

<b>CONTRACT AWARD</b>		<b>STATE OF ALASKA</b> HQ, STATE EQUIPMENT FLEET (Contracting Authority) 2200 E. 42nd Avenue Anchorage, Alaska 99508 (907-269-0800)		<b>CONTRACT AWARD NUMBER</b> <b>1608108</b>	
ORDERING DEPARTMENT  HEADQUARTERS, STATE EQUIPMENT FLEET 2200 E. 42ND AVENUE ANCHORAGE, ALASKA 99508		COMMODITY CODE  NUMBER & PERIOD OF RENEWAL OPTIONS NONE		DATE OF CONTRACT 9/27/07  PR NO./DATE ASSIGNED	
CONTRACTOR YUKON EQUIPMENT ADDRESS 2020 EAST 3RD AVENUE ANCHORAGE, AK 99501  CONTACT NAME EARL LACKEY  TELEPHONE NUMBER 277-1541		DATE INITIAL CONTRACT BEGINS 9/27/07		DATE INITIAL CONTRACT ENDS 9/26/10	
		GS VENDOR CODE:			
		ISSUED IN ACCORDANCE WITH BID # SEF- 1265		DATED: 9/14/07	
		PRICE ADJ. REQ. PRIOR TO EACH RENEWAL:			
		CPI/PPI BASE INDEX POINTS & MO/YR:			
		REVIEW DATE: 8/30/10		RENEWALS EXPIRE (MO/YR):	
		ESTIMATED VALUE OF INITIAL TERM:		REBID:	
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.					
<b>DESCRIPTION</b>					
<p><b>THREE (3) YEAR CONTRACT FOR THE PURCHASE OF 4.0 CY &amp; 5.0CY WHEEL LOADERS</b></p> <p><b>CONTRACTING OFFICER KRISTI PETTY PHONE: (907)269-0793</b></p> <p><b><u>TABLE OF CONTENTS</u> <u>SECTION</u></b></p> <p><b>I. STANDARD TERMS AND CONDITIONS</b></p> <p><b>II. SPECIAL TERMS AND CONDITIONS</b></p> <p><b>III. CONTRACT PRICE SCHEDULE</b></p> <p><b>IV. SPECIFICATIONS</b></p>					
CONTRACTING AUTHORITY NAME & TITLE LYNDA SIMMONS, CONTRACTING OFFICER III				SIGNATURE	
TELEPHONE NO: 907-269-0793 FAX NO: 907-269-0801					
<b>IMPORTANT</b> 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.					

CONTRACT AWARD 1608108  
SEF-1265 - 3-Year Contract for the Purchase of Wheel Loaders

## 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 contractor's failure to supply this evidence within the time required by the State will cause the State to consider the contract non-responsive and reject the bid.
- 2.0 AMENDMENTS:** Contract terms shall not be waived, altered, modified, supplemented or amended without prior written approval of the Contracting Officer.
- 3.0 ASSIGNMENT:** A contractor may not assign any portion of a contract unless authorized in advance and in writing by the Contracting Officer.
- 4.0 COMPLIANCE WITH ALL GOVERNMENT REGULATIONS:** The contractor 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 contractor.
- 5.0 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.
- 6.0 CONTRACT PERIOD:** From the date of award for three years (36 months). There are no options to renew.
- 7.0 DEFAULT:** In case of contractor default, the State may procure the goods or services from another source and hold the contractor 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 contractors.
- 8.0 DELIVERY:** All deliveries shall be F.O.B. final destination point with all transportation and handling charges paid by the contractor. Responsibility and liability for loss or damage shall remain with the contractor until final inspection and acceptance when responsibility shall pass to the State except as to latent defects, fraud and the contractor's warranty obligations.
- 9.0 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.
- 10.0 DISPUTES:** Any disputes arising out of this contract 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.

**11.0 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.

**12.0 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.

**13.0 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 contract specifications, the State may reject the goods and require the contractor to either correct them without charge or deliver them at a reduced price, which is equitable under the circumstances. If the contractor 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.

**14.0 INSURANCE:**

14.1 Without limiting contractor's indemnification, it is agreed that the 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.

14.2 Proof of insurance is required for the following:

14.2.1 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.

14.2.2 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.

14.2.3 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.

14.3 Failure to supply satisfactory proof of insurance within the time required will cause the State to declare the contract non-responsive and to reject the bid.

**15.0 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.

**16.0 NEW EQUIPMENT:** Equipment 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.

**17.0 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.

**18.0 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.

**19.0 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.

**20.0 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.

**21.0 SUCCESSORS IN INTEREST:** This contract shall be binding upon successors and assigns.

- 22.0 SUITABLE MATERIALS:** All materials, supplies or equipment 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.
- 23.0 TAXES:** Prices quoted must be exclusive of federal, state, and local taxes. If the contractor believes that certain taxes are payable by the State, the contractor may list such taxes separately, directly below the contract 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.
- 24.0 USE OF BRAND OR TRADE NAMES:** Brand or trade names used by the State in contract specifications are for the purpose of describing and establishing the standard of quality, performance and characteristics desired and are not a statement of preference nor are they intended to limit or restrict competition. Contractors may submit bids for substantially equivalent products to those designated unless the Invitation to Bid provides that a specific brand is necessary because of compatibility requirements. All such brand substitutions shall be subject to the State's approval.
- 25.0 WARRANTY:** Unless otherwise stated, all equipment shall be new and current model and shall carry full factory warranties. The contractor warrants all goods delivered to be free from defects in labor, material and manufacture and to be in compliance with contract specifications. All implied or expressed warranty provisions of the Uniform Commercial Code apply. All warranties shall be for and benefit the State.

## SECTION III

### SPECIAL TERMS AND CONDITIONS

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

1.1 **Pre-delivery service:** Prior to delivery, each vehicle, 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 that 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 contractor, 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 contractor's invoice to support and properly identify the vehicle delivered.

1.2.2 Contractors 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 at time of delivery that the contractor 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 contractor.
- 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.
  - 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.

## **3.0 F.O.B. POINT:**

- 3.1 The F.O.B. point for all items purchased under this contract is the final destination anywhere within the State of Alaska. Ownership of and title to the ordered items remains with the contractor until the items have been delivered at their final destination and are accepted by the State.
- 3.2 The cost of shipping and delivery for orders beyond the limits of Seattle/Tacoma dock will be handled as follows. The contractor will prepay the shipping and delivery charges to any destination named by the State in its order. The contractor will charge-back those shipping and delivery charges to the State as a separate line item on the State's invoice.
- 3.3 All shipping charges over \$100 must be documented by a copy of the actual shipping invoice and received with the invoice charge to the State.

## **4.0 DAMAGES FOR LATE DELIVERY AND NON-CONFORMING GOODS:**

- 4.1 Time is of the essence in this contract. The contractor 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 goods are delivered late or in the event that the goods do not conform in all material respects 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 of:
  - 4.2.1 on the **Class #334**, 4.0 cubic yard wheel loaders of **\$380.00 per day**,
  - 4.2.2 on the **Class #338**, 5.0 cubic yard wheel loaders of **\$520.00 per day**,
  - 4.2.3 multiplied by the number of calendar days elapsing between the delivery date provided in the Contract Price Schedule and the date that conforming goods are delivered to the State. 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 inspect the goods.

