CONTRACT AWARD CA2236-20

SECTIONS:

SECTION I –TERMS AND CONDITIONS

SECTION II – SPECIFICATIONS

SECTION III – PRICE SCHEDULE

CONTRACTOR:

NC Machinery

6450 Arctic Blvd.

Anchorage, AK 99518

Contact: Adam Hirstein or Steve Fisher

(907) 786-7580

sfisher@ncmachinery.com

ahirstein@ncmachinery.com

Alaska Business License No: 276151

Date of Contract: May 18, 2020

Contract Expiration: May 17, 2021

Estimated Value of Initial Term: $1,800,000

Optional Renewals:

Renewal One Expiration: May 17, 2022

Renewal Two Expiration: May 17, 2023

CONTRACTING AUTHORITY:

State of Alaska

HQ, State Equipment Fleet

5420 Dr. MLK Jr. Avenue

Anchorage, AK 99507

CONTRACTING OFFICER:

Kristi Futrel

(907) 269-0793

Kristi.Futrel@alaska.Gov

Contracting Authority Name & Title:

Kristi Futrel, Contracting Officer IV

Contractor Authority Name & Title:

Adam Hirstein, Government Sales

# TERMS AND CONDITION

## CONTRACT: Purchase of AIP Motor Graders:

* 1. Contract Period**:** ONE (1) YEAR CONTRACT WITH TWO (1) ONE YEAR EXTENTIONS for Purchase of Airport Improvement Project (AIP) Motor Graders for Alaska Airports. This will be a multi-vendor contract.
	2. Quantities: Contingent on approval of FAA grants. Anticipate 6 Units for Lot 1 and 7 for Lot 2 within the first year on the contract.
		1. Funding is appropriated through the Federal Aviation Administration. All future orders are dependent upon approved yearly grants.
	3. Location of Use: Statewide, Alaska
	4. Warranty locations: Anchorage
	5. In addition to the State of Alaska requirements, the Municipality of Anchorage and other Alaska political subdivisions may cooperatively purchase from the resulting contract.
		1. 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.

## DELIVERY:

* 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. Inspection must include the following (as applicable to the type of equipment):
		1. Dealer and vehicle identification.
		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.
		3. The vehicle's crankcase, differential and transmission, and other fluid compartments shall be filled to the manufacturer's recommended capacity.
		4. Fuel tank shall be filled to at least register a minimum ¼ full on the fuel gauge, unless restricted by the commercial carrier, when the vehicle arrives at the delivery location.
		5. The vehicle shall be clean and free from defects when delivered and should be ready for immediate and continued use upon delivery.
		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.
	2. Inspections:
		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:
			1. repair or replace at contractor's expense, any or all of the damaged goods,
			2. refund the price of any or all of the damaged goods, or
			3. Accept the return of any or all of the damaged goods.
		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.
	3. Acceptance:
		1. Units will not be considered “Accepted” until all deficiencies have been corrected. This includes item 2.5 Line Sheets/Bill of Materials, 2.6 Parts & Service Information, and 8.0 Publications.
	4. Delivery Receipt:
		1. A delivery receipt will be required. 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.
		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. Only the Contracting Officer or designee may sign warranty documentation.
	5. Build Sheets/Bill of Materials:
		1. It is required at the time of delivery that the successful bidder provides a comprehensive listing of all components used to assemble the unit.
		2. This includes any components installed by the manufacturer or any subcontractor or the successful bidder.
		3. Information will include at a minimum, make, model serial number on items such as engines, transmissions, axles, tires, bodies, etc. The listings will be specific to each piece of equipment.
		4. PDF copies of Build Sheets/Bill of Materials must be emailed to: jonathan.skinner@alaska.gov, for archiving and sharing with the proper SOA departments.
	6. Parts & Service information
		1. It is required at the time of delivery that the successful bidder provides a comprehensive listing of parts & service information.
		2. Information will include, at a minimum, list of all required filters, list of all required oil types by compartment, quantity of oil needed, service schedule listing required service items by hours/miles and date, and a recommended parts stock list.
		3. PDF copies of Parts & Service information must be emailed to: jonathan.skinner@alaska.gov, for archiving and sharing with the proper SOA departments.

## F.O.B. POINT:

* 1. The F.O.B. point is as listed in Section III, Bid Schedule. Ownership of and title will remain with the contractor until delivery is complete to final destination and accepted by the State. Equipment is not to be driven on the Alcan Highway without prior written approval from the contracting officer.
	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. 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. Shipping must be consolidated for the best possible price. Shipping items separately must be pre-approved by the Contracting Officer PRIOR to shipment. For example, GP Bucket or Spare Tire not being shipped with host unit must be pre-approved.

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

* 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.
	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 equipment in this this class, that daily rental fee is determined to be $690.00. 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.
	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.

