS & CONDITIONS II. SPECIAL TERMS & CONDITIONS III. BID PRICE SCHEDULE IV. SPECIFICATIONS V. ATTACHMENTS					
CONTRACTING AUTHORITY NAME & TITLE KRISTI PETTY, CONTRACTING OFFICER II			SIGNATURE		
TELEPHONE NO.: 907-269-0793 FAX NO.: 907-269-0801					
IMPORTANT 1. Contract award number and ordering department name must appear on all invoices and documents relating to this order. 2. The State is registered for tax free transactions under Chapter 32, IRS Code Registration No. 92-601185. Items are for the exclusive use of the State and not for resale.					

SECTION I

STANDARD TERMS AND CONDITIONS

- 1.0 ACCESSORIES:** When accessories are supplied, they must be certified to be compatible with the rest of the equipment. Certification will be written evidence satisfactory to the State that the accessories are compatible. The bidder's failure to supply this evidence within the time required by the State will cause the State to consider the bid non-responsive and reject the bid.
- 2.0 ALTERATIONS:** The contractor must obtain the written approval from the contracting officer prior to making any alterations to the specifications contained in this ITB. The State will not pay for alterations that are not approved in advance and in writing by the contracting officer.
- 3.0 AMENDMENTS:** Contract terms shall not be waived, altered, modified, supplemented or amended without prior written approval of the Contracting officer.
- 4.0 ASSIGNMENT:** A bidder may not assign any portion of a contract unless authorized in advance and in writing by the Contracting officer.
- 5.0 COMPLIANCE WITH ALL GOVERNMENT REGULATIONS:** The bidder must comply with all applicable federal, state, and borough regulations, codes, and laws, and pay all applicable federal, state, and borough taxes, and is liable for all required insurance, licenses, permits, and bonds. Failure to comply with such requirements shall constitute a breach of contract and shall be grounds for contract cancellation. Damages or costs resulting from noncompliance shall be the sole responsibility of the bidder.
- 6.0 CONFLICT OF INTEREST:** A person employed by the State of Alaska may not seek to acquire, be a party to, or possess a financial interest in, this contract if they are an employee of the administrative unit that supervises the award of this contract or they have the power to take or withhold official action to affect the contract.
- 7.0 CONTRACT PERIOD:** 3-Years from the date of award.
- 8.0 DEFAULT:** In case of bidder default, the State may procure the goods or services from another source and hold the bidder responsible for any resulting excess costs and may seek other remedies under law or equity. Alaska Statutes and Regulations provide for suspension and disbarment of non-responsible bidders.
- 9.0 DELIVERY:** All deliveries shall be F.O.B. final destination point with all transportation and handling charges paid by bidder. Responsibility and liability for loss or damage shall remain with bidder until final inspection and acceptance when responsibility shall pass to the State except as to latent defects, fraud and bidder's warranty obligations.
- 10.0 DISCONTINUED ITEMS:** In the event an item is discontinued by the manufacturer during the life of the contract, another item may be substituted, provided that the contracting officer makes a written determination that it is equal or better than the discontinued item and provided that it is sold at the same price or less than the discontinued item.
- 11.0 DISPUTES:** Any disputes arising out of this solicitation shall be resolved under the laws of Alaska. An appeal or any original action to enforce any provision of this agreement

must be in the superior court for the First Judicial District of Alaska.

12.0 FORCE MAJEURE (Impossibility to perform): Neither party to this contract shall be held responsible for delay or default caused by acts of God and/or war, which is beyond that party's reasonable control. The State may terminate this contract upon written notice after determining such delay or default will reasonably prevent successful performance of the contract.

13.0 HUMAN TRAFFICKING:

13.1 By signature on this contract, the offeror certifies that:

13.1.1 the offeror is not established and headquartered or incorporated and headquartered, in a country recognized as Tier 3 in the most recent United States Department of State's Trafficking in Persons Report; or

13.1.2 if the offeror is established and headquartered or incorporated and headquartered, in a country recognized as Tier 3 in the most recent United States Department of State's Trafficking in Persons Report, a certified copy of the offeror's policy against human trafficking must be submitted to the State of Alaska prior to contract award.

13.2 The most recent United States Department of State's Trafficking in Persons Report can be found at the following website: www.state.gov/g/tip/

13.3 Failure to comply with this requirement will cause the state to reject the bid or proposal as non-responsive, or cancel the contract.

13.4 This pertains to goods and services above \$50,000.00.

14.0 INDEMNIFICATION: The Contractor shall indemnify, hold harmless, and defend the contracting agency from and against any claim of, or liability for error, omission or negligent act of the Contractor under this agreement. The Contractor shall not be required to indemnify the contracting agency for a claim of, or liability for, the independent negligence of the contracting agency. If there is a claim of, or liability for, the joint negligent error or omission of the Contractor and the independent negligence of the Contracting agency, the indemnification and hold harmless obligation shall be apportioned on a comparative fault basis. "Contractor" and "Contracting agency", as used within this and the following article, include the employees, agents and other contractors who are directly responsible, respectively, to each. The term "independent negligence" is negligence other than in the Contracting agency's selection, administration, monitoring, or controlling of the Contractor and in approving or accepting the Contractor's work.

15.0 INSPECTIONS: Goods furnished under this contract are subject to inspection and test by the State at times and places determined by the State. If the State finds goods furnished to be incomplete or not in compliance with bid specifications, the State may reject the goods and require bidder to either correct them without charge or deliver them at a reduced price, which is equitable under the circumstances. If bidder is unable or refuses to correct such goods within a time deemed reasonable by the State, the State may cancel the order in whole or in part. Nothing in this paragraph shall adversely affect the State's rights as buyer, including all remedies and rights granted by Alaska statutes.

16.0 INSURANCE:

- 16.1 Without limiting Contractor's indemnification, it is agreed that Contractor shall purchase at its own expense and maintain in force at all times during the performance of services under this agreement the following policies of insurance. Where specific limits are shown, it is understood that they shall be the minimum acceptable limits. If the Contractor's policy contains higher limits, the state shall be entitled to coverage to the extent of such higher limits. Certificates of Insurance must be furnished to the Contracting Officer prior to beginning work and must provide for a 30-day prior notice of cancellation, nonrenewal or material change of conditions. Failure to furnish satisfactory evidence of insurance or lapse of the policy is a material breach of this contract and shall be grounds for termination of the Contractor's services. All insurance policies shall comply with, and be issued by insurers licensed to transact the business of insurance under AS 21.
- 16.2 Proof of insurance is required for the following:
- 16.2.1 Workers' Compensation Insurance: The Contractor shall provide and maintain, for all employees engaged in work under this contract, coverage as required by AS 23.30.045, and; where applicable, any other statutory obligations including but not limited to Federal U.S.L. & H. and Jones Act requirements. The policy must waive subrogation against the State.
- 16.2.2 Commercial General Liability Insurance: covering all business premises and operations used by the Contractor in the performance of services under this agreement with minimum coverage limits of \$300,000 combined single limit per occurrence.
- 16.2.3 Commercial Automobile Liability Insurance: covering all vehicles used by the Contractor in the performance of services under this agreement with minimum coverage limits of \$300,000 combined single limit per occurrence.
- 16.3 Failure to supply satisfactory proof of insurance within the time required will cause the State to declare the bidder nonresponsive and to reject the bid.

17.0 ITEM UPGRADES: The State reserves the right to accept upgrades to models on the basic contract when the upgrades improve the way the equipment operates or improve the accuracy of the equipment. Such upgraded items must be at the same price as the items in the basic contract.

18.0 NEW EQUIPMENT: Equipment offered in response to this ITB must be new equipment. New equipment means equipment that is currently in production by the manufacturer and is still the latest model, edition or version generally offered. The equipment must be warranted as new by the manufacturer and may not have been used for any purpose, other than display (not demonstration), prior to its sale to the State. The State will not accept remanufactured, used or reconditioned equipment, including used or reconditioned components or parts of. It is the contractor's responsibility to ensure that each piece of equipment delivered to the State complies with this requirement. A contract's failure to comply with this requirement will cause the State to seek remedies under breach of contract.

19.0 PAYMENT: Payment for agreements under \$500,000 for the undisputed purchase of

goods or services provided to a State agency will be made within 30 days of the receipt of a proper billing or the delivery of the goods or services to the location(s) specified in the agreement, whichever is later. A late payment is subject to 1.5% interest per month on the unpaid balance. Interest will not be paid if there is a dispute or if there is an agreement, which establishes a lower interest rate or precludes the charging of interest.

- 20.0 QUANTITIES:** The State reserves the right to reduce or increase the quantity of items ordered under any contract resulting from this Invitation to Bid.
- 21.0 SEVERABILITY:** If any provision of this contract is declared by a court to be illegal or in conflict with any law, the validity of the remaining terms and provisions shall not be affected.
- 22.0 SHIPPING DAMAGE:** The State will not accept or pay for damaged goods. The contractor must file all claims against the carrier(s) for damages incurred to items in transit from the point of origin to the ultimate destination. The State will provide the contractor with written notice when damaged goods are received.
- 23.0 STANDARD AND SPECIAL TERMS AND CONDITIONS:** The terms and conditions of this section are standard to State of Alaska, Department of Transportation and Public Facilities, Statewide Equipment Fleet contracts for the purchase of goods. There may also be other special terms and conditions in an Invitation to Bid or Request for Proposal which apply only to this contract. In the event of a conflict between the standard and special terms and conditions, the Special Terms and Conditions take precedence.
- 24.0 SUCCESSORS IN INTEREST:** This contract shall be binding upon successors and assigns.
- 25.0 SUITABLE MATERIALS:** All materials, supplies or equipment offered by a bidder shall be new, unused, of recent manufacture, and suitable for the manufacturer's intended purpose unless the specifications allow for used, rebuilt or remanufactured equipment.
- 26.0 TAXES:** Prices quoted in bids must be exclusive of federal, state, and local taxes. If the bidder believes that certain taxes are payable by the State, the bidder may list such taxes separately, directly below the bid price for the affected item. The State is exempt from Federal Excise Tax because articles purchased are for the exclusive use of the State of Alaska.
- 27.0 WARRANTY:** Unless otherwise stated, all equipment shall be new and current model and shall carry full factory warranties. Bidder warrants all goods delivered to be free from defects in labor, material and manufacture and to be in compliance with bid specifications. All implied or expressed warranty provisions of the Uniform Commercial Code apply. All warranties shall be for and benefit the State.

SECTION II

SPECIAL TERMS AND CONDITIONS

NOTE: This section will be used for Terms and Conditions that are "special" and/or unique to a particular ITB.