- 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 contract, the contractor will provide a one-year (12-month) full (100%) warranty.
- 5.1.1 Full (100%) Parts and Labor Warranty Coverage of all components for the first year (12-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**. Contractors 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 III – Contract 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 III – Contract 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:** Same as Standard Warranty Package.
- 5.2.3 **In-Service Date:**
  - 5.2.3.1 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 contract, the contractor must meet the following applicable requirements:
  - 5.2.4.1 Contractor must:
    - 5.2.4.1.1 possess a current Alaska Motor Vehicle Dealer License pursuant to AS 08.66.010 through AS 08.66.090, when offering motor vehicles, trailers or semi-trailers, and;
    - 5.2.4.1.2 be a manufacturer(s) authorized warranty service dealer for the unit, a minimum of one year, and;
    - 5.2.4.1.3 have the capability of providing warranty servicing and repair work within the State of Alaska, 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 or agreements with the subcontractor insuring the state that the subcontractor will provide complete contract performance on behalf of the contractor as set forth in the 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 contractor 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 contractor is to be notified via letter, telex, fax, telegram, 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 contractor 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 emergency situation or to preclude excessive downtime (greater than 48 hours).
- 5.2.5.3 Failure to notify the State, that the contractor 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 contractor 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 **\$86.00** 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. Warranty work performed by state shop personnel at locations where no shop personnel are permanently stationed may be subject to travel expenses incurred involving those warranty repairs.

#### 5.2.7 **Factory Recall:**

- 5.2.7.1 Nationwide factory recall or product update programs are the responsibility of the contractor 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 whom 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 contractors 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. Contractors 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 To include service, parts and operator's manuals.
- 7.2 All manuals are to be pre-assembled in factory binders prior to delivery.
- 7.3 Publications are to be received by the State of Alaska not later than 30 days after delivery of the unit. Delivery will not be considered complete until the publications for each unit have been received by the State of Alaska.
- 7.4 **Service Manuals:**
  - 7.4.1 Complete set(s), paper books (compact disc if available) to include applicable information covering prime unit and attachments:
    - 7.4.1.1 Body, chassis, and electrical
    - 7.4.1.2 Engine, transmission, and differential(s) (service and rebuild)
    - 7.4.1.3 Electrical and Vacuum troubleshooting
    - 7.4.1.4 Wiring diagrams
    - 7.4.1.5 Service specifications
    - 7.4.1.6 Engine/emission diagnosis
- 7.5 **Parts Manuals:**
  - 7.5.1 Complete set(s), paper books (compact disc if available) to include prime unit and attachments, including updates. If updates are not provided during the **one-year** warranty period, the State will order them from the manufacturer and bill the contractor for the full cost, including shipping.
  - 7.5.2 Parts manuals are to be customized by serial number.
- 7.6 **Operator's Manuals:** Complete set(s) to include prime unit and attachments.
- 7.7 **Quantities:** Publications, when required, will be ordered on the same Purchase Order as the unit itself.

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

7.9 **Service Bulletins, Etc.:**

7.9.1 The contractor 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 contractor 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.

7.9.2 This information will be provided as soon as possible to person(s) as noted on the Purchase Order.

**8.0 STATEMENT OF ORIGIN:** The contractor 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. 42<sup>nd</sup> Avenue, Room #311  
Anchorage, Alaska 99508

**9.0 WEIGHT VERIFICATION SLIPS:** If required in the Contract Price Schedule, a weight scale ticket of the completed unit will be included with the Statement of Origin.

**10.0 INSPECTIONS:**

10.1 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:

10.1.1 Repair or replace at contractor's expense, any or all of the damaged goods,

10.1.2 refund the price of any or all of the damaged goods, or

10.1.3 accept the return of any or all of the damaged goods.

10.2 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 contractor.

**11.0 REPLACEMENT PARTS:**

11.1 The State of Alaska shall expect the manufacturer to have adequate stocks of replacements parts available to service State vehicles and equipment and to make

delivery within a reasonable time (no more than 5 working days) of all normal replacement parts to their dealers who may service State vehicles and equipment.

## 11.2 PARTS CONTRACT:

11.2.1 This contract will include a three (3) year parts contract. This contract will include any part, component or related item applicable to the truck and any applicable components thereon.

11.2.1.1 Refer to Section III– Contract Price Schedule.

11.2.2 This is not a mandatory contract. The State is free to purchase parts and components outside this contract if lower, more competitive prices are available.

11.2.3 **PART AND COMPONENT PRICING:** Pricing will be based on the following and entered into the contract price schedule. These discounts will remain firm for the full five year contract.

11.2.3.1 Discount off of contractor list price for all wheel loader parts:

11.2.3.2 Discount off of contractor list price for all component/attachment parts:

11.2.3.3 All pricing is FOB the vendor's service points in Anchorage, Fairbanks or Juneau. All shipping costs beyond those areas will be invoiced as a separate line item on the invoice. Requests for copies of the actual shipping documents must be provided within 60 days of request.

11.2.3.4 Contract price lists and supersedure lists will be supplied to all SEF shops statewide. A list will be provided at time of award.

11.2.3.5 Items on sale: Contract items listed in the contractor's published list placed on sale at reduced prices may be purchased at the "sale price", whichever is lower. Orders placed under sales pricing are subject to the terms and conditions of the sale.

11.2.3.6 Method of Ordering: Orders for parts will be placed by individual SEF shops at their sole discretion.

11.2.3.7 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.

11.2.3.8 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 six (6) months of purchase. The cost of the defective product, including freight, is the responsibility of the contractor.

11.2.3.8.1 If the manufacturer's warranty exceeds the stated warranty, then the manufacturer's warranty supersedes.

- 11.2.3.9 Parts Return/Stocked Parts: Within 12 months of purchase, the State is to be allowed to return parts in new conditions, in original packaging, for a full refund, less shipping.
- 11.2.3.10 Parts Return/Non-Stocked Parts: Within 12 months of purchase, the State is to be allowed to return parts in new condition, in original packaging, for a full refund less a restocking fee of no more than 20%, less shipping.
- 11.2.3.11 Invoicing: Full description of item is required on all invoices, packing lists and billings.
- 11.2.3.12 Core Return: Remanufactured Product Cores must be returned within 60 days. Cores returned after sixty (60) days will be evaluated on an individual basis.

## 12.0 PRICE:

- 12.1 **Price Guarantee:** The contractor is responsible to maintain prices under the contract firm for 180 days after bid opening. All price increases or decreases must remain firm for the following 180 days.
- 12.2 **NO RETROACTIVE PRICE INCREASES WILL BE ACCEPTED.**
- 12.3 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:
  - 12.3.1 The increase is a result of the increased cost at the manufacturer's level and not costs under the contractor's control, and that;
    - 12.3.1.1 The increase will not produce a higher profit margin for the contractor than that on the original contract, and that;
    - 12.3.1.2 The increase affects only the item(s) that are clearly identified by the contractor.
    - 12.3.1.3 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.
- 12.4 **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.

## 13.0 COOPERATIVE PURCHASING:

- 13.1 All requests to cooperatively purchase, by qualified political subdivisions, from the resulting contract shall be approved by the Contracting Officer.
- 13.2 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.
- 13.3 The contractor shall charge, and subsequently reimburse to the State after receipt and payment by purchaser, a users fee of two (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.

**14.0 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 CONTRACTOR'S responsibility to inform the Contracting officer in writing and to advise the procedures for obtaining such rebates.

**15.0 BRAND NAME SPECIFICATION:** For purposes of this contract, certain vehicle accessories are specifically identified by brand name and model/part number. Only the listed brand name and model/part numbers are acceptable. Substitutes shall be not allowed.

**16.0 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 contract price margins, and will be evidenced by issuance of a written contract change notice from the Contracting officer.