## EQUIPMENT RELIABILITY:

* 1. Reliability of equipment is of paramount importance to the State. It is the policy of SEF to require minimum levels of reliability from owned or leased equipment for it to be considered acceptable. Equipment offered for this bid must be capable of meeting the acceptable reliability standard stated below.
	2. Acceptable Reliability: The State will monitor equipment reliability. Acceptable reliability for this contract is achieved when a machine achieves or maintains a Reliability Ratio (RR) equal to or exceeding the following:
		1. .90 (90 percent) PR during any consecutive 12-months (365 days) during the warranty period.
		2. .75 (75 percent) PR per operational month (recognizing operational as subject to weather and being defined by calendar days) during the consecutive 12-month period.
		3. PR below the state percentages do not meet minimum reliability requirements for state owned equipment.
	3. Machine Failure and Downtime:
		1. Machine Failure is any and all loss of capability to perform fully, as specified, which is not attributed to Conditioned Failure. Machine Failure resulting in the unit being out of service is defined as Downtime.
		2. Conditioned Failure is any Machine Failure attributable to accident, operator abuse or other external cause not attributable to a defect in the machine itself.
		3. Downtime is the actual number of days or fractions of days that the equipment is in a state of Machine Failure. Downtime does not count time used for scheduled maintenance (including preventative maintenance and scheduled major overhauls), time lost for repair maintenance and scheduled major overhauls, time lost for repair of damage as a result of operator abuse or machine misapplication; or time lost as a result of accident or an act of God. Downtime includes:
			1. Actual shop hours (and/or field repair hours) required to return unit to full operational status following machine failure, including trouble-shooting, repair, necessary replacement of parts, and necessary adjustments, plus
			2. Time lost waiting for parts and/or vendor assistance. “Waiting downtime” also applies if need for parts/assistance is discovered during routine maintenance and return to service is deemed counterproductive. In this case, “waiting time” clock begins with notice of need to vendor. Allowance may be considered in “waiting time” calculations if arrival of parts/assistance is delayed by transportation shutdown, to include verifiable transportation scheduling difficulties such as infrequent flights as long as all reasonable alternatives have been exhausted. Parts and assistance are to be provided by the quickest means reasonably possible to avoid unnecessary delays and downtime.
		4. Out of Service Report (OSR): Downtime resulting from machine failure is the actual number of hours a machine is out of service as recorded on the OSR or in the Equipment Maintenance Management System (EMS).
			1. The State will record all downtime on an OSR or EMS work order, which will be originated for each occurrence of downtime. The document will show the date and time a unit went down, the location where the machine was based, the reason the machine is down, date and time the vendor was notified (if applicable), the date and time the machine was returned to service, and the total hours of downtime.
				1. The Contract Manager will finalize and approve the OSR or EMS work order. Both are available for contractor review.
		5. Reporting Downtime: The Contracting Officer will maintain documentation of all Downtime, and shall send copies of such documentation to the contractor.
		6. Calculation of Reliability Ratio: RR is the mathematical ration of operated time (uptime) to out of service time (downtime). The RR will be calculated according to the following formula:

RR = Days in a Month – Days Out of Service\* = DM - DO

 Days in a Month \*\* DM

 Note \* : Fractional Days apply, i.e., a unit is out of service 8 hours in a 24 hour period equals 1/3 or .33% of a day.

 Note \*\*: A day is allocated as 24 consecutive hours from 12:00 AM to 12:00 PM.

 Example: 30 days DM with 2 days and 8 hours DT would result in:

 RR = 30 - 2.33 = .92

 30

* + 1. Unacceptable Reliability: If an item of equipment fails to perform at an acceptable level of reliability during the warranty period, the Contracting Officer will notify the contractor and request immediate remedy. Failure to remedy the piece of equipment within 30 days for failure will result in a breach of contract and the immediate return of the equipment and reimbursement of the Guaranteed Value (V) of the unit:

Original Cost of the unit less (-) Freight = $\_\_\_\_\_\_\_\_\_\_ (V)

Guaranteed Value (V) less (-) the Cost of Operation as listed in the Equipment Rental Rate Blue Book or comparable equipment or the current Federal Fixed Usage Rate for the Class for the State of Alaska (a, b or c per hour) times (X) the number of hours used = \_\_\_\_\_\_\_\_\_\_\_(DV).

1. Example: Cost of a single unit, less freight = $150,000. The hourly cost is $150.00 per hour. The unit was used 150 hours prior to failing the acceptable reliability. The contractor guarantees the unit’s worth at $127,500.00.
	* 1. Prior to return, the State will correct all reasonable cosmetic deficiencies (such as excessive rust) and those deficiencies that are directly related to damage due to accidents, misuse of equipment or failure to operate or maintain equipment as prescribed by the vendor/manufacturer, prior to public auction.
		2. The tires will be serviceable with at least 50% remaining thread.
		3. Oil samples, as per manufacturer’s service manual recommendations, will be taken by State of Alaska maintenance personnel on the engine, transmission, differentials and hydraulics.
		4. In the case of dispute, at the expense of the State, a qualified agent from Northern Adjusters, Inc. or another professionally recognized appraiser may be commissioned for an independent claim appraisal. Such appraisal shall be binding upon the State and the contractor.