1.0 DELIVERY:

- 1.1 **Pre-delivery service:** Prior to delivery, each piece of equipment or attachment shall be serviced and inspected by the dealer or his agent. A certification of this inspection must include the following (as applicable to the type of equipment):
 - 1.1.1 Dealer and vehicle identification.
 - 1.1.2 Check-off of service and inspection performed including a list of all fluids including type weight and specification that are in the equipment as delivered for all fluid compartments.
 - 1.1.3 The vehicle's crankcase, differential and transmission, and other fluid compartments shall be filled to the manufacturer's recommended capacity.
 - 1.1.4 Fuel tank shall be filled to at least register a minimum $\frac{1}{4}$ full on the fuel gauge, unless restricted by the commercial carrier, when the vehicle arrives at the delivery location.
 - 1.1.5 The vehicle shall be clean and free from defects when delivered and should be ready for immediate and continued use upon delivery.
 - 1.1.6 Units delivered in an incomplete state, or which have deficiencies per the specification, are subject to the damage charges as noted in paragraph 4.0 below.
- 1.2 **Delivery Receipt:**
 - 1.2.1 A delivery receipt will be required for the delivered unit. The receipt must be filled out by the vendor, and acknowledged by state receiving personnel by signature and date of actual receipt of equipment. One copy of this delivery receipt is to be given to the state-receiving agency. The original shall accompany the vendor's invoice to support and properly identify the vehicle delivered.
 - 1.2.2 Vendors are cautioned and advised that such delivery forms or other receiving type documents will not in any way be construed to mean the state has formally and fully accepted unit(s) referenced thereon as complete and meeting every specification set forth. The Regional Equipment Manager is to be contacted regarding delivery coordination and contacts.
 - 1.2.3 Under no conditions will warranty documents be presented at time of delivery for signature. Only the Contracting Officer or designee may sign warranty documentation.

2.0 LINE SHEETS/BILL OF MATERIALS:

- 2.1 It is required within 30 days after delivery that the successful bidder provide a comprehensive listing of all components used to assemble the unit.
- 2.2 This includes any components installed by the manufacturer or any subcontractor or the successful bidder.
- 2.3 Information will include at a minimum, when available, make, model serial number on items such as engines, transmissions, axles, tires, bodies, plows, snow wings, belly blades, cranes, etc. The listings will be specific to each piece of equipment and will be provided on an individual CD for each unit delivered.
 - 2.3.1 On after-market items that are installed, part numbers with descriptions, such as, but not limited to hydraulic fittings, are to be provided.
- 2.4 A minimum of two (2) CD's per unit are to be provided and marked with the make, model, and last main numbers of the units serial number or State PO number.

3.0 F.O.B. POINT:

- 3.1 The F.O.B. point is the final destination as listed in Section V, Bid Schedule. Ownership of and title to the ordered items remains with the contractor until the items have been delivered to their final destination and are accepted by the State.

4.0 DAMAGES FOR LATE DELIVERY AND NON-CONFORMING GOODS:

- 4.1 Time is of the essence in this contract. The Bidder is expected to deliver goods that conform in all material respects to the contract specifications on or before the date provided therein, as may be amended by written agreement of the parties.
- 4.2 In the event that the equipment is delivered late or does not conform to the contract specifications, the State shall be entitled to offset against the Contract Price, as liquidated damages and not as a penalty, an amount equal to the cost of renting like equipment, multiplied by the number of calendar days elapsing between the delivery date provided in the bid schedule and the delivery date to the State. In the case of a 4WD Multi-Purpose Tractor of this class, the rental fee is determined to be **\$75.00** per day, per unit. The number of days for which liquidated damages shall apply shall include, in the case of non-conforming goods, the time reasonably necessary for the State to perform inspection.
- 4.3 These liquidated damages represent a reasonable estimate of amounts necessary to compensate the State for loss of use of the goods during the period in which the goods would have been available to the State if conforming goods had been timely delivered.

5.0 WARRANTY:

- 5.1 **Standard Warranty Package:** Unless otherwise stipulated by this ITB, the successful bidder will provide a three-year (36-month) full (100%) warranty.
 - 5.1.1 Full (100%) Parts and Labor Warranty Coverage of all components for three years (36-months), from the date the unit is placed in service.
 - 5.1.2 Warranty repairs shall take place at the vendor's authorized warranty service centers in **Anchorage, Fairbanks and Juneau**. Bidders are

required to have authorized warranty repair centers located in all three (3) locations as a minimum. All travel costs for warranty performed outside of these areas will be billed as follows.

- 5.1.2.1 Travel Labor Charge, as quoted in Section IV – Bid Price Schedule. Travel labor will only be reimbursed for the time the employee is traveling from a warranty service center to the in-service location and return.
- 5.1.2.2 Mileage Charge, from the warranty service center to the in-service location, as quoted in Section IV – Bid Price Schedule.
- 5.1.2.3 Meals are paid at actual and charges must be accompanied by receipts and are not to exceed the State authorized **\$60.00** per day.
- 5.1.2.4 Transportation, such as airfare (coach only), shall be reimbursed at actual and all charges are to be accompanied by a receipt/copy of the ticket.
- 5.1.2.5 Lodging shall be reimbursed at actual and shall not exceed \$100.00 per night unless no other lodging is available. Requests for reimbursement must be accompanied by a receipt.
- 5.1.2.6 Travel must be charged from the closest warranty service center to the in-service location unless otherwise approved by the Contract Administrator.
- 5.1.3 Full Warranty Coverage includes all cost of labor, parts, freight of parts or associated tools, transportation and travel in the **Anchorage, Fairbanks and Juneau** as a minimum (within a 10 mile radius), lubricants, miscellaneous cost, etc., to place the unit in like-new condition.
- 5.1.4 Should the manufacturer's standard warranty exceed the minimum State warranty requirements, the manufacturer's warranty will run in conjunction with and enhance the State's warranty, then continue for the remainder of its term.

5.2 **General Warranty Requirements for all Equipment:**

5.2.1 **Warranty Exceptions:**

- 5.2.1.1 For clarification, warranty does not apply to normal wear and tear or maintenance items, accident damages, misuse of equipment or failure to operate or maintain equipment as prescribed by vendor/manufacturer.

5.2.2 **Warranty on Attachments:** 1 year (12 months)

- 5.2.3 **In-Service Date:** Warranty on vehicles not placed in service immediately upon receipt because of time lag to construct body components and/or installation of special equipment, or due to seasonal usage or other delay, shall be warranted from the date the vehicle is placed in service. The receiving agency shall notify the vendor/manufacturer in writing of the

actual "in service" date. Notification of the requirement for delayed warranty will be provided on delivery orders whenever possible.

5.2.4 **Authorized Warranty Dealer (Contractor) and Subcontractor:** For the purpose of this bid, the contractor must meet the following applicable requirements:

5.2.4.1 Contractor (bidder) must:

5.2.4.1.1 be a manufacturer(s) authorized warranty service dealer for the unit, and;

5.2.4.1.2 have the capability of providing warranty servicing and repair work with an authorized warranty repair facility in Anchorage, Fairbanks, and Juneau, as a minimum.

5.2.4.2 Contractor, if appropriate, shall submit the name, address, Alaska business license of any subcontractor who will provide the warranty servicing and repair work referenced in paragraph 5.1 above. The Contractor must also provide contractual documentation with the subcontractor insuring the state that the subcontractor will provide complete contract performance on behalf of the contractor as set forth in this ITB and verification that the work provided will maintain manufacturer's warranty requirements.

5.2.4.2.1 Approval of all subcontractors must take place prior to the bid opening.

5.2.4.2.2 The use of a subcontractor does not exclude the provisions as noted in paragraphs 5.2.4.1, and subsequent paragraphs, as requirements to the contractor.

5.2.5 **Warranty Claims:**

5.2.5.1 Warranty will be provided at the unit's assigned (in-service) location. Because of the remote location of some equipment it is not always practical to deliver equipment to authorized warranty repair facilities. In these cases, the vendor may perform warranty work at the state's location or, the State of Alaska, at its discretion, reserves the right to perform the warranty work and be reimbursed by the vendor.

5.2.5.2 The State of Alaska has established a warranty procedure whereby the vendor is to be notified via letter, email, fax, etc. that warranty work needs to be performed. If time is of the essence, a telephone call confirmed by one of the above written procedures may be utilized. The vendor must notify the state immediately that it will begin to perform the warranty work at the equipment location within 48 hours from receipt of written notification. The State may, at its discretion, proceed to make warranty repairs with its own work force in the case of an

emergency situation or to preclude excessive downtime (greater than 48 hours).

5.2.5.3 Failure to notify the State, that the vendor intends to begin to perform warranty work promptly under this paragraph, by the end of the business day following the states notification that work is required to be performed, is considered a contractual breach.

5.2.6 The vendor will be invoiced for required warranty work performed by the state. The shop rate to be charged for warranty work performed by the state will be \$79.00 per hour. Labor hours to be charged will be in accordance with appropriate flat rate manuals. If flat rate manuals do not cover the labor operation, actual repair time will be used.

5.2.7 Factory Recall:

5.2.7.1 Nationwide factory recall or product update programs are the responsibility of the vendor and/or manufacturer. The State will attempt to bring affected equipment to an authorized repair facility. However, because of the remoteness of some equipment this is not always practicable or economical. In such cases, factory recall and modification work will be handled the same as warranty work. Factory recall notices sent to the state should, in addition to serial number, include model, year, and dealer from who purchased.

5.2.8 **Hazardous Material:**

5.2.8.1 Due to concerns about liability resulting from hazardous materials being left at the work site on State of Alaska property, effective immediately no vendors will be allowed to use the State of Alaska rural airport facilities to perform warranty work unless they agree and sign a letter of intent stating that all waste products including oils, coolant and garbage will be removed from the work site. Vendors should note that in some village locations other suitable facilities might be available for rent from local residents or village authority.

6.0 REPAIR ORDERS AND DOCUMENTATION:

6.1 Any work performed by the contractor or approved subcontractor, whether warranty or any other work on a piece of equipment purchased under this ITB, will require a copy of the repair order, any invoices showing parts and commodities including oils and types used.

7.0 PUBLICATIONS:

7.1 Publications are to be received by the State of Alaska no later than 10 days after receipt of the unit. Custom manuals may be delivered no later than 90 days after receipt of the unit. Delivery will not be considered complete until the publications for each unit have been received by the State of Alaska. Note: Publications, when required, will be ordered on the same Purchase Order as the unit itself.

- 7.1.1 All manuals are to be pre-assembled in factory binders prior to delivery.
- 7.1.2 Internet access (lifetime of the unit) which is accessible from more than one (1) location in addition to paper for service and parts manuals is acceptable.

7.2 Service Manuals:

- 7.2.1 Complete set(s) (paper manuals) to include applicable information covering prime unit and attachments:
- 7.2.2 Body, chassis, and electrical
- 7.2.3 Engine, transmission, and differential(s) (service and rebuild)
- 7.2.4 Electrical and Vacuum troubleshooting
- 7.2.5 Wiring diagrams
- 7.2.6 Service specifications
- 7.2.7 Engine/emission diagnosis

7.3 Parts Manuals:

- 7.3.1 Complete set(s) (paper manuals) including all updates. If updates are not provided during the one-year warranty period, the State may order them from the manufacturer and bill the contractor for the full cost, including shipping.
- 7.3.2 Parts manuals are to be customized by serial number.