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

**SECTION IV**

**CONTRACT PRICE SCHEDULE**

**LOT #1:**

Item #	Unit	Description	\$ Amount
1a	ea	Front End Loader, 4.0 CY Diesel Powered, Four-Wheel Drive Articulating Quick Attach System Per Specification #334  Year, Make and Model Offered: <b><u>2008 Case 821E</u></b>	<b><u>\$143,933.00</u></b>
1b	ea	Engine and Transmission Oil Pan Heaters (As per Spec Items 1.7.3 and 1.7.4)	<b><u>\$375.00</u></b>
1c	ea	Spare Tire with Mounted Wheel (As per Spec Item 3.7.2)	<b><u>\$2,357.00</u></b>
1d	ea	Emergency Steering System (As per Spec Item 3.9)	<b><u>\$2,002.00</u></b>
1e	ea	Converter, Alternator & Mounting Plates (As per Spec Item 4.7)	<b><u>\$1,908.00</u></b>
1f	ea	Auto Lube System (As per Spec Item 7.0)	<b><u>\$6,114.00</u></b>
1g	ea	General Purpose Bucket, 4.0 CY (As per Spec Item 8.2)	<b><u>\$7,364.00</u></b>
1h	ea	Heavy-Duty 4.0 CY Bucket with G.E.T. System (As per Spec Item 8.3)	<b><u>\$10,261.00</u></b>
1i	ea	Snow Bucket, 8.0 CY (As per Spec Item 8.4)	<b><u>\$10,815.00</u></b>
1j	ea	Plow, Multi-Purpose Heavy Duty (As per Spec Item 8.5)  Plow - Make and Model Offered: <b><u>Weldco-Beales U/V Blade</u></b>	<b><u>\$26,510.00</u></b>

1k	ea	Pallet Forks, 5-Foot (As per Spec Item 8.6)	<b><u>\$7,457.00</u></b>
1L	ea	Pallet Forks, 8-Foot (As per Spec Item 8.7)	<b><u>\$8,457.00</u></b>
1m	ea	Training in Anchorage (As per Spec Item 9.0)	<b><u>\$706.00</u></b>
1n	ea	Training in Fairbanks (As per Spec Item 9.0)	<b><u>\$706.00</u></b>
1o	ea	Training in Juneau (As per Spec Item 9.0)	<b><u>\$1,382.00</u></b>
1p	ea	Diagnostic Tools (As per Spec Item 10.1)	<b><u>NO CHARGE</u></b>
1q	set	Publications (As per Spec Item 10.7)	<b><u>\$748.00</u></b>

**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.

**LOT #2:**

<b>Item #</b>	<b>Unit</b>	<b>Description</b>	<b>\$ Amount</b>
2a	ea	Front End Loader, 5.0 CY Diesel Powered, Four-Wheel Drive Articulating Quick Attach System Per Specification #338  Year, Make and Model Offered: <b><u>2008 Case 921E</u></b>	<b><u>\$210,843.00</u></b>
2b	ea	Engine and Transmission Oil Pan Heaters (As per Spec Items 1.7.3 and 1.7.4)	<b><u>\$375.00</u></b>
2c	ea	Spare Tire with Mounted Wheel (As per Spec Item 3.7.2)	<b><u>\$3,583.00</u></b>
2d	ea	Emergency Steering System (As per Spec Item 3.9)	<b><u>\$2,136.00</u></b>
2e	ea	Converter, Alternator and Mounting Plates (As per Spec Item 4.7)	<b><u>\$1,908.00</u></b>
2f	ea	Auto Lube System (As per Spec Item 7.0)	<b><u>\$6,114.00</u></b>
2g	ea	General Purpose Bucket, 5.0 CY (As per Spec Item 8.2)	<b><u>\$8,893.00</u></b>
2h	ea	Heavy-Duty 5.0 CY Bucket with G.E.T. System (As per Spec Item 8.3)	<b><u>\$12,009.00</u></b>
2i	ea	Snow Bucket, 10.0 CY (As per Spec Item 8.4)	<b><u>\$11,840.00</u></b>
2j	ea	Plow, Multi-Purpose Heavy-Duty (As per Spec Item 8.5)	<b><u>\$27,871.00</u></b>
2k	ea	Pallet Forks, 8-Foot (As per Spec Item 8.6)	<b><u>\$9,609.00</u></b>
2L	ea	Training in Anchorage (As per Spec Item 9.0)	<b><u>\$706.00</u></b>
2m	ea	Training in Fairbanks (As per Spec Item 9.0)	<b><u>\$706.00</u></b>

2n	ea	Training in Juneau (As per Spec Item 9.0)	<b><u>\$1,382.00</u></b>
2o	ea	Diagnostic Tools (As per Spec Item 10.1)	<b><u>NO CHARGE</u></b>
2p	set	Publications (As per Spec Item 10.8)	<b><u>\$758.00</u></b>

**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.

**Lot #3**

3a TRAVEL COSTS (For warranty performed outside the Anchorage, Fairbanks, or Juneau area):

Per Mile . . . . . **\$2.50**

Per Hour (travel labor). . **\$90.00**

**LOT #4**

**PARTS CONTRACT INFORMATION:**

4a Discount off of contractor list price for all wheel loader parts. ----- **10%**

4b Discount off of contractor list price for all component/attachment parts . ----- **10%**



**SECTION IV**  
**SPECIFICATIONS**

SPECIFICATION #334  
Minimum 4.0 Cubic Yard Wheel Loader  
August 16, 2007

**GENERAL SPECIFICATION:**

It is the purpose of this specification to describe a new, and of the manufacturer's latest current model and design, diesel powered, four-wheel drive, minimum 4.0 cubic yard, articulating front-end loader.

Unit shall include all standard equipment and accessories as advertised in manufacturer's specification sheet of model offered, unless otherwise specified herein.

**APPLICATION:**

General wheel loader application and implement carrier. Severe weather application ranging from minus 50 to plus 110 degrees Fahrenheit.

**1.0 POWER TRAIN:**

1.1 Engine:

1.1.1 Diesel, 4 cycle, 6.6 liter displacement, 183 net SAE-J1349 flywheel HP at governed RPM, 573 net SAE-J1349 pound foot torque, minimum.

1.1.2 To meet EPA Tier III emission requirements.

1.2 Cooling System:

1.2.1 Winterfront:

1.2.1.1 If required to maintain engine operating temperature at a minimum of 140 degrees Fahrenheit while operating to minus 50 degrees.

1.2.1.2 To be a heavy-duty vinyl construction, with stainless steel snaps or swivel locks and include a heavy-duty zipper. Installed over the rear grill area.

1.2.2 Permanent type anti-freeze giving protection to minus 50 degrees Fahrenheit.

1.3 Intake System:

1.3.1 Air cleaner to be two (2) stage, dual element type.

1.3.2 Pre-cleaner: *CASE* dust ejector, or *CATERPILLAR* dust ejector, or *VOLVO* exhaust aspirated, or *CENTRI*, or *ENGINAIR*, or *SURECO TURBO II*.

1.3.3 Filter service indicator, in cab.

- 1.4 Exhaust System:
  - 1.4.1 Muffler(s) must not restrict operator's vision to rear.
  - 1.4.2 Exhaust stack(s) to include 90 degree elbow or attenuator system.
- 1.5 Fuel System:
  - 1.5.1 Fuel filler to have ready access.
- 1.6 Oil and fuel filters to be spin-on type.
- 1.7 Starting Assist:
  - 1.7.1 Metered ether system, glow plugs or grid heater, operated from cab.
  - 1.7.2 Engine block heater, immersion type, highest wattage available, 110 volt AC (OEM if available).
  - 1.7.3 **Engine Oil Pan Heater (OPTIONAL):**
    - 1.7.3.1 One (1) each , 150 watt, 110 volt AC, silicone pad heater bonded to oil pan, *BESCO*, *KAT'S*, *WATLO*, or equivalent.
  - 1.7.4 **Transmission Oil Pan Heater (OPTIONAL):**
    - 1.7.4.1 One (1) each, 150 watt, 110 volt AC, silicone pad heater bonded to oil pan, *BESCO*, *KAT'S*, *WATLO*, or equivalent.
  - 1.7.5 110-volt AC power cords for engine and battery heaters to be plugged into waterproof, 110 volt AC, junction box equipped with four (4) each 15-amp receptacles. Electrical cord, 20-amp, Male plug portion of 20 amp cord(s) to run out to the rear of the unit for easy access by ground personnel. Cords being plugged into the junction box are to be labeled as to what they are for, such as; "Engine Block Heater", "Transmission Oil Pan Heater", and "Engine Oil Pan Heater".
    - 1.7.5.1 The location of the cord(s) outlet box(es) is/are to be in a weather protected area in the engine compartment.
    - 1.7.5.2 All wiring to be adequately secured and protected in a loom or similar protection.