## WARRANTY:

* 1. Standard Warranty Package: Unless otherwise stipulated by this ITB, the successful bidder will provide a one-year (12-month) warranty.
		1. Full (100%) Parts and Labor Warranty Coverage of all components for 12 months (year one), from the date the unit is placed in service at the assigned location.
		2. Full (100%) Warranty Coverage includes all cost of labor, parts, freight, lubricants, miscellaneous cost, etc., to place the unit in like-new condition.
		3. 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.
		4. 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. Warranty on Attachments: Same as Standard Warranty Package.
		6. 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.
	2. Warranty Claims:
		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. If travel is required by State personnel to perform the work, actual costs will be used for reimbursement.
		2. The State of Alaska has established a warranty procedure whereby the vendor is to be notified via letter, email, or fax, 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.
		3. The vendor must notify the state within 24 hours of verbal or written notification that it will begin to perform the warranty work at the equipment location.
		4. 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 24 hours). The State will require a PO to perform the warranty work.
		5. Failure to notify the State that the vendor intends to begin to perform warranty is considered a contractual breach.
		6. The vendor will be invoiced for required warranty work performed by the state.  Warranty work performed by the state will be charged at the current SEF shop labor rate at the time of the repair.  Actual repair time will be used.
	3. Warranty Performed by Vendor:
		1. The State will reimburse travel costs not reimbursed by the manufacturer for travel to and from the bidder’s closest warranty service center within the State of Alaska to the location of the equipment under warranty.  Travel costs will be billed as follows:
			1. Mileage Charge: Mileage will only be reimbursed for travel within Alaska at the rate allowable by the IRS.
			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.
			3. Transportation, such as airfare, shall be reimbursed at actual and all charges are to be accompanied by a receipt/copy of the coach ticket.
			4. Lodging shall be reimbursed at actual and shall not exceed $150.00 per night unless no other lodging is available. Requests for reimbursement must be accompanied by a receipt.
		2. Travel will only be reimbursed for time in Alaska.
		3. After hours, weekend and holiday travel must be approved by the contracting officer to be considered for reimbursement. The State will not pay for weather delays.
	4. Authorized Warranty (Contractor/Bidder):
		1. Contractor (bidder) must have Authorized Warranty Dealer that has all required licenses, facilities and factory certified and trained personnel necessary to perform the warranty servicing and repair work.

Provide name and address for each Authorized Warranty Dealer for each location.

(\*) Anchorage, Fairbanks, Juneau, Wasilla and Dutch Harbor

* + 1. The ultimate responsibility for warranty lies with the contractor (bidder).
		2. The State reserves the right to inspect the warranty facility and diagnostic equipment prior to issuing the Notice of Intent to Award a contract.
	1. Factory Recall:
		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.

## REPAIR ORDERS AND DOCUMENTATION:

* 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.

## PUBLICATIONS:

* 1. Paper publications are to be received by the State at the time of delivery. 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.
		1. All paper manuals are to be pre-assembled in factory binders prior to delivery.
		2. Any electronic copies of manuals, and subsequent revisions, must be emailed to: jonathan.skinner@alaska.gov, for archiving and sharing with the proper SOA departments.
		3. Online access to manuals must be provided at time of delivery. All shared access credentials shall be proved to: jonathan.skinner@alaska.gov, for archiving and sharing with the proper SOA departments.
	2. Service Manuals:
		1. Complete set(s) to include applicable information covering prime unit and attachments:
		2. Body, chassis, and electrical
		3. Engine, transmission, and differential(s) (service and rebuild)
		4. Electrical and vacuum troubleshooting
		5. Wiring diagrams
		6. Service specifications
		7. Engine/emission diagnosis
	3. Parts Manuals:
		1. Complete set(s) including all updates. If updates are not provided during the warranty period, the State may order them from the manufacturer and bill the contractor for the full cost, including shipping.
		2. Parts manuals are to be customized by serial number.
	4. Operator’s Manuals: Complete set(s) to include prime unit and attachments.
	5. Quantities: As per Section III – Bid Price Schedule.
	6. 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 improvement’s that may affect the maintenance, reliability, longevity, and safety of our equipment.

## 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 delivered with the invoice to:

DOT&PF, HQ State Equipment Fleet

5420 Dr. Martin Luther King Jr. Avenue

Anchorage, Alaska 99507

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

## PRICE:

* 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.
	2. NO RETROACTIVE PRICE INCREASES WILL BE ACCEPTED.
	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:
		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;
			1. The increase will not produce a higher profit margin for the contractor than that on the original contract, and that;
			2. The increase affects only the item(s) that are clearly identified by the contractor.
			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.
	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.
	5. Manufacturer’s Rebate (Incentives):
		1. 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.

## REPLACEMENT PARTS AND REPAIRS:

* 1. This contract encompasses a full parts and labor contract for manufacturer parts and repairs for the entire warranty period.
	2. The State of Alaska shall expect the dealer or manufacturer to provide replacement wear parts at their authorized warranty facilities for the entire warranty period within seven (7) days of order. All other parts must be available within ten (10) working days.
	3. Back order procedures: Back orders are acceptable; however, the ordering shop shall be appraised at time of original orders as to the expected delay in delivery.
	4. 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.
		1. If the manufacturer’s warranty exceeds the stated warranty then manufacturer’s warranty supersedes.
		2. Parts Return: Within 12 months of the invoice date, the State is to be allowed to return new parts with full refund, less actual shipping charges. Cores returned within 12 months of original invoice date will receive full core credit. Returned parts will be in new, resalable condition. Refund will be in the form of a credit/invoice credited to the SOA account with the vendor.
		3. Invoicing: Full description of item is required on all invoices, packing lists and billings.

# CONDITIONS:

## AUTHORITY:

This ITB is written in accordance with AS 36.30 and 2 AAC 12.

## COMPLIANCE:

In the performance of a contract that results from this ITB, the contractor must comply with all applicable federal, state, and borough regulations, codes, and laws; be liable for all required insurance, licenses, permits and bonds; and pay all applicable federal, state, and borough taxes.