7.4 Operator's Manuals: Complete set(s) to include prime unit and attachments.

7.5 Quantities: As per Section V – Bid Price Schedule.

7.6 Manuals: To be delivered to, and receipt signed by person(s) as noted on the Purchase Order.

7.7 Service Bulletins, Etc.: The successful bidder must provide appropriate service bulletins, technical support bulletins, service letters, product support bulletins, and/or any other information type notifications that are sent out to the vendor or used by the manufacturer in the maintenance and report of the vehicle, equipment or attachments being provided. The intent of this clause is that the State of Alaska be provided notification of any and all changes or improvements that may affect the maintenance, reliability, longevity, and safety of our equipment. This information will be provided as soon as possible to person(s) as noted on the Purchase Order.

8.0 STATEMENT OF ORIGIN: The bidder will be required to furnish a Manufacturer's Statement of Origin for Automotive or Non-Automotive rolling stock for each unit. All such documents shall be forwarded to:

DOT&PF, HQ State Equipment Fleet
2200 E. 42nd Avenue Room #311
Anchorage, Alaska 99508

9.0 INSPECTIONS:

- 9.1 The State's inspection of all materials and equipment upon delivery is for the sole purpose of identification. Such inspection shall not be construed as final or as acceptance of the materials or equipment if materials or equipment do not conform to Contract requirements. If there are any apparent defects in the materials or equipment at the time of delivery, the State will promptly notify the Contractor thereof. Without limiting any other rights of the State, The State at its option, may require the Contractor to:
 - 9.1.1 Repair or replace at Contractor's expense, any or all of the damaged goods,
 - 9.1.2 refund the price of any or all of the damaged goods, or
 - 9.1.3 accept the return of any or all of the damaged goods.
- 9.2 Costs of remedying all defects, indirect and consequential costs of correcting same, and/or removing or replacing any or all of the defective materials or equipment will be charged against the Bidder.

10.0 PRICE:

- 10.1 **Price Guarantee:** The Contractor is responsible to maintain prices under the contract firm for 90 days after bid opening. All price increases or decreases must remain firm for the following 90 days.
- 10.2 **NO RETROACTIVE PRICE INCREASES WILL BE ACCEPTED.**
- 10.3 Price adjustments, increases or decreases, for subsequent orders, may be made by providing the Contracting Officer satisfactory evidence that all of the following conditions exist:
 - 10.3.1 The increase is a result of the increased cost at the manufacturer's level and not costs under the contractor's control, and that;
 - 10.3.1.1 The increase will not produce a higher profit margin for the contractor than that on the original contract, and that;
 - 10.3.1.2 The increase affects only the item(s) that are clearly identified by the contractor.
 - 10.3.1.3 Satisfactory forms of the evidence of the above facts may include a certified invoice from the manufacturer, or an affidavit from an independent professional price-tracking firm that is recognized by the industry as reputable and knowledgeable. The contractor must be able to show the difference between the prior year's price and the current difference in the price being requested.
- 10.4 **Price Decreases:** During the period of the contract, the Contractor must pass on to the state all price decreases, such as fleet rebates. A Contractor's failure to adhere strictly and faithfully to this clause will be considered a material breach of contract. The state reserves the right to cancel the contract if the contractor fails to properly perform the duties set out herein.

11.0 COOPERATIVE PURCHASING:

- 11.1 All requests to cooperatively purchase, by qualified political subdivisions, from the resulting contract shall be approved by the Contracting Officer.
- 11.2 At no time may the contractor change the terms and conditions, alter the price to another entity, which differs from the contractual price, nor charge undisclosed administrative fees to allow cooperative purchasing.
- 11.3 The Contractor shall charge, and subsequently reimburse to the State after receipt and payment by purchaser, a users fee of **2% or \$1,000.00**, whichever is less, for each unit ordered by a qualifying political subdivision. Any administrative fee resulting to the Contractor in fulfillment of this requirement must be included in the bid price of the offered unit.

12.0 MANUFACTURER'S REBATE (INCENTIVES): In any circumstance during or prior to completion of the contract, whereupon the State of Alaska becomes eligible to receive a rebate for any vehicle purchased under this contract, it shall be the BIDDER'S responsibility to inform the Contracting officer in writing and to advise the procedures for obtaining such rebates.

13.0 REPLACEMENT PARTS:

- 13.1 The State of Alaska shall expect the dealer or manufacturer to provide replacement wear parts at their Anchorage (as a minimum Alaska location) authorized warranty facility within seven (7) days of order. All other parts must be available within ten (10) working days.
- 13.2 Back order procedures: Back orders are acceptable; however, the ordering shop shall be apprised at time of original orders as to the expected delay in delivery.
- 13.3 Warranty: All products supplied by the contractor shall be warranted against defects in materials and workmanship for a minimum of 90 days, commencing at the time of installation as long as the installation is within 12 months of purchase. The cost of any defective product and the labor required to replace the defective product shall be the obligation of the contractor.
 - 13.3.1 If the manufacturer's warranty exceeds the stated warranty then manufacturer's warranty supersedes.
 - 13.3.2 Parts Return: Within 12 months of purchase, the State is to be allowed to return new, parts with full refund, less shipping charges.
 - 13.3.3 Invoicing: Full description of item is required on all invoices, packing lists and billings.

14.0 ADDITIONS OR DELETIONS: The State reserves the right to add or delete items, agencies or locations as determined to be in the best interest of the State. Added items, agencies or locations will be related to those on contract and will not represent a significant increase or decrease in size or scope of the contract. Such additions or deletions will be documented via mutual agreement, will be at prices consistent with the original bid price margins, and will be evidenced by issuance of a written contract change notice from the Contracting officer.

15.0 CONTRACT ADMINISTRATION: The administration of this contract, including any/all changes, is the responsibility of the Contracting Officer, HQ State Equipment Fleet.

16.0 PROPRIETARY INFORMATION AND STATEMENTS OF CONFIDENTIALITY:

- 16.1 Except as set forth in this provision, all information in all bids will be made public under AS 36.30.530 not later than the time of issuance of a notice of intent to award.
- 16.2 If the offeror submits information considered by it to constitute a trade secret or proprietary data, such information may be expressly designated as such, and must be accompanied by the offeror's certification that (1) the information has consistently been maintained by its owner as a trade secret or as proprietary information, (2) the owner of the information has taken due care to protect it from release to non-privileged persons, and (3) to the best knowledge of the offeror, the information has not lost its status as trade secret or proprietary information, whether by lack of diligent protection, release to any non-privileged person or otherwise.
- 16.3 **Absence of such certification, any claim of confidentiality will be ignored, and the bidder may not hold any reasonable expectation of confidentiality.**
- 16.4 Any information so certified will be held confidential so long as the contracting officer concurs that it constitutes a trade secret or proprietary data, and deems it not critical to determination of the price, quantity, or delivery terms bid, or the responsiveness of the bid.
- 16.5 By submission of a bid, the offeror consents to the contracting officer's exercise of reasonable judgment as to concurrence with any assertion of confidentiality, and waives any and all claims for release of information that the contracting officer reasonably deems not confidential notwithstanding a certified assertion of confidentiality.
- 16.6 A certified assertion of confidentiality in which the contracting officer concurs, with respect to information the contracting officer deems critical to determination of the price, quantity, or delivery terms bid, or the responsiveness of the bid, will cause the bid to be rejected as a non-responsive bid.

SECTION III

BID PRICE SCHEDULE

LOT #1:

Item #	Unit	Description	\$ Amount
1a	1 ea.	Four-Wheel Drive Articulating Multi-Purpose Municipal Carrier/Tractor with Attachment Options Warranty as per Section III – Special Terms and Conditions. Per specification # 722-Trac contained herein. Year, Make & Model Offered: <u>2008 TRACKLESS MT6</u>	\$100,934.00
1b	1 ea.	OPTIONAL ITEM Alaskan Option Kit (Per Spec Item 2.10)	\$1,833.00
1c	1 ea,	OPTIONAL ITEM Air Conditioning (Per Spec Item 5.5)	\$3,637.00
1d	1 ea.	OPTIONAL ITEM 51 Inch Snow Blower Attachment (Per Spec Item 7.0)	\$16,013.00
1e	1 ea.	OPTIONAL ITEM Loading Chute for 51 Inch Snow Blower (Per Spec Item 7.13)	\$1,038.00
1f	1 ea.	OPTIONAL ITEM 60 Inch Snow Blower Attachment (Per Spec Item 8.0)	\$17,128.00
1g	1 ea.	OPTIONAL ITEM Loading Chute for 60 Inch Snow Blower (Per Spec Item 8.13)	\$1,038.00
1h	1 ea.	OPTIONAL ITEM 79 Inch Snow Blower Attachment (Per Spec Item 9.0)	\$19,138.00
1i	1 ea.	OPTIONAL ITEM Loading Chute for 79 Inch Snow Blower (Per Spec Item 9.13)	\$1,038.00

1j	1 ea.	OPTIONAL ITEM 60 inch Broom Attachment (Per Spec Item 10.0)	\$7,739.00
1k	1 ea.	OPTIONAL ITEM 72 inch Broom Attachment (Per Spec Item 11.0)	\$8,210.00
1L	1 ea.	OPTIONAL ITEM 84 inch Broom Attachment (Per Spec Item 12.0)	\$8,828.00
1m	1 ea.	OPTIONAL ITEM 96 inch Broom Attachment (Per Spec Item 13.0)	\$10,793.00
1n	1 ea.	OPTIONAL ITEM 60 inch Plow Attachment (Per Spec Item 14.0)	\$4,155.00
1o	1 ea.	OPTIONAL ITEM 72 inch Plow Attachment (Per Spec Item 15.0)	\$4,280.00
1p	1 ea.	OPTIONAL ITEM 84 inch Plow Attachment (Per Spec Item 16.0)	\$4,801.00
1q	1 ea.	OPTIONAL ITEM 96 inch Plow Attachment (Per Spec Item 17.0)	\$4,939.00
1r	1 ea.	OPTIONAL ITEM 60 inch Multi-Directional Plow Attachment (Per Spec Item 18.0)	\$5,623.00
1s	1 ea.	OPTIONAL ITEM Infrared Asphalt Heater & Generator Attachment (Per Spec Item 19.0)	\$29,888.00
1t	1 ea.	OPTIONAL ITEM Boom Mounted Flail Mower Attachment (Per Spec Item 20.0)	\$29,903.00
1u	1 ea.	OPTIONAL ITEM Rear Mounted Salt/Sand Spreader Attachment (Per Spec Item 21.0)	\$5,883.00
1v	1 ea.	OPTIONAL ITEM Training in Anchorage (Per Spec Item 24.0)	\$1,705.00

Section III – Bid Price Schedule

1w	1 ea.	OPTIONAL ITEM Training in Fairbanks (Per Spec Item 24.0)	\$2,727.00
1x	1 ea.	OPTIONAL ITEM Training in Juneau (Per Spec Item 24.0)	\$3,835.00
1y	1 ea.	OPTIONAL ITEM Publications (per set (Per Spec Item 25.6)	\$114.00

TOTAL BID PRICE (1a through 1y) \$295,220.00

FOB Point: Dockside, Seattle/Tacoma Area

NOTE: Final shipment to in-service locations as annotated on the Purchase or Delivery Orders will be arranged and pre-paid by the contractor. The actual cost will be invoiced as a separate line item on the invoice for full reimbursement by the State. Shipping arrangements will always be in the best interest of the State and any extraordinary costs or circumstances pre-approved by the Contracting Officer prior to shipment. Refer to Section II – Special Terms and Conditions, paragraph 3.0.