## 2.0 DRIVE TRAIN:

- 2.1 Transmission:
  - 2.1.1 Power shift, forward and reverse.
  - 2.1.2 Transmission Disconnect: To include either a valve control or brake pedal control or transmission neutralizing feature which will allow transmission to be engaged or disengaged when depressing brake pedal as required for varying operating conditions.
- 2.2 Axles:
  - 2.2.1 *TRACTECH* No-SPIN or limited-slip or hydraulic locking differential in one (1) differential, minimum, or limited slip differential by *CASE* or

*CATERPILLAR* or *KOMATSU*, is acceptable. **Torque proportioning is not acceptable.**

2.2.2 If equipped with limited slip rear differential and hydraulic locking front differential as in *VOLVO*, the front axle locking device can only be activated by the operator holding down on an activation pedal that is spring released.

2.3 To provide a forward speed of not less than 21 MPH with tires specified herein.

2.4 To provide a reverse speed of not less than 15.5 MPH with tires specified herein.

### **3.0 CHASSIS:**

3.1 Operating Weight: Minimum 38,000 pounds, per these specifications including GP bucket, but without quick attach.

3.2 Breakout Force (With general purpose bucket listed in this specification): Minimum 33,245 pounds, per these specifications, but without quick attach.

3.3 Full Turn Tip Load (With general purpose bucket listed in this specification): Minimum 23,500 pounds, per these specifications, but without quick attach.

3.4 Bucket Hinge Pin Height: Minimum 155 inches, per these specifications using the GP bucket with bolt-on cutting edge, but without the quick attach system.

3.5 Dump Height at 45 degrees: Minimum 109 inches, per these specifications using the GP bucket with bolt-on cutting edge, but without the quick attach system.

3.6 Dump Reach at 45 degrees and bucket raised to full height: Minimum 42 inches, per these specifications using the GP bucket with bolt-on cutting edge, but without the quick attach system.

3.7 Tires:

3.7.1 To be 23.5x25 (16PR) L-3 tires, (16PR minimum). Calcium chloride not acceptable.

3.7.2 **Spare Tire with Mounted Wheel (OPTIONAL):** To be same as above with mounted wheel.

3.8 Brakes:

3.8.1 Service Brakes: To be wet (oil) disk. To include an air dryer (all metal) installed in discharge line between compressor and air tanks (if air system).

3.8.2 Secondary (Back-Up) Braking System: Manually and/or automatically applied back-up braking system in the event of loss of service brake capacity.

3.8.3 Parking Brake:

3.8.3.1 To be a spring applied hydraulic released or hand operated, mechanical parking brake independent of other braking systems, capable of holding machine on a 20% grade.

3.8.3.2 To include parking brake warning light and audible warning device or a parking brake system with a transmission disconnect feature.

**3.9 Emergency Steering System (OPTIONAL):**

3.9.1 In compliance with SAE-J53.

3.10 Fenders: Front and rear, full width OEM.

3.11 Tire Chain Clearance:

3.11.1 To provide minimum four (4) inches clearance (from outside diameter of tire to underside of fender) for tire chains.

3.11.2 To provide minimum of three (3) inches clearance (from inside wall of the tire).

3.12 Tow Hook: Shall be drawbar hitch pin type, with pin.

3.13 Lift Arm Kickout: Automatic.

3.14 Bucket Leveling: Automatic.

3.15 To include cushion system type ride control.

**4.0 ELECTRICAL SYSTEM:**

4.1 24-volt system.

4.2 To be negative ground system.

4.3 Alternator: Minimum 50 amp.

4.4 Battery(s): Heavy-duty, highest capacity available, minimum total of 1800 CCA at zero degrees Fahrenheit.

4.5 Master electrical switch to cut off all power source from battery to starter and remainder of electrical system. (To be located where accessible, but not ordinarily visible to persons not familiar with machine.)

4.6 Lighting System:

4.6.1 Front headlights.

4.6.2 Work Lights: Two (2) rear work lights and two (2) front work lights, halogen or HID.

4.6.3 Turn signals.

4.6.4 Stop and tail lights.

4.6.5 Dome light.

4.6.6 Strobe Lights:

4.6.6.1 Two (2) each *WHELEN* Model S360D strobe lights, synchronized.

4.6.6.2 Left lens to be amber, right lens to be blue, in color.

4.6.6.3 To include "High/Off/Low" switch.

4.6.6.4 Location: On top of the cab, visible from all directions.

4.6.6.5 To be a 24-volt strobe light system.

#### 4.7 **OPTIONAL:**

##### 4.7.1 Voltage Converter:

4.7.1.1 24-volt systems require a 24-volt to 12-volt converter with a minimum of 60 amp continuous. *DUVAC 52107* or equivalent. Alaska dealer for *DUVAC* is *AUTO ELECTRIC*, Anchorage, Alaska, phone #907-562-9679.

4.7.1.2 Voltage converter's purpose is for communications radio(s). All other electrical including strobe and lighting systems are to be 24 volt.

4.7.2 Alternator: To be minimum 65-amp in lieu of the minimum 50-amp listed for the standard unit.

4.7.3 Communications Radio Mounting Plate(s)/Bracket(s): Vendor is to provide a mounting plate(s)/bracket(s) for mounting of State owned radio and power supply. For the radio mounting, one manufacturer has been using drilled and tapped (for 3/8 inch bolts) mounting points about 6 inches apart on either side of the cab. Plates can then be bolted to these mounting points by the State. On some of the units they have included a cover plate of heavy gauge steel bolted to these points, which hides the ROPS and provides even more area to mount our equipment. This system has been working OK, but if another manufacturer has a better way of providing a mounting point we can certainly look at it.

#### 5.0 **CAB:**

##### 5.1 Enclosed Roll Over Protection System (EROPS):

5.1.1 OEM, fully enclosed, steel, insulated, sound suppressed, pressurized, "ROPS" (SAE J1040) cab with safety glass front windshield and safety or tempered glass on sides or rear windows. To be adequately sealed as to not allow unreasonable cold air or dust into cab.

5.2 Recirculating personnel heater (Minimum 30,000 BTU) with defroster(s). Defroster(s) to be zoned to front windshield wiper area(s), minimum. Caged defroster fans are not acceptable in lieu of the zoned system.

5.3 Air Conditioning: To be OEM.

5.4 Front and rear window wipers and washers. Wiper motors to be highest capacity available from OEM. To include OEM intermittent feature on front minimum.

5.5 Sunvisor.

5.6 Operator's Seat: 6-way adjustable, cloth or cloth/vinyl covered, suspension type with seat belt.

5.7 Lockable doors.

- 5.8 Mirrors: To include an interior mounted convex rear view mirror and outside cab mounted *WEST COAST* style heated mirrors.
- 5.9 Horn: Electric or air.
- 5.10 High engine idle control capability, operator controlled or automatic.