## SUITABLE MATERIALS, ETC.:

Unless otherwise specified, all materials, supplies or equipment offered by a bidder shall be new, unused, and of the latest edition, version, model or crop and of recent manufacture.

## SPECIFICATIONS:

Unless otherwise specified in the ITB, product brand names or model numbers specified in this ITB are examples of the type and quality of product required, and are not statements of preference. If the specifications describing an item conflict with a brand name or model number describing the item, the specifications govern. Reference to brand name or number does not preclude an offer of a comparable or better product, if full specifications and descriptive literature are provided for the product. Failure to provide such specifications and descriptive literature may be cause for rejection of the offer.

## FIRM OFFER:

For the purpose of award, offers made in accordance with this ITB must be good and firm for a period of ninety (90) days from the date of bid opening.

## EXTENSION OF PRICES:

In case of error in the extension of prices in the bid, the unit prices will govern; in a lot bid, the lot prices will govern.

## BID PREPARATION COSTS:

The State is not liable for any costs incurred by the bidder in bid preparation.

## CONSOLIDATION OF AWARDS:

Due to high administrative costs associated with processing of purchase orders, a single low bid of $50 or less may, at the discretion of the State, be awarded to the next low bidder receiving other awards for consolidation purposes. This paragraph is not subject to the protest terms enumerated in “*INSTRUCTION TO BIDDERS”*, “FILING A PROTEST*”* above.

## CONTRACT FUNDING:

Bidders are advised that funds are available for the initial purchase and/or the first term of the contract. Payment and performance obligations for succeeding purchases and/or additional terms of the contract are subject to the availability and appropriation of funds.

## CONFLICT OF INTEREST:

An officer or employee of the State of Alaska may not seek to acquire, be a party to, or possess a financial interest in, this contract if (1) the officer or employee is an employee of the administrative unit that supervises the award of this contract; or (2) the officer or employee has the power to take or withhold official action so as to affect the award or execution of the contract.

## ASSIGNMENT(S):

Assignment of rights, duties, or payments under a contract resulting from this ITB is not permitted unless authorized in writing by the procurement officer of the contracting agency. Bids that are conditioned upon the State’s approval of an assignment will be rejected as nonresponsive.

## SUBCONTRACTOR(S):

Within five (5) working days of notice from the state, the apparent low bidder must submit a list of the subcontractors that will be used in the performance of the contract. The list must include the name of each subcontractor and the location of the place of business for each subcontractor and evidence of each subcontractor's valid Alaska business license.

## FORCE MAJEURE:

(Impossibility to perform): The parties to a contract resulting from this ITB are not liable for the consequences of any failure to perform, or default in performing, any of its obligations under the contract, if that failure or default is caused by any unforeseeable Force Majeure, beyond the control of, and without the fault or negligence of, the respective party. For the purposes of this ITB, Force Majeure will mean war (whether declared or not); revolution; invasion; insurrection; riot; civil commotion; sabotage; military or usurped power; lightning; explosion; fire; storm; drought; flood; earthquake; epidemic; quarantine; strikes; acts or restraints of governmental authorities affecting the project or directly or indirectly prohibiting or restricting the furnishing or use of materials or labor required; inability to secure materials, machinery, equipment or labor because of priority, allocation or other regulations of any governmental authorities.

## LATE BIDS:

Late bids are bids received after the time and date set for receipt of the bids. Late bids will not be accepted.

## CONTRACT EXTENSION:

Unless otherwise provided in this ITB, the State and the successful bidder/contractor agree: (1) that any holding over of the contract excluding any exercised renewal options, will be considered as a month-to-month extension, and all other terms and conditions shall remain in full force and effect and (2) to provide written notice to the other party of the intent to cancel such month-to-month extension at least thirty (30) days before the desired date of cancellation.

## DEFAULT:

In case of default by the contractor, for any reason whatsoever, the State of Alaska may procure the goods or services from another source and hold the contractor responsible for any resulting excess cost and may seek other remedies under law or equity.

## DISPUTES:

If a contractor has a claim arising in connection with a contract resulting from this ITB that it cannot resolve with the State by mutual agreement, it shall pursue a claim, if at all, in accordance with the provisions of AS 36.30.620 – 632.

## CONSUMER ELECTRICAL PRODUCT:

AS 45.45.910 requires that "...a person may not sell, offer to sell, or otherwise transfer in the course of the person's business a consumer electrical product that is manufactured after August 14, 1990, unless the product is clearly marked as being listed by an approved third party certification program." Electrical consumer products manufactured before August 14, 1990, must either be clearly marked as being third party certified or be marked with a warning label that complies with AS 45.45.910(e). Even exempted electrical products must be marked with the warning label. By signature on this bid the bidder certifies that the product offered is in compliance with the law. A list of approved third party certifiers, warning labels and additional information is available from: Department of Labor and Workforce Development, Labor Standards & Safety Division, Mechanical Inspection Section, P.O. Box 107020, Anchorage, Alaska 99510-7020, (907)269-4925.

## SEVERABILITY:

If any provision of the contract is declared by a court to be illegal or in conflict with any law, the validity of the remaining terms and provisions will not be affected; and, the rights and obligations of the parties will be construed and enforced as if the contract did not contain the particular provision held to be invalid.

## GOVERNING LAW; FORUM SELECTION:

A contract resulting from this ITB is governed by the laws of the State of Alaska. To the extent not otherwise governed by section 17 of these Standard Terms and Conditions, any claim concerning the contract shall be brought only in the Superior Court of the State of Alaska and not elsewhere.