Required Operators Manuals and Service Bulletins to be delivered to persons as listed on the Purchase Order.

Required Delivery: Not later than 180 days ARO unless barge schedules prevent such delivery.

Offered Delivered Time: **180** Days ARO.

SECTION IV - SPECIFICATIONS

Specification #722-Trac
Four-Wheel Drive Articulated Multi-Purpose Municipal Carrier/Tractor
With Attachment Options
December 26, 2007

GENERAL SPECIFICATION:

It is the purpose of this specification to describe a new, and of the manufacturer's latest current year production model and design, four-wheel drive articulated multi-purpose tractor meeting the minimum performance, safety, and standardization requirements of the State of Alaska's State Equipment Fleet for blowing snow from sidewalks and bike trails and other attachments as described herein.

These specifications are intended to assure all proposals submitted will cover units of similar design and capacity.

Unit is to include all factory standard equipment, unless specified otherwise.

APPLICATION:

The snow removal unit covered by this specification is intended for use in removing and dispersing snow from sidewalks and bike trails. Unit will be subject to varying terrain and weather conditions to minus 40 degrees Fahrenheit.

DOCUMENTATION REQUIRED:

A basic manufacturer's product brochure(s) describing the unit being bid is to be provided.

Manufacturer of unit must have at least ten (10) North American customers. Engineer prototypes or production prototypes will not be accepted. Models manufactured outside of North America will require proof of parts support ability. Proof of parts support ability to be provided with the bid package.

In addition, specifications marked with an asterisk (*) require supporting documentation, which indicates specifically what the bidder intends to supply in regard to said items and/or how specifications will be met.

TYPICAL UNIT:

TRACKLESS MT Series VI or equal, provided all of the following minimum specifications are met.

1.0 POWER TRAIN:

1.1 Engine:

- 1.1.1 (*) Diesel, liquid cooled, wet sleeved, four (4) cycle, minimum 3.9 liter (165 cubic inch) displacement, minimum 110 gross horsepower, minimum 293 pound foot peak torque, not to exceed 2,500 RPM. **Cummins 4.5 Liter, 275 cu.in liquid cooled, 110 HP, 360 lb/ft torque @ 1500 RPM, Tier 3 Certified.**

- 1.1.2 Engine governor will be of the correct type to control and limit engine speeds as recommended by the engine, driveline, and power train component manufacturers, for its intended use in this vehicle.
- 1.1.3 Engine shall meet emission standards applicable at time of delivery.
- 1.2 Cooling System:
 - 1.2.1 Permanent type antifreeze to minus 60 degrees Fahrenheit.
 - 1.2.2 Drain cock(s) will be provided to completely drain engine coolant system.
- 1.3 Engine Cold Starting Aids:
 - 1.3.1 (*) To include a fully automatic: ether system or glow plugs or air grid type heater. **Air grid type heater**
 - 1.3.1.1 If ether system, to include engine temperature sensor switch (or info from engine's computer) and be wired through starter button or keyed ignition.
 - 1.3.2 Engine Block Heater: Immersion type, highest wattage available, 110 volt AC (OEM if available).
- 1.4 Air Intake:
 - 1.4.1 To include dry type air cleaner with a pre-cleaner.
 - 1.4.2 To include a dash mounted air filter restriction indicator.
- 1.5 Exhaust System:
 - 1.5.1 Exhaust system to be designed to prevent rain, snow, or slush from entering exhaust system
 - 1.5.2 Mufflers and pipe will be designed to minimize noise without causing excessive backpressure.
- 1.6 Fuel System:
 - 1.6.1 (*) Fuel tank capacity or 13.7 gallons minimum. **28 Gallons**
 - 1.6.2 Fuel system to include spin-on fuel filter(s).
 - 1.6.3 Fuel filtration to be mounted in protected and convenient location.
- 1.7 Oil filtration to be spin-on type, mounted in protected and convenient location.
- 1.8 Shut Down Systems:
 - 1.8.1 High engine coolant temperature.
 - 1.8.2 Low engine oil pressure.
- 1.9 Engine Housing:
 - 1.9.1 The housing for the engine is to be fabricated from sheet metal not less than 14 gauge with not less than 18 gauge door panels.
 - 1.9.2 The side panels are capable of being fully opened to permit unobstructed access to engine and drive train components.

- 1.9.3 Provisions are made to allow combustion air and air for engine fan to enter the engine compartment when side panels are closed.

2.0 DRIVE TRAIN:

- 2.1 (*) Transmission: Hydrostatic, *EATON* Series 33 or equivalent, high and low range in conjunction with infinitely variable hydrostatic transmission. **Sunstrand 90 Series hydrostatic transmission.**
- 2.2 Transfer Case: Manufacturer's standard two (2) speed.
- 2.3 To include front PTO capability for included or future attachments, such as a snow blower.
- 2.4 (*) Ground Speed: Variable with minimum 19 MPH in high range and minimum eight (8) MPH in low range. **0 to 19 MPH in high gear and 0 to 8 in low gear.**
- 2.5 Axles:
- 2.5.1 (*) To be *DANA* Model 60 or equivalent. **Dana 60 axles**
- 2.5.2 (*) Capacity: Each axle to be rated at 5,900 pounds, minimum. **Each axle is rated at 5,900 pounds**
- 2.5.3 (*) Differentials: To include Track-Loc, front and rear. **Trac-Loc front and rear differentials.**
- 2.6 Steering: Articulated hydraulic steering.
- 2.7 Frame: Fabricated steel for articulation and oscillation.
- 2.8 Brakes:
- 2.8.1 Minimum 12 x 2½ inch. Hydraulic on all four (4) wheels.
- 2.8.2 Parking:
- 2.8.2.1 Mechanical on front.
- 2.8.2.2 To include a red flashing "ON" indicator light or an audible warning buzzer when parking brake is engaged.
- 2.9 Wheels and Tires:
- 2.9.1 Wheels: Heavy-duty steel, 16½ (16.5) inch, eight (8) hole, disc type.
- 2.9.2 Tires:
- 2.9.2.1 Traction grip 10x16.5 (8 ply rated), minimum.
- 2.9.2.2 To include spare tire mounted on wheel. Spare to be shipped loose.
- 2.9.3 Unit is to be equipped with 100 pound wheel weights (per wheel) as required by the manufacturer to ensure stability of unit when using any of the attachments specified. Should different tires and wheel be required by the manufacturer for safe and proper use of any attachment, the vendor must include those tires as part of the unit.
- 2.10 **To include an "ALASKAN OPTION KIT"**

- 2.10.1 This kit, when ordered, will require the unit to be used with tire chains on all four (4) wheels.
 - 2.10.1.1 Tire chains shall be *PEWAG* p/n 2119SL2.
- 2.10.2 It may require that the unit be shipped with additional set of slightly smaller tires, minimum 8.75 x 16.5, load rated and mounted onto their own same model and design steel wheels that the standard 10 x 16.5 grip tires come with.
- 2.10.3 It may also require the chassis to be raised for adequate chain clearance.
- 2.10.4 It may also require additional mounting brackets be supplied to operate the snow blower and other attachments.
- 2.10.5 The standard tires and wheels are also to be supplied along with the special tires and wheels.

3.0 PTO (POWER TAKE OFF):

- 3.1 To include live splined shaft PTO to front of unit with *TWIN-DISC* multi-plate wet clutch and full load engagement independent of tractor drive.
- 3.2 (*) PTO speed of minimum 540 RPM to rotate in direction of travel.

540 PTO RPM

4.0 ELECTRICAL SYSTEM:

- 4.1 12-volt negative ground system.
- 4.2 Alternator, minimum 95 AMPS, water resistant.
- 4.3 Master Electrical Switch:
 - 4.3.1 Single high-ampere master switch to cut off power source from battery to the ground and remainder of electrical system; *BUSSMAN #15250-1* or *COLE HERSEE #M284-02*.
 - 4.3.2 Located where easily accessible, but not ordinarily visible to persons unfamiliar with unit.
- 4.4 Battery:
 - 4.4.1 To be maintenance free, group 31, with minimum of 850 CCA at zero degrees Fahrenheit, minimum.
 - 4.4.2 To be enclosed to prevent build up of snow on and around the battery terminals, but be easily accessible.
- 4.5 All electrical control switches to be direct current rated.
- 4.6 Lighting System:
 - 4.6.1 Headlights: Two (2) each, halogen, adjustable, rubber mounted, located top forward corners of cab.
 - 4.6.2 Backup light.
 - 4.6.3 Stop, turn, tail, and hazard.
 - 4.6.4 Interior light.

- 4.6.5 Dash lighting.
- 4.6.6 Work Lights:
 - 4.6.6.1 Two (2) each front, minimum 35 watt, halogen, adjustable, rubber mounted, located top forward corners of cab.
 - 4.6.6.2 Two (2) each rear, minimum 35 watt, halogen, adjustable, rubber mounted, located top rear corners of cab.
 - 4.6.6.3 To include separate control box mounted switch.
- 4.6.7 Strobe Lights:
 - 4.6.7.1 Two (2) each *WHELEN* Model L31H Super-LED strobe lights.
 - 4.6.7.2 Left lens to be amber in color.
 - 4.6.7.3 Right lens to be blue in color.
 - 4.6.7.4 One (1) switch for both lights.
 - 4.6.7.5 System to include a raise lower feature to allow the lights to be easily seen from 360 degrees or to be easily lowered to keep the overall height of the vehicle to a minimum. If possible, one (1) system to be used to raise/lower each light.
 - 4.6.7.6 To include branch guards.
- 4.7 Backup Alarm: Electronic, self-adjusting sound level, *ACORN PRODUCTS* Model 1D-112AA, *ECCO* Models S901 or SA914 or SA917, *PRECO* Model Preco-Matic 1040, *STAR* Model Starmatic 63-000, *TARGET TECH* Model 210504, *VELVAC* Model 697066 or *WARN* Model Reactor 2100504, located on rear of unit, as per manufacturer's recommendations.
- 4.8 All gauges to be lighted from behind.
- 4.9 All switch identifications to be lighted.
- 4.10 All switches, gauges and controls to be properly identified.
 - 4.10.1 *DYMO* type tape labels are not acceptable.
 - 4.10.2 Stick-on type labels are not acceptable, however labels with OEM part numbers that are parts manual listed are acceptable.
- 4.11 Toggle switches, if provided, controlling electrical components to be metal. Plastic is not acceptable. Rocker arm type switches may be plastic or metal.
- 4.12 Wiring:
 - 4.12.1 All wiring shall be color-coded or continuously numbered every 18 inches minimum.
 - 4.12.2 Located for maximum protection from snow and ice build-up, grease, oil, fuel, and heat from engine and components.
 - 4.12.3 Routing through structural members to be protected by grommets.
 - 4.12.4 To be secured by clips at intervals to prevent rubbing or chafing due to movement.