## **6.0 INSTRUMENTATION:**

- 6.1 Gauges and/or indicators, as a minimum, shall include, in easy view of the operator:
  - 6.1.1 All gauges as noted below shall read in U.S. units of measure (not metric) at time of delivery.
  - 6.1.2 Hour Meter: Running engine activated.
  - 6.1.3 Ammeter or voltmeter gauge, or alternator malfunction indicator.
  - 6.1.4 Engine Coolant:
    - 6.1.4.1 High temperature (to include audio and visual warning system).
    - 6.1.4.2 Low level (to include audio and visual warning system).
  - 6.1.5 Engine oil pressure (to include audio and visual warning system).
  - 6.1.6 Air pressure gauge or indicator, if applicable.
  - 6.1.7 Transmission oil temperature gauge or indicator.
  - 6.1.8 Air filter restriction gauge or indicator.
  - 6.1.9 Fuel gauge.
  - 6.1.10 Parking Brake: To include warning light and audible warning device that activates when parking brake is on and transmission is in gear or a parking brake system with a transmission disconnect feature.

## **7.0 AUTO LUBE SYSTEM WITH MONITORING SYSTEM (amendment #3)(OPTIONAL):**

- 7.1 To include an automatic lubricating system, *BEKA-MAX* or equivalent, provided unit will work with NLGI Class 2 grease, per all Alaska conditions.
- 7.2 All zerks (drivelines being the exception).
- 7.3 All lines are to be routed and protected as necessary.
- 7.4 Lines are to be *ARCTIC FOX* wire braid on all moving points.

## **8.0 ATTACHMENTS:**

- 8.1 Quick Attach System:
  - 8.1.1 To be equipped with an attach system that is compatible with unit on contract. To be *CWS* or *WELDCO-BEALES* WLKAT or equivalent matching up with our current WLKAT system.
  - 8.1.2 All functions to be controlled from in the cab by the operator.

8.2 **General Purpose Bucket (OPTIONAL):**

- 8.2.1 To be OEM or *CWS* or *WELDCO-BEALES* or equivalent.
- 8.2.2 Capacity: 4.0 cubic yard SAE heaped.
- 8.2.3 Width: To be equal to or greater than host unit.
- 8.2.4 To include replaceable and reversible bolt-on cutting edge with 3-3-6-6-6.....6-6-6-3-3 inch punching.
- 8.2.5 To include lifting eyes or hooks on each top corner and center top of bucket.
- 8.2.6 To include *CWS* or *WELDCO-BEALES* or *WLKAT* equivalent quick attach.
- 8.2.7 Minimum Weight: 3,950 lbs. (per am #3)

8.3 **Heavy-Duty Bucket with G.E.T (Ground Engagement Tool) System (OPTIONAL):**

- 8.3.1 To be OEM or *CWS* or *WELDCO-BEALES* or equivalent.
- 8.3.2 To be *ESCO* or *CATERPILLAR*.
- 8.3.3 Capacity: 4.0 cubic yard SAE heaped.
- 8.3.4 Width: To be equal to or greater than host unit.
- 8.3.5 Bucket to include the following protectors: Edge, corner, base edge, and segment protectors.
- 8.3.6 G.E.T. System to include:
  - 8.3.6.1 Bolt-on shanks and teeth combination equivalent to *ESCO 43*.
    - 8.3.6.1.1 Shanks to be two (2) bolt, two (2) strap design.
  - 8.3.6.2 Left and right hand corner bolt-on shanks with teeth.
  - 8.3.6.3 Center shanks and teeth to be six (6) each, minimum.
  - 8.3.6.4 Corner adapters with teeth.
  - 8.3.6.5 Reversible edge segments
- 8.3.7 Bucket punching to be 3-3-6-6-6.....6-6-6-3-3 inch. (delete per am #3)
- 8.3.8 In addition to the G.E.T. system, a replaceable and reversible bolt-on cutting edge with compatible punching shall be shipped loose.
- 8.3.9 To include lifting eyes or hooks on each top corner and center top of bucket.
- 8.3.10 To include *CWS* or *WELDCO-BEALES* or *WLKAT* equivalent quick attach.
- 8.3.11 Minimum Weight: 3,950 lbs.

8.4 **Snow Bucket (State Class #876-7CY) (OPTIONAL):**

- 8.4.1 To be *CWS* or *WELDCO-BEALES* or equivalent.

- 8.4.2
- 8.4.3 Capacity: 8.0 cubic yard SAE heaped, minimum.
- 8.4.4 Width: To be equal to or greater than host unit.
- 8.4.5 To include replaceable and reversible bolt-on cutting edge with 3-3-6-6-6.....6-6-6-3-3 inch punching.
- 8.4.6 To include *CWS* or *WELDCO-BEALES* or *WLKAT* equivalent quick attach.
- 8.5 **Multi-Purpose Heavy-Duty Plow (State Class #866) (OPTIONAL):**
  - 8.5.1 To be front mounted with full hydraulic controls. To be *CWS* or *WELDCO-BEALES* or *HENKE*, provided all of the following specifications are met.
  - 8.5.2 Minimum Weight: 5,300 lbs. (per am #3)
  - 8.5.3 To include adjustable and replaceable mushroom design shoes.
  - 8.5.4 Blade angle cylinders to include accumulator system or hydraulic cross-over relief(s).
  - 8.5.5 Clearing width, minimum 133 inches, in bulldozer position.
  - 8.5.6 Center blade height, minimum 40 inches.
  - 8.5.7 Tip blade height, minimum 46 inches.
  - 8.5.8 Cutting Edge:
    - 8.5.8.1 In lieu of standard cutting edge, to be equipped with replaceable bolt-on *KENNEMETAL* Dual-Carbide-Insert, or equivalent, cutting edge with minimum 5/8 (0.625) inch diameter grade eight (8) plow bolts and nuts on six (6) inch centers, and end bits of alloy or high carbon steel.
    - 8.5.8.2 The main body of the cutting edge blade to be minimum 7/8 (0.875) inch thick.
  - 8.5.9 To include valves, controls and lines necessary for installation and full operation.
    - 8.5.9.1 Minimum of 4-spool valves.
    - 8.5.9.2 Diverter valves are not acceptable.
    - 8.5.9.3 Lift circuit to include detented valve for float position.
  - 8.5.10 Hydraulic quick disconnects must be pressure rated and sized to allow proper flow. Quick disconnects to include chained caps.
  - 8.5.11 Hydraulic lines must be secured and wrapped in wear areas to prevent chaffing.
  - 8.5.12 To include *CWS* or *WELDCO-BEALES* or *WLKAT* equivalent quick attach.
- 8.6 **Pallet Forks, 5-Foot (State Class #485) (OPTIONAL):**
  - 8.6.1 To be *CWS* or *WELDCO-BEALES* Model PF 60-108 or equivalent.

- 8.6.2 Minimum Weight: 2,700 lbs. (per am #3)
- 8.6.3 Tine Length: 60 inches.
- 8.6.4 Tine Spread: Adjustable to minimum of 100 inches wide.
- 8.6.5 Full width carriage backrest to be included.
- 8.6.6 Tine locks (width and swing) to be included.
- 8.6.7 To include *CWS* or *WELDCO-BEALES* or *WLKAT* equivalent quick attach.

**8.7 Pallet Forks, 8-Foot (State Class #485) (OPTIONAL):**

- 8.7.1 To be *CWS* or *WELDCO-BEALES* Model PF 96-108 or equivalent.
- 8.7.2 Minimum Weight: 2,850 lbs. (per am #3)
- 8.7.3 Tine length to be 96 inches.
- 8.7.4 Fork spread to be minimum 100 inches wide.
- 8.7.5 Full width carriage backrest to be included.
- 8.7.6 Tine locks (width and swing) to be included.
- 8.7.7 To include *CWS* or *WELDCO-BEALES* or *WLKAT* equivalent quick attach.

**8.8 Rear Counterweights:**

- 8.8.1 To include the heaviest OEM counterweights(s), for wheel loader applications. A special log loading application counterweight, wheel weights, and filled tires, would not be required.