## NEW EQUIPMENT:

Equipment and components 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. It is the contractor's responsibility to ensure that each piece of equipment and components delivered to the state complies with this requirement. A contractor's failure to comply with this requirement will cause the state to seek remedies under breach of contract.

## 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.

## BRAND SPECIFIC:

Certain items may be designated brand specific. When an item is so designated no substitutions for the brand and model specified will be allowed.

## INSPECTION:

Equipment offered for lease may be subject to inspection and approval by the state prior to the award of the ITB. The equipment and attachments must be in good repair and capable of performing the work for which they were designed.

## 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.

## 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 to or better than the discontinued item and provided that it is sold at the same price or less than the discontinued item.

## 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.

## DELIVERY TIME:

The elapsed time between the time the state places an order and the time that order is actually shipped from the contractor's place of business must be entered in space provided under "Bid Schedule". This processing time is to remain constant throughout the life of the contract(s).

## DELIVERY CONFIRMATION:

Bidders must obtain a confirmation from the manufacturer that the items offered are scheduled for production in sufficient time to meet the scheduled delivery dates. A copy of the manufacturer’s confirmation may be included with the bid or submitted within 10 days of the state's request. The bidder's failure to provide the manufacturers confirmation as required will cause the state to consider the bid non-responsive and reject the bid.

## ADVANCE NOTICE OF DELIVERY:

The contractor must notify the freight company that delivers the order that the state facility receiving the order requires 24 hours advance notice of delivery.

## THIRD-PARTY FINANCING AGREEMENTS NOT ALLOWED:

Because of the additional administrative and accounting time required of state agencies when third party financing agreements are permitted, they will not be allowed under this contract.

## CONTINUING OBLIGATION OF CONTRACTOR:

Regardless of the terms and conditions of any third-party financing agreement, the contractor agrees that none of its responsibilities under this contract are transferable and that the contractor alone will continue to be solely responsible until the expiration date of the contract. Such responsibilities include, but are not limited to, the provision of equipment, training, warranty service, maintenance, parts and the provision of consumable supplies. By signature on the face page of this ITB the bidder acknowledges this requirement and indicates unconditional acceptance of this continuing obligation clause.

## ESTIMATED QUANTITIES:

The quantities referenced in this ITB are the state's estimated requirements and may vary more or less from the quantities actually purchased. The state does not guarantee any minimum purchase. Orders will be issued throughout the contract period on an as-needed basis.

## SERVICE CHARGES:

Regardless whether the contractor repairs equipment on-site or off-site, the state will not be liable for any charges associated with the repair of broken equipment, including, but not limited to, unhooking, disassembly, packaging, crating, repair, transportation, replacement, reassembly, or rewiring.

## PARTS:

Only parts designed for the purpose they are being used, and warranted as new, may be used in the repair of state equipment.

## COMPLETION OF SERVICE:

The service will not be complete and the equipment will not be considered serviced, repaired, or acceptable until it performs in compliance with the manufacturer's published performance specifications.

## SERVICE TECHNICIAN QUALIFICATIONS:

Bidders must provide evidence that the person performing the service work is a manufacturer's authorized service technician; or, the bidder may provide evidence that they have contracted with a manufacturer's authorized service technician to perform the service work.

Acceptable evidence of the service technician's competence may take the form of a letter or certificate, signed by an authorized officer of the manufacturer, that the service technician has been trained and authorized by the manufacturer to provide manufacturer's authorized warranty service.

 The bidder’s failure to provide the evidence mentioned above, within the time required by the state, may cause the state to consider the bid non-responsive and reject the bid.

## WORKMANSHIP & MATERIALS:

 All work must be performed in a thorough and workmanlike manner and in accordance with current industry practices. The contractor will be held responsible for the quality of the finished item. The state will reject any item that does not meet the specifications of the ITB. Rejected items will be returned to the contractor at the contractor's risk and expense.

## CONTRACT CANCELLATION:

 The state reserves the right to cancel the contract at its convenience upon 30 calendar day’s written notice to the contractor. The state is liable only for payment in accordance with the payment provisions of this contract for services or supplies provided before the effective date of termination.

## METHOD OF AWARD:

 DOT/PF is required by law to award “to the lowest responsible and responsive bidder whose bid conforms in all MATERIAL respects to the requirements and criteria set out in the invitation to bid.” AS 36.30.170.

 All specifications in this ITB are important and bidders should carefully address each item. Deviation from a specification MAY result in rejection of a bid at the discretion of the Contracting Officer if the deviation is material. A material deviation is one that is significantly different from an essential aspect of a specification.

 The Contracting Officer may be justified in accepting a non-material deviation - it will be determined upon the facts, circumstances, and the proposal in the bid. If a bid deviation has a negligible effect on price, quality, performance, delivery or contract conditions, it is not material and may be waived or corrected by the Contracting Officer. The State reserves the right to waive minor informalities or technical defects, which are not material, when such waiver is in the best interest of the State.

 Nothing in this section shall be construed as depriving the State of its discretion in the matter of determining the lowest responsible bidder.

 A Notice of Intent to Award (ITA) will be issued for all solicitations in accordance with regulations. The notice of intent to award does not constitute a formal award of a contract. Formal award is achieved through execution of the "Offer and Contract Award" section of the Invitation to Bid.