- 4.12.5 All applicable junction boxes, light housings, etc. to be constructed of corrosion proof material.
- 4.12.6 All connectors to be corrosion resistant and water proof.
 - 4.12.6.1 Thermoseal and weather-pack type connectors are acceptable.
 - 4.12.6.2 Spade, Scotchlok, and bullet type connectors are not acceptable.
- 4.12.7 Non-Factory Wiring:
 - 4.12.7.1 All dealer/vendor installed items, which require connecting into the vehicle's electrical system shall be done using an OEM factory modified wiring kit whenever possible. All non-factory wire connections (splices, connectors, etc.) shall be soldered and shrink tube insulated with adhesive/metable sealant, thick wall polyolefin shrink tubing (3M EPS-300 or equal). No non-factory crimp connections allowed. No cutting or splicing into the factory wiring harnesses allowed. All electrical connectors shall have dielectric grease applied to terminals to help reduce corrosion.
 - 4.12.7.2 All accessories (strobe lights, operator controls. Light bar, etc. shall be wired through a 12-volt DC constant duty solenoid and controlled by bus bar mounted and permanently labeled auto-resetting circuit breakers. The solenoid shall be wired to the key switch.
 - 4.12.7.3 All non-factory wiring shall be encased in a totally sealed wiring harness (no plastic split loom) to help prevent corrosion from magnesium chloride or urea. The wiring harness shall be well secured to the truck with neoprene aircraft stainless steel tubing clamps. Rubber grommets shall be used at all areas where the wiring passes through areas that could damage the wiring.

5.0 CAB:

- 5.1 All steel construction.
- 5.2 ROPS to be certified to SAE J1040C.
- 5.3 To be pressurized and insulated with interior temperature and sound absorbing lining which provides for noise level of not more than 80 dB inside the cab.
- 5.4 Heater and Defroster:
 - 5.4.1 Pressurized heater/defroster system with 2-speed heater and ventilation fan.
 - 5.4.1.1 All inlet air to be filtered with a replaceable or reusable filter.
 - 5.4.2 (*) Heater Output: 22,000 BTU minimum. **22,000 BTU heater output.**
 - 5.4.3 (*) Air Flow: 420 CFM minimum. **420 CFM airflow.**
 - 5.4.4 Air flow shall keep all windows clear of moisture during winter use. Caged defroster fans may be required.

5.5 **Air Conditioning**

5.5.1 Minimum 22,500 BTU.

5.5.2 Fan: Three (3) speed fan.

5.5.3 Roof mounting is acceptable. To include brush guarding.

5.6 Doors, left and right, to include sliding windows and door locks.

5.7 Steering Wheel: To include tilt feature.

5.8 Seat:

5.8.1 Air suspension type with lumbar support.

5.8.2 To include full adjustment (weight, height, distance and tilt).

5.8.3 To include seat belt.

5.8.4 To include an internally mounted operator safety switch in seat bottom cushion that stops the engine and will not allow starting of the engine, if the operator is not seated.

5.9 Glass:

5.9.1 To include safety glass, front sides and rear.

5.9.2 Side windows to be roll up/down or sliding.

5.10 Windshield Wiper System:

5.10.1 Front Windshield: Two (2) speed pantograph wiper with washer system.

5.10.2 Rear Window: Two (2) speed wiper with washer system.

5.11 Mirrors:

5.11.1 Inside rear view mirror.

5.11.2 Left and right outside rear view mirrors to be swing-away style.

5.12 Hydraulic functions shall not include exposed hydraulic fittings or lines within the cab.

5.13 Radio: AM/FM with CD player.

5.14 Instrumentation and Gauges:

5.14.1 Hour Meter: *HOBBS* type, running engine activated. Dash area mounted.

5.14.2 Any and all gauges that show pressure, temperature, etc., are to be in U.S.A. measurements such as PSI, Fahrenheit, etc.

5.14.3 Engine start and stop, keyed ignition.

5.14.4 Engine oil pressure gauge.

5.14.5 Low engine oil pressure warning light or audible alarm.

5.14.6 Engine coolant temperature gauge.

5.14.7 High engine coolant temperature warning light or audible alarm.

5.14.8 Low engine coolant level warning light or audible alarm.

- 5.14.9 Voltmeter gauge.
- 5.14.10 Alternator malfunction light or audible alarm.
- 5.14.11 Hydraulic oil temperature gauge.
- 5.14.12 High hydraulic temperature warning light or audible alarm.
- 5.14.13 Low hydraulic level warning light or audible alarm.
- 5.14.14 Fuel Gauge.
- 5.14.15 Engine tachometer.
- 5.14.16 Engine speed control, electric actuated, variable in 100-RPM increments, minimum. Idle to full throttle is not acceptable.
- 5.14.17 Work lights switch.
- 5.14.18 Test lamp (warning light[s]) switch.

6.0 HYDROSTATIC SYSTEM:

- 6.1 The entire hydraulic system shall be designed to exceed the performance and capacity of the intended usage.
 - 6.1.1 Minimum flow rate will be determined by equipment manufacturer, who must ensure sufficient flow to permit proper operation of machine and all attachments specified later in this specification.
 - 6.1.2 No hydraulic functions will be compromised by activation of another hydraulic function.
- 6.2 (*) Hydraulic Pump: Gear or piston type, minimum 18 GPM, driven directly by the engine. To be USA manufactured with local parts availability in Anchorage at a minimum. **U.S. Manufactured hydraulic pump with 18 GPM output.**
 - 6.2.1 (*) An additional pump, gear or piston type, minimum 12 GPM will be required for included or future attachments, such as snow blowers or brooms. To be USA manufactured with local parts availability in Anchorage at a minimum. **Optional 12 GPM pump included.**
- 6.3 Hydraulic Reservoir:
 - 6.3.1 Capacity: To be minimum four (4) gallons.
 - 6.3.1.1 Some attachments may require additional capacity.
 - 6.3.2 Filter: To be spin-on or in-the-tank design. To include filter restriction indicator.
 - 6.3.3 Oil level sight gauge to be easily viewed.
- 6.4 Quick couplers are to be included for all applicable attachments.

7.0 51 INCH SNOW BLOWER ATTACHMENT:

- 7.1 Front mounted.
- 7.2 To be SNOQUIP Model CDXX51 built for operating with the intended carrier.

- 7.3 The rotary snow blower first stage cutter/reel drums and the second stage casting impeller are to be PTO driven.
- 7.4 Hydraulics for lift, tilt, chute rotation, and tip deflector.
 - 7.4.1 Hose and fittings to match host carrier and be quick disconnect type with tethered plugs/caps.
 - 7.4.2 Hydraulic motor(s) used are to be USA manufactured with local parts availability in Anchorage or Fairbanks.
- 7.5 All function controls to be inside the cab with exception to chute tilt.
- 7.6 Frame shall be designed and fabricated using structural steel. Steel shall be new. Salvage or used steel shall not be accepted.
- 7.7 First Stage Cutter Ribbon/Reel Configuration:
 - 7.7.1 (*) Cutting Width: 51 inches minimum.
 - 7.7.2 (*) Opening Height: 39 inches minimum.
 - 7.7.3 (*) Cutter ribbon/reel(s) (first stage) required to feed impeller fan (second stage).
 - 7.7.4 (*) Cutter Ribbon Diameter: 28 inches minimum.
 - 7.7.5 The ribbons/reels (cutter blades) shall have serrated leading edges and shall be 5/16 (0.312) inch thick, minimum. These ribbons shall be made from 400 Brinell abrasion resistant plate steel.
 - 7.7.6 First stage cutter ribbons are to be center gear driven. Chain drive is not acceptable.
 - 7.7.7 Shear bolts, easily accessed are to protect ribbons.
- 7.8 Impeller Fan Configuration:
 - 7.8.1 (*) Impeller Housing Depth: 11 inches minimum.
 - 7.8.2 (*) Impeller fan diameter, minimum 28 inches.
 - 7.8.3 Paddles:
 - 7.8.3.1 Minimum of five (5) paddles.
 - 7.8.3.2 Rubber fan blade tips are not acceptable.
- 7.9 Chute:
 - 7.9.1 (*) To have a maximum height of 87 inches.
 - 7.9.2 The chute shall rotate minimum 250 degrees with a hydraulic motor and heavy-duty UHMW bearing system (wire or cable is not acceptable).
 - 7.9.3 Chute to include easy fold-down feature for ease of clearing clogged snow.
- 7.10 Skid/Wear Shoes:
 - 7.10.1 **Carbide or hardened steel**, located rear of the cutting edge.

- 7.10.1.1 To include replaceable, bolt-on, skid/wear shoes, for ground contact.
- 7.10.1.2 Surface area, minimum 30 square inches (each shoe), to facilitate leveling of head in poor visibility and to help avoid digging into gravel or other surfaces.
- 7.10.2 Forward and rear edges of shoes to be turned up to help avoid digging into gravel or other surfaces.
- 7.10.3 **SPARES** Skid/Wear Shoes: To include one (1) each additional set (front and rear) of skid/wear shoes, with hardware (nuts, bolts, etc.).
- 7.11 Cutting Edge:
 - 7.11.1 One (1) piece design, ½ (0.5) x four (4) inch, 1090 plow steel or equivalent.
 - 7.11.2 **SPARE** Cutting Edge: To include one (1) additional cutting edge, with hardware (nuts, plow bolts, etc.).
- 7.12 (*) Weight: 1300 pounds (+/- 200 pounds). **1,350 pounds**
- 7.13 **Loading Chute:**
 - 7.13.1 For the 51 inch wide snow blower.
 - 7.13.2 In lieu of the standard chute.
 - 7.13.3 To include the same hydraulics for chute rotation and tip deflector.
 - 7.13.4 (*) To provide a loading height of 117 inches (9'9"). When ordering the loading chute, the tilt feature for ease of clearing clogged snow is not available.

8.0 60 INCH SNOW BLOWER ATTACHMENT:

- 8.1 Front mounted.
- 8.2 To be *SNOQUIP* Model XX60 built for operating with the intended carrier.
- 8.3 The rotary snow blower first stage cutter/reel drums and the second stage casting impeller are to be PTO driven.
- 8.4 Hydraulics for lift, tilt, chute rotation, and tip deflector.
 - 8.4.1 Hose and fittings to match host carrier and be quick disconnect type with tethered plugs/caps.
 - 8.4.2 Hydraulic pumps and motor(s) used are to be USA manufactured with local parts availability in Anchorage or Fairbanks.
- 8.5 All function controls to be inside the cab with exception to chute tilt.
- 8.6 Frame shall be designed and fabricated using structural steel. Steel shall be new. Salvage or used steel shall not be accepted.
- 8.7 First Stage Cutter Ribbon/Reel Configuration:
 - 8.7.1 (*) Cutting Width: 60 inches minimum.
 - 8.7.2 (*) Opening Height: 39 inches minimum.