**9.0 TRAINING (OPTIONAL):**

- 9.1 Total of 8 hours at the State Equipment Fleet Maintenance Facilities located in **Anchorage, Fairbanks or Juneau as requested.**
  - 9.1.1 Contractor to provide a qualified factory trained instructor(s), within 30 days of acceptance by the State. Please give advance notice (call the Contracting Officer for the name and telephone number of the Regional Equipment Manager or Superintendent).
- 9.2 To include a minimum of eight (8) hours of operator training including the following, as a minimum applicable agenda:
  - 9.2.1 Operating procedures per operating manual.
  - 9.2.2 Break-in procedures.
  - 9.2.3 Equipment limitations.
  - 9.2.4 Operator maintenance.
  - 9.2.5 Before operations checks and lubrication.
  - 9.2.6 Safety.
  - 9.2.7 Cold weather operations.
  - 9.2.8 Jump starting.

- 9.2.9 Welding on equipment.
- 9.2.10 Towing or transporting equipment.
- 9.2.11 Instruments and controls.
- 9.2.12 Gauge interpretation.
- 9.2.13 Equipment operation, Do's and Don'ts.
- 9.2.14 Attachment operation, Do's and Don'ts.

## **10.0 MISCELLANEOUS:**

### **10.1 Diagnostic Tools (OPTIONAL):**

- 10.1.1 For Engine, Transmission, ABS Braking, Bucket Leveling, etc., as applicable to diagnostics.
  - 10.1.2 To include, as a minimum, software and cables for connecting to a State owned laptop computer and training in use of the software.
  - 10.1.3 Training could be training an individual State employee in Fairbanks, Anchorage, and Juneau. This training could be over the telephone.
- 10.2 Hydraulic Hose: To be arctic grade (minus 40 degrees Fahrenheit, minimum).
- 10.3 Special Lubricants: If, for warranty purposes, manufacturer's specific lubricants are required, vendor is to provide these lubricants, or provide, at time of delivery, a cross reference chart between manufacturer's lubricants and any name brand and readily available equivalents.
- 10.4 Vandalism Protection:
- 10.4.1 Shall include locks for batteries, fuel tank, hydraulic tank, engine lube oil filler, and radiator.
  - 10.4.2 Locking panels for compartments are acceptable.
  - 10.4.3 If padlocks are utilized, they shall be keyed alike.
  - 10.4.4 Three (3) sets of keys, minimum, to be provided.
- 10.5 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.
- 10.6 SMV Emblem: Shall include metal slow moving vehicle emblem.
- 10.7 Paint: Manufacturer's standard yellow.
- 10.8 **Publications (OPTIONAL):** To include parts, service, and operator's manuals, per Section III- Special Terms and Conditions.
- 10.9 Inspection: For compliance of specifications on the unit will be conducted at FOB point.



## SECTION VI – SPECIFICATION

### SPECIFICATION #338 Minimum 5.0 Cubic Yard Wheel Loader August 16, 2007

#### GENERAL SPECIFICATION:

It is the purpose of this specification to describe a new, and of the manufacturer's latest current model and design, diesel powered, four wheel drive, minimum 5.0 cubic yard, articulating front end loader.

Unit shall include all standard equipment and accessories as advertised in manufacturer's specification sheet of model offered, unless otherwise specified herein.

#### APPLICATION:

General wheel loader application and implement carrier. Severe weather application ranging from minus 50 to plus 110 degrees Fahrenheit.

#### 1.0 POWER TRAIN:

##### 1.1 Engine:

- 1.1.1 Diesel, wet sleeved, 4 cycle, 9.6 liter displacement, 233 net SAE-J1349 flywheel HP at governed RPM, minimum.
- 1.1.2 To meet EPA Tier III emission requirements.

##### 1.2 Cooling System:

###### 1.2.1 Winterfront:

- 1.2.1.1 If required to maintain engine operating temperature at a minimum of 140 degrees Fahrenheit while operating to minus 50 degrees.
- 1.2.1.2 To be a heavy-duty vinyl construction, with stainless steel snaps or swivel locks and include a heavy-duty zipper. Installed over the rear grill area.

- 1.2.2 Permanent type anti-freeze giving protection to minus 50 degrees Fahrenheit.

##### 1.3 Intake System:

- 1.3.1 Air cleaner to be two (2) stage, dual element type.
- 1.3.2 Pre-cleaner: CASE dust ejector, or *CATERPILLAR* dust ejector, or *VOLVO* exhaust aspirated, or *CENTRI*, or *ENGINAIR*, or *SURECO TURBO II*.
- 1.3.3 Filter service indicator, in cab.

##### 1.4 Exhaust System:

- 1.4.1 Muffler(s) must not restrict operator's vision to rear.
- 1.4.2 Exhaust stack(s) to include 90 degree elbow or attenuator system.
- 1.5 Fuel System:
  - 1.5.1 Fuel filler to have ready access.
- 1.6 Oil and fuel filters to be spin-on type.
- 1.7 Starting Assist:
  - 1.7.1 Metered ether system, glow plugs or grid heater, operated from cab.
  - 1.7.2 Engine block heater, immersion type, highest wattage available, 110 volt AC (OEM if available).
  - 1.7.3 **Engine Oil Pan Heater (OPTIONAL):**
    - 1.7.3.1 One (1) each , 150 watt, 110 volt AC, silicone pad heater bonded to oil pan, *BESCO, KAT'S, WATLO*, or equivalent.
  - 1.7.4 **Transmission Oil Pan Heater (OPTIONAL):**
    - 1.7.4.1 One (1) each, 150 watt, 110 volt AC, silicone pad heater bonded to oil pan, *BESCO, KAT'S, WATLO*, or equivalent.
  - 1.7.5 110 volt AC power cords for engine and battery heaters to be plugged into waterproof, 20 amp, 110 volt AC, cord(s) or junction box(es) (more than one cord or junction box may be required due to total amperage being over 20), each with a minimum of three (3) receptacles. Male plug portion of 20 amp cord(s) to run out to the top of rear counterweight area for easy access by ground personnel. If more than one cord is required, they are to be labeled as to what they are for, such as; "Engine Block Heater", "Engine Oil Pan Heater", and Transmission Oil Pan Heater".
    - 1.7.5.1 The location of the cord(s) outlet boxes is/are to be in a weather protected area in the engine compartment.
    - 1.7.5.2 All wiring to be adequately secured and protected in a loom or similar protection.

## 2.0 DRIVE TRAIN:

- 2.1 Transmission:
  - 2.1.1 Power shift, forward and reverse.
  - 2.1.2 Transmission Disconnect: To include either a valve control or brake pedal control or transmission neutralizing feature which will allow transmission to be engaged or disengaged when depressing brake pedal as required for varying operating conditions.
- 2.2 Axles:
  - 2.2.1 *TRACTECH* No-SPIN or limited-slip or hydraulic locking differential in one (1) differential, minimum, or the limited slip differential by *CASE* or *CATERPILLAR* or *KOMATSU*, is acceptable. **Torque proportioning is not acceptable.**

- 2.2.2 If equipped with hydraulic differential locks in both front and rear differentials as in *VOLVO*, the front axle locking device can only be activated by the operator holding down on an activation pedal that is spring released.
- 2.3 Four (4) speeds forward, providing a speed of not less than 21 MPH with tires specified herein.
- 2.4 Minimum three (3) speeds reverse, providing a speed of not less than 16.1 MPH with tires specified herein.