## CONTRACTOR SELECTION PROCESS:

 If multiple contracts are awarded and established this selection process will be used. When an agency needs security services the lowest contractor for that location will be contacted first. If, for any reason, the lowest contractor is not available to perform the needed service, the state will contact the next lowest contractor for that location. This process will continue until a contractor who can perform the service is located. The location of the contractor initially contacted will be determined by the starting location of the call-out. For instance, if a there was a need to transport a person from Anchorage to Fairbanks and then guard the person for two days in Fairbanks, the agency would contact Anchorage contractors, even though a substantial portion of the actual service would be performed in Fairbanks.

# SPECIAL CONDITIONS:

## ORDER DOCUMENTS:

Except as specifically allowed under this ITB, an ordering agency will not sign any vendor contract. The State is not bound by a vendor contract signed by a person who is not specifically authorized to sign for the State under this ITB. The State of Alaska Purchase Order, Contract Award and Delivery Order are the only order documents that may be used to place orders against the contract(s) resulting from this ITB.

## BILLING INSTRUCTIONS:

Invoices must be billed to the ordering agency's address shown on the individual Purchase Order, Contract Award or Delivery Order, not to the Division of General Services. The ordering agency will make payment after it receives the merchandise or service and the invoice. Questions concerning payment must be addressed to the ordering agency.

## CONTINUING OBLIGATION OF CONTRACTOR:

Notwithstanding the expiration date of a contract resulting from this ITB, the contractor is obligated to fulfill its responsibilities until warranty, guarantee, maintenance and parts availability requirements have completely expired.

# AIP TERMS AND CONDITIONS:

## PERFORMANCE BOND FOR WARRANTY & PERFORMANCE:

A Performance Bond is due within 30 days of the first purchase order.

 The State does not have backup equipment in many of its locations. Consequently, new-unit reliability and warranty performance is of vital importance. To insure the possible reliability and warranty service the State requires the contractor to post performance bond in one of the forms listed below. The purpose of the posted performance bond is to secure performance over the entire term of the contract. The performance bond must cover any remaining warranty in the event that the contractor is unable to or otherwise fails to complete the warranty period. The amount of the performance bond will be $50,000.00. Release of the performance security will be contingent solely upon the acceptable completion of the terms of the original contract.

 The Performance Bond must be posted in one year terms for the life of the contract by a surety company agreed to by the parties to this contract. Failure to post the successive bond, or to provide an alternative security as listed below, will be cause for breach of contract and immediate cancellation of any future orders.

 The Performance Bond must be written in a form satisfactory to the State by a company authorized to do surety business in Alaska. The performance bond must provide a statement that it is payable to the State of Alaska as security for the contractor’s full and faithful performance of the contract.

 Alternate Security: In lieu of a performance bond, a contractor may post security in the form of a certified or cashier’s check, or a certificate of deposit, to be returned to the contractor provided that the contractor fully and faithfully performs the contract, including all warranty obligations.

A certified or cashier’s check, made payable to the State of Alaska.

A Certificate of Deposit (CD) made payable to the State of Alaska. Inclusion of other verbiage on the “payee” or pay to” line will render the security unacceptable.

## TRADE RESTRICTION CLAUSE (9 CFR Part 30.13FAA Order 5100.38):

The contractor or subcontractor, by submission of an offer and/or execution of a contract, certifies that it:

 is not owned or controlled by one or more citizens of a foreign country included in the list of countries that discriminate against U.S. firms published by the Office of the United States Trade Representative (USTR);

 has not knowingly entered into any contract or subcontract for this project with a person that is a citizen or national of a foreign country on said list, or is owned or controlled directly or indirectly by one or more citizens or nationals of a foreign country on said list;

 has not procured any product nor subcontracted for the supply of any product for use on the project that is produced in a foreign country on said list.

 Unless the restrictions of this clause are waived by the Secretary of Transportation in accordance with 49 CFR 30.17, no contract shall be awarded to a contractor or subcontractor who is unable to certify to the above. If the contractor knowingly procures or subcontracts for the supply of any product or service of a foreign country on said list for use on the project, the Federal Aviation Administration may direct through the Sponsor cancellation of the contract at no cost to the Government.

 Further, the contractor agrees that, if awarded a contract resulting from this solicitation, it will incorporate this provision for certification without modification in each contract and in all lower tier subcontracts. The contractor may rely on the certification of a prospective subcontractor unless it has knowledge that the certification is erroneous.

 The contractor shall provide immediate written notice to the sponsor if the contractor learns that its certification or that of a subcontractor was erroneous when submitted or has become erroneous by reason of changed circumstances. The subcontractor agrees to provide written notice to the contractor if at any time it learns that its certification was erroneous by reason of changed circumstances.

 This certification is a material representation of fact upon which reliance was placed when making the award. If it is later determined that the contractor or subcontractor knowingly rendered an erroneous certification, the Federal Aviation Administration may direct through the Sponsor cancellation of the contract or subcontract for default at no cost to the Government.

 Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by this provision. The knowledge and information of a contractor is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

 This certification concerns a matter within the jurisdiction of an agency of the United States of America and the making of a false, fictitious, or fraudulent certification may render the maker subject to prosecution under Title 18, United States Code, Section 1001.