- 8.7.3 (*) Cutter ribbon/reel(s) (first stage) required to feed impeller fan (second stage).
- 8.7.4 (*) Cutter Ribbon Diameter: 28 inches minimum.
- 8.7.5 The ribbons/reels (cutter blades) shall have serrated leading edges and shall be 5/16 (0.312) inch thick, minimum. These ribbons shall be made from 400 Brinnel abrasion resistant plate steel.
- 8.7.6 First stage cutter ribbons are to be center gear driven. Chain drive is not acceptable.
- 8.7.7 Shear bolts, easily accessed are to protect ribbons.
- 8.8 Impeller Fan Configuration:
 - 8.8.1 (*) Impeller Housing Depth: 11 inches minimum.
 - 8.8.2 (*) Impeller fan diameter, minimum 28 inches.
 - 8.8.3 Paddles:
 - 8.8.3.1 Minimum of five (5) paddles.
 - 8.8.3.2 Rubber fan blade tips are not acceptable.
 - 8.8.4 Impeller Fan Housing Liner: To provide a minimum 3/16 (0.1875) inch thick AR400 steel bolt-in replaceable liner.
- 8.9 Chute:
 - 8.9.1 (*) To have a maximum height of 87 inches.
 - 8.9.2 The chute shall rotate minimum 250 degrees with a hydraulic motor and heavy-duty bearing system (wire or cable is not acceptable).
 - 8.9.3 Chute to include easy fold-down feature for ease of clearing clogged snow.
- 8.10 Skid/Wear Shoes:
 - 8.10.1 **Carbide or hardened steel**, located rear of the cutting edge.
 - 8.10.1.1 To include replaceable, bolt-on, skid/wear shoes, for ground contact.
 - 8.10.1.2 Surface area, minimum 30 square inches (each shoe), to facilitate leveling of head in poor visibility and to help avoid digging into gravel or other surfaces.
 - 8.10.2 Forward and rear edges of shoes to be turned up to help avoid digging into gravel or other surfaces.
 - 8.10.3 **SPARES** Skid/Wear Shoes: To include one (1) each additional set (front and rear) of skid/wear shoes, with hardware (nuts, bolts, etc.).
- 8.11 Cutting Edge:
 - 8.11.1 One (1) piece design, ½ (0.5) x four (4) inch, 1090 plow steel or equivalent.

8.11.2 **SPARE** Cutting Edge: To include one (1) additional cutting edge, with hardware (nuts, plow bolts, etc.).

8.12 (*) Weight: 1400 pounds (+/- 200 pounds). **1,420 pounds.**

8.13 **Loading Chute:**

8.13.1 For the 60 inch wide snow blower.

8.13.2 In lieu of the standard chute.

8.13.3 To include the same hydraulics for chute rotation and tip deflector.

8.13.4 (*) To provide a loading height of 117 inches (9'9").

8.13.5 When ordering the loading chute, the tilt feature for ease of clearing clogged snow is not available.

9.0 79 INCH SNOW BLOWER ATTACHMENT:

9.1 Front mounted.

9.2 To be *SNOQUIP* Model XX79 built for operating with the intended carrier.

9.3 The rotary snow blower first stage cutter/reel drums and the second stage casting impeller are to be PTO driven.

9.4 Hydraulics for chute rotation and tip deflector.

9.4.1 Hose and fittings to match host carrier and be quick disconnect type with tethered plugs/caps.

9.4.2 Hydraulic motor to be USA manufactured with local parts availability in Anchorage or Fairbanks.

9.5 All function controls to be inside the cab with exception to chute tilt.

9.6 Frame shall be designed and fabricated using structural steel. Steel shall be new. Salvage or used steel shall not be accepted.

9.7 First Stage Cutter Ribbon/Reel Configuration:

9.7.1 (*) Cutting Width: 79 inches minimum.

9.7.2 (*) Opening Height: 39 inches minimum.

9.7.3 (*) Cutter ribbon/reel(s) (first stage) required to feed impeller fan (second stage).

9.7.4 (*) Cutter Ribbon Diameter: 28 inches minimum.

9.7.5 The ribbons/reels (cutter blades) shall have serrated leading edges and shall be 5/16 (0.312) inch thick, minimum. These ribbons shall be made from 400 Brinell abrasion resistant plate steel.

9.7.6 First stage cutter ribbons are to be center gear driven. Chain drive is not acceptable.

9.7.7 Shear bolts, easily accessed are to protect ribbons.

9.8 Impeller Fan Configuration:

9.8.1 (*) Impeller Housing Depth: 11 inches minimum.

- 9.8.2 (*) Impeller fan diameter, minimum 28 inches.
- 9.8.3 Paddles:
 - 9.8.3.1 Minimum of five (5) paddles.
 - 9.8.3.2 Rubber fan blade tips are not acceptable.
- 9.8.4 Impeller Fan Housing Liner: To provide a minimum 3/16 (0.1875) inch thick AR400 steel bolt-in replaceable liner.
- 9.9 Chute:
 - 9.9.1 (*) To have a maximum height of 87 inches.
 - 9.9.2 The chute shall rotate minimum 250 degrees with a hydraulic motor and heavy-duty bearing system (wire or cable is not acceptable).
 - 9.9.3 Chute to include easy fold-down feature for ease of clearing clogged snow.
- 9.10 Skid/Wear Shoes:
 - 9.10.1 **Carbide or hardened steel**, located rear of the cutting edge.
 - 9.10.1.1 To include replaceable, bolt-on, skid/wear shoes, for ground contact.
 - 9.10.1.2 Surface area, minimum 30 square inches (each shoe), to facilitate leveling of head in poor visibility and to help avoid digging into gravel or other surfaces.
 - 9.10.2 Forward and rear edges of shoes to be turned up to help avoid digging into gravel or other surfaces.
 - 9.10.3 **SPARES** Skid/Wear Shoes: To include one (1) each additional set (front and rear) of skid/wear shoes, with hardware (nuts, bolts, etc.).
- 9.11 Cutting Edge:
 - 9.11.1 One (1) piece design, ½ (0.5) x four (4) inch, 1090 plow steel or equivalent.
 - 9.11.2 **SPARE** Cutting Edge: To include one (1) additional cutting edge, with hardware (nuts, plow bolts, etc.).
- 9.12 (*) Weight: 1400 pounds (+/- 200 pounds). **1,600 Pounds.**
- 9.13 **Loading Chute:**
 - 9.13.1 For the 79 inch wide snow blower.
 - 9.13.2 In lieu of the standard chute.
 - 9.13.3 To include the same hydraulics for chute rotation and tip deflector.
 - 9.13.4 (*) To provide a loading height of 117 inches (9'9").
 - 9.13.5 When ordering the loading chute, the tilt feature for ease of clearing clogged snow is not available.

10.0 60 INCH BROOM ATTACHMENT WITH POWER ANGLE:

- 10.1 Front mounted.
- 10.2 To be *TRACKLESS MT* by *SWEEPSTER* or equivalent.
- 10.3 Hydraulics:
 - 10.3.1 To power broom up/down, angle left/right and rotation.
 - 10.3.2 (*) Hydraulic motor(s) to be USA manufactured with local parts availability in Anchorage or Fairbanks. **U.S. Manufacturer hydraulic motors.**
 - 10.3.2.1 To include guards for motor, fittings and hoses.
 - 10.3.3 All controls to be within the cab.
 - 10.3.4 Hose and fittings to match host carrier and be quick disconnect type with tethered plugs/caps.
- 10.4 Broom width to be 60 inches.
- 10.5 Brush diameter to be 32 inches.
- 10.6 The broom's hitch assembly is to allow the broom to sweep the same path whether angled left or right.
- 10.7 Angle to be minimum 35 degrees to the left and 35 degrees to the right.
- 10.8 Oscillation to be minimum total of 15 degrees (7.5 to the left and 7.5 to the right).
- 10.9 Broom brushes are to be convoluted poly.
 - 10.9.1 **Spares:** To include one (1) complete set of brushes.
- 10.10 (*) Weight: 1100 pounds (+/- 200 pounds). **941 Pounds.**

11.0 72 INCH BROOM ATTACHMENT WITH POWER ANGLE:

- 11.1 Front mounted.
- 11.2 To be *TRACKLESS MT* by *SWEEPSTER* or equivalent.
- 11.3 Hydraulics:
 - 11.3.1 To power broom up/down, angle left/right and rotation.
 - 11.3.2 (*) Dual hydraulic motors to be USA manufactured with local parts availability in Anchorage or Fairbanks. **U.S. Manufacturer hydraulic motors.**
 - 11.3.3 To include guards for motors, fittings and hoses.
 - 11.3.4 All controls to be within the cab.
 - 11.3.5 Hose and fittings to match host carrier and be quick disconnect type with tethered plugs/caps.
- 11.4 Broom width to be 72 inches.
- 11.5 Brush diameter to be 32 inches.
- 11.6 The broom's hitch assembly is to allow the broom to sweep the same path whether angled left or right.
- 11.7 Angle to be minimum 35 degrees to the left and 35 degrees to the right.

- 11.8 Oscillation to be minimum total of 15 degrees (7.5 to the left and 7.5 to the right).
- 11.9 Broom brushes are to be convoluted poly.
 - 11.9.1 **Spares:** To include one (1) complete set of brushes.
- 11.10 (*) Weight: 1200 pounds (+/- 200 pounds). **1008 Pounds.**

12.0 84 INCH BROOM ATTACHMENT WITH POWER ANGLE:

- 12.1 Front mounted.
- 12.2 To be *TRACKLESS MT* by *SWEEPSTER* or equivalent.
- 12.3 Hydraulics:
 - 12.3.1 To power broom up/down, angle left/right and rotation.
 - 12.3.2 (*) Dual hydraulic motors to be USA manufactured with local parts availability in Anchorage or Fairbanks. **U.S. Manufacturer hydraulic motors.**
 - 12.3.3 To include guards for motors, fittings and hoses.
 - 12.3.4 All controls to be within the cab.
 - 12.3.5 Hose and fittings to match host carrier and be quick disconnect type with tethered plugs/caps.
- 12.4 Broom width to be 84 inches.
- 12.5 Brush diameter to be 32 inches.
- 12.6 The broom's hitch assembly is to allow the broom to sweep the same path whether angled left or right.
- 12.7 Angle to be minimum 35 degrees to the left and 35 degrees to the right.
- 12.8 Oscillation to be minimum total of 15 degrees (7.5 to the left and 7.5 to the right).
- 12.9 Broom brushes are to be convoluted poly.
 - 12.9.1 **Spares:** To include one (1) complete set of brushes.
- 12.10 (*) Weight: 1300 pounds (+/- 200 pounds). **1,160 Pounds.**

13.0 96 INCH BROOM ATTACHMENT WITH POWER ANGLE:

- 13.1 Front mounted.
- 13.2 To be *TRACKLESS MT* by *SWEEPSTER* or equivalent.
- 13.3 Hydraulics:
 - 13.3.1 To power broom up/down, angle left/right and rotation.
 - 13.3.2 (*) Dual hydraulic motors to be USA manufactured with local parts availability in Anchorage or Fairbanks. **U.S. Manufacturer hydraulic motors.**
 - 13.3.3 To include guards for motors, fittings and hoses.
 - 13.3.4 All controls to be within the cab.