### 3.0 CHASSIS:

- 3.1 Operating Weight: Minimum 48,400 pounds, per these specifications including GP bucket, but without quick attach.
- 3.2 Breakout Force (With general purpose bucket listed in this specification): Minimum 39,500 pounds, per these specifications, but without quick attach.
- 3.3 Full Turn Tip Load (With general purpose bucket listed in this specification): Minimum 30,600 pounds, per these specifications, but without quick attach.
- 3.4 Bucket Hinge Pin Height: Minimum 166 inches, per these specifications using the GP bucket with bolt-on cutting edge, but without the quick attach system.
- 3.5 Dump Height at 45 degrees: Minimum 119 inches, per these specifications using the GP bucket with bolt-on cutting edge, but without the quick attach system.
- 3.6 Dump Reach at 45 degrees and bucket raised to full height: Minimum 44 inches, per these specifications using the GP bucket with bolt-on cutting edge, but without the quick attach system.
- 3.7 Tires:
  - 3.7.1 To be 26.5x25 (20PR) L-3 tires, minimum. Calcium chloride not acceptable.
  - 3.7.2 **Spare Tire with Mounted Wheel (OPTIONAL):** To be same as above with mounted wheel.
- 3.8 Brakes:
  - 3.8.1 Service Brakes: To be wet (oil) disk. To include an air dryer (all metal) installed in discharge line between compressor and air tanks (if air system).
  - 3.8.2 Secondary (Back-Up) Braking System: Manually and/or automatically applied back-up braking system in the event of loss of service brake capacity.
  - 3.8.3 Parking Brake:
    - 3.8.3.1 To be a spring applied hydraulic released or hand operated, mechanical parking brake independent of other braking systems, capable of holding machine on a 20% grade.

3.8.3.2 To include parking brake warning light and audible warning device or a parking brake system with a transmission disconnect feature.

**3.9 Emergency Steering System (OPTIONAL):**

3.9.1 In compliance with SAE-J53.

3.10 Fenders: Front and rear, full width, OEM.

3.11 Tire Chain Clearance:

3.11.1 To provide minimum four (4) inches clearance (from outside diameter of tire to underside of fender) for tire chains.

3.11.2 To provide minimum of three (3) inches clearance (from inside wall of the tire).

3.12 Tow Hook: Shall be drawbar hitch pin type.

3.13 Lift Arm Kickout: Automatic.

3.14 Bucket Leveling: Automatic.

3.15 To include cushion system type ride control.

**4.0 ELECTRICAL SYSTEM:**

4.1 24-volt system.

4.2 To be negative ground system.

4.3 Alternator: Minimum 50 amp.

4.4 Battery(s): Heavy-duty, highest capacity available, minimum total of 1800 CCA at zero degrees Fahrenheit.

4.5 Master electrical switch to cut off all power source from battery to starter and remainder of electrical system. (To be located where accessible, but not ordinarily visible to persons not familiar with machine.)

4.6 Lighting System:

4.6.1 Front headlights.

4.6.2 Work Lights: Two (2) rear work lights and two (2) front work lights, halogen or HID.

4.6.3 Turn signals.

4.6.4 Stop and tail lights.

4.6.5 Dome light.

4.6.6 Strobe Lights:

4.6.6.1 Two (2) each *WHELEN* Model S360D, strobe lights, synchronized.

4.6.6.2 Left lens to be amber, right lens to be blue, in color.

4.6.6.3 To include "High/Low/Off" switch.

4.6.6.4 Location: On top of the cab, visible from all directions.

4.6.6.5 To be a 24-volt strobe light system.

#### 4.7 **OPTIONAL PACKAGE:**

##### 4.7.1 Voltage Converter:

4.7.1.1 24-volt systems require a 24-volt to 12-volt converter with a minimum of 60 amp continuous. *DUVAC 52107* or equivalent. Alaska dealer for *DUVAC* is *AUTO ELECTRIC*, Anchorage, Alaska, phone #907-562-9679.

4.7.1.2 Voltage converter's purpose is for communications radio(s). All other electrical including strobe and lighting systems are to be 24 volt.

4.7.2 Alternator: To be minimum 65-amp in lieu of the minimum 50-amp listed for the standard unit.

4.7.3 Communications Radio Mounting Plate(s)/Bracket(s): Vendor is to provide a mounting plate(s)/bracket(s) for mounting of State owned radio and power supply. For the radio mounting, one manufacturer has been using drilled and tapped (for 3/8 inch bolts) mounting points about 6 inches apart on either side of the cab. Plates can then be bolted to these mounting points by the State. On some of the units they have included a cover plate of heavy gauge steel bolted to these points, which hides the ROPS and provides even more area to mount our equipment. This system has been working OK, but if another manufacturer has a better way of providing a mounting point we can certainly look at it.

#### 5.0 **CAB:**

##### 5.1 Enclosed Roll Over Protection System (EROPS):

5.1.1 OEM, fully enclosed, steel, insulated, sound suppressed, pressurized, "ROPS" (SAE J1040) cab with safety glass front windshield and safety or tempered glass on sides or rear windows. To be adequately sealed as to not allow unreasonable cold air or dust into cab.

5.2 Recirculating personnel heater (Minimum 30,000 BTU) with defroster(s). Defroster(s) to be zoned to front windshield wiper area(s), minimum. Caged defroster fans are not acceptable in lieu of the zoned system.

5.3 Air Conditioning: To be OEM.

5.4 Front and rear window wipers and washers. Wiper motors to be highest capacity available from OEM. To include OEM intermittent feature on front minimum.

5.5 Sunvisor.

5.6 Operator's Seat: 6-way adjustable, cloth or cloth/vinyl covered, suspension type with seat belt.

5.7 Lockable doors.

5.8 Mirrors: To include an interior mounted convex rear view mirror and outside cab mounted *WEST COAST* style heated mirrors.

5.9 Horn: Electric or air.

5.10 High engine idle control capability, operator or automatically controlled.

## **6.0 INSTRUMENTATION:**

6.1 Gauges and indicators, as a minimum, shall include, in easy view of the operator:

6.1.1 All gauges as noted below shall read in U.S. units of measure (not metric) at time of delivery.

6.1.2 Hour Meter: Running engine activated.

6.1.3 Ammeter or voltmeter gauge, or alternator malfunction indicator.

6.1.4 Engine Coolant:

6.1.4.1 High temperature (to include audio and visual warning system).

6.1.4.2 Low level (to include audio and visual warning system).

6.1.5 Engine oil pressure (to include audio and visual warning system).

6.1.6 Air pressure gauge or indicator, if applicable.

6.1.7 Transmission oil temperature gauge or indicator.

6.1.8 Air filter restriction gauge or indicator.

6.1.9 Fuel gauge.

6.1.10 Parking Brake: To include warning light and audible warning device that activates when parking brake is on and transmission is in gear or a parking brake system with a transmission disconnect feature.

## **7.0 AUTO LUBE SYSTEM (OPTIONAL):**

7.1 To include an automatic lubricating system, *BEKA-MAX* or equivalent, provided unit will work with NLGI Class 2 grease, per all Alaska conditions.

7.2 All zerks (drivelines being the exception).

7.3 All lines are to be routed and protected as necessary.

7.4 Lines are to be *ARCTIC FOX* wire braid on all moving points.

## **8.0 ATTACHMENTS:**

8.1 Quick Attach System:

8.1.1 To be equipped with an attach system that is compatible with unit on contract. To be *CWS* or *WELDCO-BEALES* or *WLKAT5* equivalent matching up with our current *WLKAT* system.

8.1.2 All functions to be controlled from in the cab by the operator.

8.1.3 To include *CWS* or *WELDCO-BEALES* or *WLKAT* equivalent quick attach.

8.2 **General Purpose Bucket (OPTIONAL):**

8.2.1 To be OEM or *CWS* or *WELDCO-BEALES* or *PSM* equivalent.

8.2.2 Capacity: 5.0 cubic yard SAE heaped, minimum.

- 8.2.3 Width: To be equal to or greater than host unit.
- 8.2.4 To include replaceable bolt-on cutting edge with standard AASHTO punching.
- 8.2.5 To include lifting eyes or hooks on each top corner and center top of bucket.
- 8.2.6 To include *CWS* or *WELDCO-BEALES* or *WLKAT* equivalent quick attach.
- 8.2.7 Minimum Weight: 4,350 lbs.