## CIVIL RIGHTS ACT OF 1964, TITLE VI – CONTRACTOR CONTRACTUAL REQUIREMENTS (49 CFR Part 21 AC 150/5100-15)

During the performance of this contract, the contractor, for itself, its assignees and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

 Compliance with Regulations. The contractor shall comply with the Regulations relative to nondiscrimination in federally assisted programs of the Department of Transportation (hereinafter, "DOT") Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.

Nondiscrimination. The contractor, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor shall not participate either directly or indirectly in the discrimination prohibited by section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.

Solicitations for Subcontracts, Including Procurements of Materials and Equipment. In all solicitations either by competitive bidding or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the contractor of the contractor's obligations under this contract and the Regulations relative to nondiscrimination on the grounds of race, color, or national origin.

Information and Reports. The contractor shall provide all information and reports required by the regulations or directives issued pursuant thereto and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Sponsor or the Federal Aviation Administration (FAA) to be pertinent to ascertain compliance with such Regulations, orders, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish this information, the contractor shall so certify to the sponsor or the FAA, as appropriate, and shall set forth what efforts it has made to obtain the information.

Sanctions for Noncompliance. In the event of the contractor's noncompliance with the nondiscrimination provisions of this contract, the sponsor shall impose such contract sanctions as it or the FAA may determine to be appropriate, including, but not limited to:

 Withholding of payments to the contractor under the contract until the contractor complies, and/or

 Cancellation, termination, or suspension of the contract, in whole or in part.

Incorporation of Provisions. The contractor shall include the provisions of paragraphs 1 through 5 in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations or directives issued pursuant thereto. The contractor shall take such action with respect to any subcontract or procurement as the sponsor or the FAA may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the contractor may request the Sponsor to enter into such litigation to protect the interests of the sponsor and, in addition, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

## AIRPORT AND AIRWAY IMPROVEMENT ACT OF 1982, SECTION 520 - GENERAL CIVIL RIGHTS PROVISIONS (Airport and Airway Improvement Act of 1982, Section 520, Title 49 47123,AC 150/5100-15, Para. 10.c):

The contractor assures that it will comply with pertinent statutes, Executive orders and such rules as are promulgated to assure that no person shall, on the grounds of race, creed, color, national origin, sex, age, or handicap be excluded from participating in any activity conducted with or benefiting from Federal assistance. This provision obligates the tenant/concessionaire/lessee or its transferee for the period during which Federal assistance is extended to the airport a program, except where Federal assistance is to provide, or is in the form of personal property or real property or interest therein or structures or improvements thereon. In these cases the provision obligates the party or any transferee for the longer of the following periods: (a) the period during which the property is used by the airport sponsor or any transferee for a purpose for which Federal assistance is extended, or for another purpose involving the provision of similar services or benefits or (b) the period during which the airport sponsor or any transferee retains ownership or possession of the property. In the case of contractors, this provision binds the contractors from the bid solicitation period through the completion of the contract. This provision is in addition to that required of Title VI of the Civil Rights Act of 1964.

## DISADVANTAGED BUSINESS ENTERPRISES (49 CFR Part 26):

Contract Assurance (§26.13): The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy, as the recipient deems appropriate.

 Prompt Payment (§26.29): The prime contractor agrees to pay each subcontractor under this prime contract for satisfactory performance of its contract no later than *30* days from the receipt of each payment the prime contractor receives from the *State of Alaska.* The prime contractor agrees further to return retainage payments to each subcontractor within [specify the same number as above] days after the subcontractor's work is satisfactorily completed. Any delay or postponement of payment from the above referenced time frame may occur only for good cause following written approval of the *Contracting Officer*. This clause applies to both DBE and non-DBE subcontractors.

## LOBBYING AND INFLUENCING FEDERAL EMPLOYEES (49 CFR Part 20, Appendix A):

No Federal appropriated funds shall be paid, by or on behalf of the contractor, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the making of any Federal grant and the amendment or modification of any Federal grant.

If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any Federal grant, the contractor shall complete and submit Standard Form-LLL, “Disclosure of Lobby Activities,” in accordance with its instructions.

## ACCESS TO RECORDS AND REPORTS (49 CFR Part 18.36(i), FAA Order 5100.38):

The Contractor shall maintain an acceptable cost accounting system. The Contractor agrees to provide the Sponsor, the Federal Aviation Administration and the Comptroller General of the United States or any of their duly authorized representative’s access to any books, documents, papers, and records of the contractor which are directly pertinent to the specific contract for the purpose of making audit, examination, excerpts and transcriptions. The Contractor agrees to maintain all books, records and reports required under this contract for a period of not less than three years after final payment is made and all pending matters are closed.

## ENERGY CONSERVATION REQUIREMENTS (49 CFR Part 18.36 & Public Law 94-163):

The contractor agrees to comply with mandatory standards and policies relating to energy efficiency that are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act.

## BREACH OF CONTRACT TERMS (49 CFR Part 18.36):

Any violation or breach of terms of this contract on the part of the contractor or their subcontractors may result in the suspension or termination of this contract or such other action that may be necessary to enforce the rights of the parties of this agreement. The duties and obligations imposed by the Contract Documents and the rights and remedies available there under shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by law.

## RIGHTS TO INVENTIONS (49 CFR Part 18.36(i)(8) & FAA Order 5100.38):

All rights to inventions and materials generated under this contract are subject to regulations issued by the FAA and the Sponsor of the Federal grant under which this contract is executed.