- 13.3.5 Hose and fittings to match host carrier and be quick disconnect type with tethered plugs/caps.
- 13.4 Broom width to be 96 inches.
- 13.5 Brush diameter to be 32 inches.
- 13.6 The broom's hitch assembly is to allow the broom to sweep the same path whether angled left or right.
- 13.7 Angle to be minimum 35 degrees to the left and 35 degrees to the right.
- 13.8 Oscillation to be minimum total of 15 degrees (7.5 to the left and 7.5 to the right).
- 13.9 Broom brushes are to be convoluted poly.
 - 13.9.1 **Spares:** To include one (1) complete set of brushes.
- 13.10 (*) Weight: 1500 pounds (+/- 200 pounds). **1,339 Pounds.**

14.0 60 INCH PLOW ATTACHMENT WITH POWER ANGLE:

- 14.1 Front mounted.
- 14.2 To be *TRACKLESS* or equivalent.
- 14.3 Hydraulics:
 - 14.3.1 To power plow up/down and angle left/right.
 - 14.3.1.1 Hydraulic Cylinders: Two (2) each single acting with cross-over relief valves.
 - 14.3.2 All controls to be within the cab.
 - 14.3.3 To include down pressure capability.
 - 14.3.4 Hose and fittings to match host carrier and be quick disconnect type with tethered plugs/caps.
- 14.4 Blade Dimensions:
 - 14.4.1 (*) Blade width to be 60 inches minimum.
 - 14.4.2 (*) Blade height to be 30 inches minimum.
 - 14.4.3 (*) Blade width in an angled position to be 50 inches minimum.
- 14.5 Moldboard stiffening to include four (4) ribs minimum.
- 14.6 Angle to be minimum 30 degrees to the left and 30 degrees to the right.
- 14.7 To include spring trip.
- 14.8 To include adjustable mushroom type skid shoes.
- 14.9 (*) Weight: 400 pounds (+/- 100 pounds). **380 Pounds.**

15.0 72 INCH PLOW ATTACHMENT WITH POWER ANGLE:

- 15.1 Front mounted.
- 15.2 To be *TRACKLESS* or equivalent.
- 15.3 Hydraulics:

- 15.3.1 To power plow up/down and angle left/right.
 - 15.3.1.1 Hydraulic Cylinders: Two (2) each single acting with cross-over relief valves.
- 15.3.2 All controls to be within the cab.
- 15.3.3 To include down pressure capability.
- 15.3.4 Hose and fittings to match host carrier and be quick disconnect type with tethered plugs/caps.
- 15.4 Blade Dimensions:
 - 15.4.1 (*) Blade width to be 72 inches minimum.
 - 15.4.2 (*) Blade height to be 30 inches minimum.
- 15.5 Moldboard stiffening to include five (5) ribs minimum.
- 15.6 Angle to be minimum 30 degrees to the left and 30 degrees to the right.
- 15.7 To include spring trip.
- 15.8 To include adjustable mushroom type skid shoes.
- 15.9 (*) Weight: 500 pounds (+/- 100 pounds). **468 Pounds.**

16.0 84 INCH PLOW ATTACHMENT WITH POWER ANGLE:

- 16.1 Front mounted.
- 16.2 To be *TRACKLESS* or equivalent.
- 16.3 Hydraulics:
 - 16.3.1 To power plow up/down and angle left/right.
 - 16.3.1.1 Hydraulic Cylinders: Two (2) each single acting with cross-over relief valves.
 - 16.3.2 All controls to be within the cab.
 - 16.3.3 To include down pressure capability.
 - 16.3.4 Hose and fittings to match host carrier and be quick disconnect type with tethered plugs/caps.
- 16.4 Blade Dimensions:
 - 16.4.1 (*) Blade width to be 84 inches minimum.
 - 16.4.2 (*) Blade height to be 30 inches minimum.
- 16.5 Moldboard stiffening to include six (6) ribs minimum.
- 16.6 Angle to be minimum 30 degrees to the left and 30 degrees to the right.
- 16.7 To include spring trip.
- 16.8 To include adjustable mushroom type skid shoes.
- 16.9 (*) Weight: 500 pounds (+/- 100 pounds). **485 Pounds.**

17.0 96 INCH PLOW ATTACHMENT WITH POWER ANGLE:

- 17.1 Front mounted.
- 17.2 To be *TRACKLESS* or equivalent.
- 17.3 Hydraulics:
 - 17.3.1 To power plow up/down and angle left/right.
 - 17.3.1.1 Hydraulic Cylinders: Two (2) each single acting with cross-over relief valves.
 - 17.3.2 All controls to be within the cab.
 - 17.3.3 To include down pressure capability.
 - 17.3.4 Hose and fittings to match host carrier and be quick disconnect type with tethered plugs/caps.
- 17.4 Blade width to be 96 inches.
- 17.5 Blade height to be 30 inches.
- 17.6 Moldboard stiffening to include four (4) ribs minimum.
- 17.7 Angle to be minimum 30 degrees to the left and 30 degrees to the right.
- 17.8 To include spring trip.
- 17.9 To include adjustable mushroom type skid shoes.
- 17.10 (*) Weight: 600 pounds (+/- 100 pounds). **504 Pounds.**

18.0 60 INCH MULTI-DIRECTIONAL PLOW:

- 18.1 Front mounted.
- 18.2 To be *TRACKLESS* or equivalent.
- 18.3 Hydraulics:
 - 18.3.1 To power plow up/down, angle left, angle right, "V" blade design, and inverted "V" design.
 - 18.3.1.1 Hydraulic Cylinders: Two (2) each double acting with cross-over relief valves.
 - 18.3.2 All controls to be within the cab.
 - 18.3.3 To include down pressure capability.
 - 18.3.4 Hose and fittings to match host carrier and be quick disconnect type with tethered plugs/caps.
- 18.4 Blade Dimensions:
 - 18.4.1 (*) Blade width to be 60 inches minimum.
 - 18.4.2 (*) Blade height to be 26 inches minimum.
- 18.5 Angle to be minimum 30 degrees to the left and 30 degrees to the right.
- 18.6 Plow moldboard shall include a trip mechanism system.
- 18.7 Cutting edges to be six (6) inch high x 5/8 (0.625) inch thick, minimum.

- 18.8 To include three (3) each adjustable mushroom type skid shoes.
- 18.9 To include an adjustable height stand for ease of hook-up to tractor.
- 18.10 (*) Weight: 800 pounds (+/- 100 pounds). **900 Pounds.**

19.0 INFRARED ASPHALT HEATER AND GENERATOR ATTACHMENT:

- 19.1 Front mounted.
- 19.2 To be *TRACKLESS* or equivalent.
- 19.3 To be dual purpose:
 - 19.3.1 Capable of heating an asphalt area of 4.5 x 6 foot (27 square foot).
 - 19.3.2 (*) Capable of generating 45KW and 175 AMPs of power.
 - 19.3.3 Receptacles: To include two (2) each GFI 110 volt (15 amp) outlets, one (1) each 220 volt 50 amp outlet, and one (1) each special outlet for the infrared heater.
- 19.4 Infrared Heater:
 - 19.4.1 Heating elements to be minimum quantity of 11.
 - 19.4.2 Insulation: Five (5) inch thick ceramic.
 - 19.4.3 Deflector shields: Stainless steel.
 - 19.4.4 To include timer to control cycle times. A weather resistant control panel with timer, cycle start button and emergency stop is located on the infrared heater assembly.
 - 19.4.5 The heater is to be equipped with four (4) adjustable legs.
- 19.5 Generator:
 - 19.5.1 PTO driven.
 - 19.5.1.1 Controlled from within the cab.
 - 19.5.2 As stated above, the generator is to be capable of generating 45KW and 175 AMPS.
 - 19.5.3 The generator is to have the capability of disconnecting from the infrared heater by simply pulling four (4) pins and disconnecting the electrical plug
 - 19.5.4 The generator is to be equipped with its own stand that includes two (2) adjustable legs.

20.0 BOOM MOUNTED FLAIL MOWER:

- 20.1 It is the purpose of the following specification to describe a front mounted, hydraulically powered, articulated two (2) section boom, flail mower for cutting grass and light brush on roadsides and other areas that are not accessible to conventional mowing equipment.
- 20.2 Flail mower offered is to have been specifically designed to work on the tractor being provided.
- 20.3 To be *BOMFORD* or equivalent.

- 20.4 Unit bid must have been in production a minimum of four (4) years and a user list shall be furnished upon request.
- 20.5 Unit bid to be manufacturer's most heavy-duty model available.
- 20.6 Hydraulics:
 - 20.6.1 To power boom (up/down) and (fore/aft), arm (out/in), cutter head wrist (up/down), and cutter head rotation.
 - 20.6.2 Minimum flow rate to be determined by equipment manufacturer, who must ensure sufficient flow to permit proper operation
 - 20.6.3 Hydraulic Cylinders:
 - 20.6.3.1 All (with exception to the boom) to be double acting.
 - 20.6.3.2 All to include cross-over relief valves.
 - 20.6.4 All controls to be within the cab.
 - 20.6.5 Hose and fittings to match host carrier and be quick disconnect type with tethered plugs/caps.
- 20.7 (*) Cutting Width: Minimum 51 inches.
- 20.8 Reach:
 - 20.8.1 (*) Ground level reach with cutter-head, minimum 13-1/2 feet (162 inches), as measured from tractor centerline.
 - 20.8.2 (*) Vertical reach with cutter-head, minimum 13-1/2 feet (162 inches), as measured from tractor centerline.
- 20.9 (*) Below grade level cut, minimum 53 inches.
- 20.10 Cutting Blades:
 - 20.10.1 Minimum quantity of 36, bolt on style.
 - 20.10.2 **SPARES:** To include two (2) each complete sets, including hardware (bolts, nuts, etc.).
- 20.11 (*) Weight: 2,400 pounds (+/- 300 pounds). **2,182 pounds.**

21.0 REAR MOUNTED SALT AND SAND SPREADER:

- 21.1 Used to apply salt, sand or a mixture.
- 21.2 Rear mounted.
- 21.3 To be *TRACKLESS* or equivalent.
- 21.4 Capacity: One-Half (1/2) cubic yard.
- 21.5 To include an easily removed hopper screen.
- 21.6 To provide a spread width of 41 inches minimum by means of a roller system.
- 21.7 Spread Distance: Three (3) to eight (8) miles.
- 21.8 Spread amount is controlled by means of an adjustment lever mounted on the sander.