**8.3 Heavy-Duty Bucket with G.E.T (Ground Engagement Tool) System (OPTIONAL):**

- 8.3.1 To be OEM or *CWS* or *WELDCO-BEALES* or equivalent.
- 8.3.2 Minimum Weight: 4,000 lbs. (per am #3)
- 8.3.3 To be *ESCO* or *CATERPILLAR*.
- 8.3.4 Capacity: 5.0 cubic yard SAE heaped.
- 8.3.5 Width: To be equal to or greater than host unit.
- 8.3.6 Bucket to include the following protectors: Edge, corner, base edge, and segment protectors.
- 8.3.7 G.E.T. System to include:
  - 8.3.7.1 Bolt-on shanks and teeth combination equivalent to *ESCO 43*.
    - 8.3.7.1.1 Shanks to be two (2) bolt, two (2) strap design.
  - 8.3.7.2 Left and right hand corner bolt-on shanks with teeth.
  - 8.3.7.3 Center shanks and teeth to be six (6) each, minimum.
  - 8.3.7.4 Corner adapters with teeth.
  - 8.3.7.5 Reversible edge segments
- 8.3.8 Bucket punching to be 3-3-6-6-6.....6-6-6-3-3 inch. (DELETE AM#3)
- 8.3.9 In addition to the G.E.T. system, a replaceable and reversible bolt-on cutting edge with compatible punching shall be shipped loose.
- 8.3.10 To include lifting eyes or hooks on each top corner and center top of bucket.
- 8.3.11 To include *CWS* or *WELDCO-BEALES* or *WLKAT* equivalent quick attach.

**8.4 Snow Bucket (State Class #876-10CY) (OPTIONAL)**

- 8.4.1 To be *CWS* or *WELDCO-BEALES* or *PSM* equivalent.
- 8.4.2 Minimum Weight: 6,100 lbs. (per am #3)
- 8.4.3 Capacity: 10.0 cubic yard SAE heaped, minimum.
- 8.4.4 Width: To be equal to or greater than host unit.

- 8.4.5 To include replaceable bolt-on cutting edge with standard AASHTO punching.
- 8.4.6 To include *CWS* or *WELDCO-BEALES* or *WLKAT* equivalent quick attach.
- 8.5 **Multi-Purpose Heavy-Duty Plow (State Class #866) (OPTIONAL):**
  - 8.5.1 To be front mounted with full hydraulic controls. To be *CWS* or *WELDCO-BEALES* or *HENKE*, provided all of the following specifications are met.
  - 8.5.2 Minimum Weight: 3,900 lbs. (per am #3)
  - 8.5.3 To include adjustable and replaceable mushroom design shoes.
  - 8.5.4 Blade angle cylinders to include accumulator system or hydraulic cross-over relief(s).
  - 8.5.5 Clearing width, minimum 133 inches, in bulldozer position.
  - 8.5.6 Center blade height, minimum 40 inches.
  - 8.5.7 Tip blade height, minimum 46 inches.
  - 8.5.8 Cutting Edge:
    - 8.5.8.1 In lieu of standard cutting edge, to be equipped with replaceable bolt-on *KENNEMETAL* Dual-Carbide-Insert, or equivalent, cutting edge with minimum 5/8 (0.625) inch diameter grade eight (8) plow bolts and nuts on six (6) inch centers, and end bits of alloy or high carbon steel.
    - 8.5.8.2 The main body of the cutting edge blade to be minimum 7/8 (0.875) inch thick.
  - 8.5.9 To include valves, controls and lines necessary for installation and full operation.
    - 8.5.9.1 Minimum of 4-spool valves.
    - 8.5.9.2 Diverter valves are not acceptable.
    - 8.5.9.3 Lift circuit to include detented valve for float position.
  - 8.5.10 Hydraulic quick disconnects must be pressure rated and sized to allow proper flow. Quick disconnects to include chained caps.
  - 8.5.11 Hydraulic lines must be secured and wrapped in wear areas to prevent chaffing.
  - 8.5.12 To include *CWS* or *WELDCO-BEALES* or *WLKAT* equivalent quick attach.
- 8.6 **Pallet Forks, 8-Foot (State Class #485) (OPTIONAL):**
  - 8.6.1 To be *CWS* or *WELDCO-BEALES* Model PF 96-108 or equivalent.
  - 8.6.2 Minimum Weight: 2,850 lbs. (per am #3)
  - 8.6.3 Tine Length: 96 inches.
  - 8.6.4 Tine Spread: Adjustable to 102 inches, with tine locks.
  - 8.6.5 Carriage backrest to be included.

- 8.6.6 Tine locks (width and swing) to be included.
- 8.6.7 Capacity: 20,000 pounds, minimum.
- 8.6.8 To include *CWS* or *WELDCO-BEALES* or *WLKAT* equivalent quick attach.

**8.7 Rear Counterweights:**

- 8.7.1 To include the heaviest OEM counterweights(s), for wheel loader applications. A special log loading application counterweight, wheel weights, and filled tires, would not be required.

**9.0 TRAINING (OPTIONAL):**

- 9.1 Total of 8 hours at the State Equipment Fleet Maintenance Facilities located in **Anchorage, Fairbanks, or Juneau as requested.**

- 9.1.1 Contractor to provide a qualified factory trained instructor(s), within 30 days of acceptance by the State. Please give advance notice (call the Contracting Officer for the name and telephone number of the Regional Equipment Manager or Superintendent).

- 9.2 To include a minimum of eight (8) hours of operator training including the following, as a minimum applicable agenda:

- 9.2.1 Operating procedures per operating manual.
- 9.2.2 Break-in procedures.
- 9.2.3 Equipment limitations.
- 9.2.4 Operator maintenance.
- 9.2.5 Before operations checks and lubrication.
- 9.2.6 Safety.
- 9.2.7 Cold weather operations.
- 9.2.8 Jump starting.
- 9.2.9 Welding on equipment.
- 9.2.10 Towing or transporting equipment.
- 9.2.11 Instruments and controls.
- 9.2.12 Gauge interpretation.
- 9.2.13 Equipment operation, Do's and Don'ts.
- 9.2.14 Attachment operation, Do's and Don'ts.

**10.0 MISCELLANEOUS:**

**10.1 Diagnostic Tools (OPTIONAL):**

- 10.1.1 For Engine, Transmission, ABS Braking, Bucket Leveling, etc., as applicable to diagnostics.

- 10.1.2 To include, as a minimum, software and cables for connecting to a State owned laptop computer and training in use of the software.
- 10.1.3 Training could be training an individual State employee in Fairbanks, Anchorage, and Juneau. This training could be over the telephone.
- 10.2 Hydraulic Hose: To be arctic grade (minus 40 degrees Fahrenheit, minimum).
- 10.3 Special Lubricants: If, for warranty purposes, manufacturer's specific lubricants are required, lessor is to provide these lubricants, or provide, at time of delivery, a cross reference chart between manufacturer's lubricants and any name brand and readily available equivalents.
- 10.4 Vandalism Protection:
  - 10.4.1 Shall include locks for batteries, fuel tank, hydraulic tank, engine lube oil filler, and radiator.
  - 10.4.2 Locking panels for compartments are acceptable.
  - 10.4.3 If padlocks are utilized, they shall be keyed alike.
  - 10.4.4 Three (3) sets of keys, minimum, to be provided.
- 10.5 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.
- 10.6 SMV Emblem: Shall include metal slow moving vehicle emblem.
- 10.7 Paint: Manufacturer's standard yellow.
- 10.8 **Publications (OPTIONAL):** To include parts, service, and operator's manuals, per Section III- Special Terms and Conditions.
- 10.9 Inspection: For compliance of specifications on the unit will be conducted at FOB point.