- 21.9 To be hydraulically driven.
 - 21.9.1 All controls to be within the cab.
 - 21.9.2 Hose and fittings to match host carrier and be quick disconnect type with tethered plugs/caps.
- 21.10 To include lifting eyes.
- 21.11 To include adjustable/removable jack legs for storage, three (3) each minimum.
- 21.12 (*) Weight (Empty): 600 pounds (+/- 100 pounds). **600 Pounds.**

22.0 DIMENSIONS (GENERAL):

- 22.1 (*) Carrier Overall Height (without attachments): Maximum of 88 inches from top of cab with air condition unit.
- 22.2 (*) Carrier Overall Length (without attachments): 151 inches (12 foot 7 inches) maximum.

23.0 TOTAL WEIGHT:

- 23.1 Carrier/Tractor weight is to be operating, including full fuel load.
- 23.2 (*) Minimum 5,500 pounds, maximum 5,800 pounds. **Total tractor weight full of fuel and 200 pound operator is 5,700 pounds.**

24.0 TRAINING:

- 24.1 The vendor shall provide a factory trained certified instructor(s) within 30 days of acceptance by the State. This (these) representative(s) shall be prepared and qualified to make all necessary adjustments to the unit and give instruction to the operators to assure correct operation of the unit when it is placed in service.
 - 24.1.1 Please give advance notice to the SEF District Superintendent as listed on the Purchase Order.
- 24.2 Total of 16 hours at the location as noted in each individual Lot Item, Section V – Bid Price Schedule.
 - 24.2.1 Travel labor will only be reimbursed for travel from Anchorage, Fairbanks, or Juneau to the 'Assigned Location' as per Section V – Bid Price Schedule. Travel labor will only be reimbursed for the time the employee is traveling within Alaska.
 - 24.2.1.1 Mileage charge, as per Section V – Bid Price Schedule, will only be reimbursed for travel within Alaska.
 - 24.2.1.2 Meals are paid at actual and charges must be accompanied by receipts and are not to exceed the State authorized \$60.00 per day. Meals are only paid for time in Alaska.
 - 24.2.1.3 Transportation, such as airfare (coach), shall be reimbursed at actual and all charges are to be accompanied by a receipt/copy of the ticket. Transportation will only be paid for transportation within Alaska.

- 24.2.1.4 Lodging shall be reimbursed at actual and shall not exceed \$100.00 per night unless no other lodging is available. Requests for reimbursement must be accompanied by a receipt. Lodging will only be paid for lodging within Alaska at the training location.
- 24.3 To include a minimum of eight (8) hours of operator training including the following, as a minimum applicable agenda:
 - 24.3.1 Operating procedures per operating manual.
 - 24.3.2 Break-in procedures.
 - 24.3.3 Equipment limitations.
 - 24.3.4 Operator maintenance.
 - 24.3.5 Before operations checks and lubrication.
 - 24.3.6 Safety.
 - 24.3.7 Cold weather operations.
 - 24.3.8 Jump starting.
 - 24.3.9 Welding on equipment.
 - 24.3.10 Towing or transporting equipment.
 - 24.3.11 Instruments and controls.
 - 24.3.12 Gauge interpretation.
 - 24.3.13 Equipment operation, Do's and Don'ts.
 - 24.3.14 Attachment operation, Do's and Don'ts.
- 24.4 To include a minimum of eight (8) hours of mechanics (Journeyman level) training including the following theory, trouble shooting, and test procedures for, as a minimum applicable agenda:
 - 24.4.1 Electronics.
 - 24.4.2 Electrical.
 - 24.4.3 Hydraulics.
 - 24.4.4 Air system.
 - 24.4.5 Drive train.
 - 24.4.6 Engine and transmission electronics.

25.0 MISCELLANEOUS:

- 25.1 Weight Scale Verification Slip (on the Carrier/Tractor):
 - 25.1.1 Required not later than time of delivery.
 - 25.1.2 Also refer to Section III – Special Terms and Conditions.
- 25.2 Paint:
 - 25.2.1 Lead free.

- 25.2.2 Color to be manufacturer's standard yellow.
 - 25.2.2.1 Wheels and chassis to be manufacturer's standard color (black is preferred).
- 25.2.3 To include sandblasting and three (3) mils of appropriate primer, including frame and wheels.
- 25.2.4 The inside of the engine housing is to be painted a gloss yellow or white.
- 25.3 Easy access to all maintenance components shall be provided for items such as air cleaners, batteries, radiator fill and drain, oil filters, oil drain (hydraulic and engine), etc.
 - 25.3.1 To assist maintenance personnel, oil drains for engine and hydraulic may require a remote mounted hose with an easily accessed ¼-turn ball valve at the outlet and a cap or plug at the exit point.
- 25.4 Winterization: Entire unit to be winterized to provide satisfactory performance in temperatures to minus 40 degrees Fahrenheit. Antifreeze to be of permanent type only providing protection to minus 60 degrees Fahrenheit.
- 25.5 Warranty:
 - 25.5.1 Carrier/tractor to be a three-year (36 month), full 100 percent.
 - 25.5.2 Attachments to be minimum one-year (12 month) manufacturer's warranty.
 - 25.5.3 Refer to Section III - Special Terms and Conditions.
- 25.6 **Publications:**
 - 25.6.1 Bidder may be required to supply samples of parts and service manuals after bid opening.
 - 25.6.2 Refer to Section III – Special Terms and Conditions for further requirements.
- 25.7 Hydraulic tubes, hoses and fittings used shall conform to SAE J514, J516, J517 and J524. A minimum number of fittings, joints and connections shall be used to prevent excessive backpressure, vibration and leakage. Hydraulic lines shall be of sufficient size to permit free flow of hydraulic fluid at temperatures down to minus 40 degrees Fahrenheit.
- 25.8 (*) A letter of certification/approval from the manufacturer of the hydrostatic drive system components for chassis and attachments shall be included in the bid package. Filters: All elements where applicable to be spin on type and be easily accessible.
- 25.9 Component Sourcing:
 - 25.9.1 Due to critical nature of vehicle mission and parts support, only current production componentry shall be supplied.
 - 25.9.2 (*) The bidder shall provide assurance that only unused, newly manufactured components are supplied. (*) In the bid package, the bidder and/or vehicle manufacturer shall certify that the engine(s), automatic

transmission(s), transfer case, and axles to be supplied will be newly manufactured and purchased directly from the original component manufacturer or their authorized OEM distributor. Upon the request of the purchaser, the bidder shall provide copies of purchase orders and invoices properly dated after bid award to verify the source and newness of these components.

- 25.9.3 Purchase orders and invoices shall reference the component manufacturer, manufacturer's model and/or part number, and the bidders and/or vehicle manufacturer's name and part number.
- 25.9.4 In the event that any of these components are manufactured by either the bidder or vehicle manufacturer, documentation shall be provided indicating manufacture date and chassis installation date by serial number.
- 25.9.5 Failure to provide appropriate documentation of component sourcing shall be considered cause for rejecting the delivered vehicle. The burden of proof shall lay with the bidder.

25.10 Local Support:

25.10.1 (*) Because of the critical nature of use for this equipment, service and technical support are considered an integral part of its purchase. Therefore, all bidders must be authorized dealers of the vehicle proposed, with service facilities in Anchorage or Fairbanks at a minimum. **Yukon Equipment, Inc. is the Trackless Dealer with facilities in Anchorage and Fairbanks.**

25.10.2 All bidders must be capable of servicing the entire unit including the chassis, and any auxiliary equipment provided thereon.

25.10.3 The bidder must include verification that their maintenance facility and staff are factory trained to provide the service and technical support, and have experience on similar units.

25.10.4 Prior to award, the State reserves the right to inspect the bidder's maintenance facility and request documentation on training and experience.

25.11 Inspection of the unit will be conducted at FOB point to assure that the unit still meets specifications.

END OF SPECIFICATION #722-Trac

SECTION V- ATTACHMENTS



35A Ironside Crescent
Scarborough, Ontario M1X 1G5

Phone: (416) 335-5557
Fax: (416) 335-8844
Internet: www.bfna.com

Mr. Harry Rymer
Trackless Vehicles Ltd.
55 Thunderbird Drive
Courtland, Ontario N0J1E0
Canada

January 2008

Subject: Hydrostatic pump and motor used on MT6 tractor.

Dear Harry,

Berendsen Fluid Power participated with Trackless vehicles in the development of the drive for the model MT6, 110hp municipal tractor. The hydrostatic drive selected for the MT6 consists of a Sauer-Danfoss series 90 heavy duty hydraulic pump and motor. This drive selection is the end result of a machine design evaluation and prototype testing process. The drive selection is the result over two years of collaboration between Berendsen and Trackless Vehicles engineering departments.

The pump on the MT6 is a variable displacement, servo controlled, 55cc per revolution, series 90 piston pump. The motor is a fixed displacement, 75cc per revolution, series 90 piston motor.

When coupled together this pump and motor are capable of a 219hp output, (when run at maximum operating pressure and speed). The drive, life, and power requirements of the MT6 are the ideal application for a series 90 hydrostatic transmission of the size.

The series 90 hydrostatic transmission has been used worldwide for propel drive on an extensive range of machinery since the late 1980's.

We are confident that the series 90 will provide Trackless Vehicles MT6 tractors with long and reliable service life.

If you would like any further details regarding the series 90 product please do not hesitate to contact the undersigned.

Sincerely,
Berendsen Fluid Power

Peter Kelly
Regional Sales Manager, Eastern Canada



Trackless Vehicles Limited

MANUFACTURERS OF MUNICIPAL TRACTORS

Tel: 519-688-0370 ext 212
Fax: 519-688-3644
Cell: 519-688-4719
E-mail: jmcintyre@tracklessvehicles.com

P.O. Box 244
55 Thunderbird Drive
Courtland, ON, Canada
N0J 1E0

January 14, 2008

Mr. Earl Lackey
Vice President
Yukon Equipment Inc.
2020 E. 3rd Avenue
Anchorage, AK.
99501-2994

Re: State of Alaska Bid # REF - 1277

Dear Earl,

This letter is to confirm that Trackless Vehicles, when producing the MT6 and its attachments only uses "New" and unused components. These components are purchased direct of OEM suppliers such as;

Cummins (engine), Sundstrand (hydrostatics), Twin Disc (PTO clutch), Dana (axles), Ontario Drive & Gear (gearboxes), Donaldson (air breather), Fluid Power (Haldex hydraulic pumps).

If you or the State of Alaska requires any additional information please do not hesitate to let me know.

Sincerely,

A handwritten signature in black ink, appearing to read "Joe McIntyre".

Joe McIntyre
Sales Manager
Trackless Vehicles Ltd.