## TERMINATION OF CONTRACT (49 CFR Part 18.36(i)(2) & FAA Order 5100.38):

The Sponsor may, by written notice, terminate this contract in whole or in part at any time, either for the Sponsor's convenience or because of failure to fulfill the contract obligations. Upon receipt of such notice services shall be immediately discontinued (unless the notice directs otherwise) and all materials as may have been accumulated in performing this contract, whether completed or in progress, delivered to the Sponsor.

If the termination is for the convenience of the Sponsor, an equitable adjustment in the contract price shall be made, but no amount shall be allowed for anticipated profit on unperformed services.

If the termination is due to failure to fulfill the contractor's obligations, the Sponsor may take over the work and prosecute the same to completion by contract or otherwise. In such case, the contractor shall be liable to the Sponsor for any additional cost occasioned to the Sponsor thereby.

If, after notice of termination for failure to fulfill contract obligations, it is determined that the contractor had not so failed, the termination shall be deemed to have been effected for the convenience of the Sponsor. In such event, adjustment in the contract price shall be made as provided in paragraph 2 of this clause.

The rights and remedies of the sponsor provided in this clause are in addition to any other rights and remedies provided by law or under this contract.

## CERTIFICATION REGARDING DEBAREMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION (49 CFR Part 29 & FAA Order 5100.38):

The bidder/offeror certifies, by submission of this proposal or acceptance of this contract, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency. It further agrees by submitting this proposal that it will include this clause without modification in all lower tier transactions, solicitations, proposals, contracts, and subcontracts. Where the bidder/offeror/contractor or any lower tier participant is unable to certify to this statement, it shall attach an explanation to this solicitation/proposal.

## CLEAN AIR AND WATER POLLUTION CONTROL (49 CFR Part 18.36(i)(12) & Section 306 of the Clean Air Act & Section 508 of the Clean Water Act):

Contractors and subcontractors agree:

That any facility to be used in the performance of the contract or subcontract or to benefit from the contract is not listed on the Environmental Protection Agency (EPA) List of Violating Facilities;

To comply with all the requirements of Section 114 of the Clean Air Act, as amended, 42 U.S.C. 1857 et seq. and Section 308 of the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq. relating to inspection, monitoring, entry, reports, and information, as well as all other requirements specified in Section 114 and Section 308 of the Acts, respectively, and all other regulations and guidelines issued there under;

That, as a condition for the award of this contract, the contractor or subcontractor will notify the awarding official of the receipt of any communication from the EPA indicating that a facility to be used for the performance of or benefit from the contract is under consideration to be listed on the EPA List of Violating Facilities;

To include or cause to be included in any construction contract or subcontract which exceeds $100,000 the aforementioned criteria and requirements.

## BUY AMERICAN PREFERENCES (Section 9129 of the Aviation Safety and Capacity Expansion Act of 1990 & Title 49 U.S.C. Chapter 501, AIP Program Guidance Letter 91-3):

The Aviation Safety and Capacity Expansion Act of 1990 provides that preference be given to steel and manufactured products produced in the United States when funds are expended pursuant to a grant issued under the Airport Improvement Program. The following terms apply:

Steel and manufactured products. As used in this clause, steel and manufactured products include (1) steel produced in the United States or (2) a manufactured product produced in the United States, if the cost of its components mined, produced or manufactured in the United States exceeds 60 percent of the cost of all its components and final assembly has taken place in the United States. Components of foreign origin of the same class or kind as the products referred to in subparagraphs b. (1) or (2) shall be treated as domestic.

Components. As used in this clause, components mean those articles, materials, and supplies incorporated directly into steel and manufactured products.

Cost of Components. This means the costs for production of the components, exclusive of final assembly labor costs.

<http://www.faa.gov/airports/aip/guidance_letters/media/PGL_10_02.pdf>

# MANDATORY CONTRACT TERMS:

## ALASKA BUSINESS LICENSE AND OTHER REQUIRED LICENSES:

Prior to the award of a contract, a bidder must hold a valid Alaska business license. However, in order to receive the Alaska Bidder Preference and other related preferences, such as the Alaska Veteran and Alaskans with Disabilities Preference, a bidder must hold a valid Alaska business license at the time designated for bid opening. Bidders should contact the Department of Commerce, Community and Economic Development, Division of Corporations, Business, and Professional Licensing, P. O. Box 110806, Juneau, Alaska 99811-0806, for information on these licenses.

 Acceptable evidence that the bidder possesses a valid Alaska business license may consist of any one of the following:

* copy of an Alaska business license;
* certification on the bid that the bidder has a valid Alaska business license and has included the license number in the bid (see front page);
* a canceled check for the Alaska business license fee;
* a copy of the Alaska business license application with a receipt stamp from the state's occupational licensing office; or
* A sworn and notarized affidavit that the bidder has applied and paid for the Alaska business license.

You are not required to hold a valid Alaska business license at the time bids are opened if you possess one of the following licenses and are offering services or supplies under that specific line of business:

* fisheries business licenses issued by Alaska Department of Revenue or Alaska Department of Fish and Game,
* liquor licenses issued by Alaska Department of Revenue for alcohol sales only,
* insurance licenses issued by Alaska Department of Commerce, Community and Economic Development, Division of Insurance, or
* Mining licenses issued by Alaska Department of Revenue.

At the time designated for bid opening, all bidders must hold any other necessary applicable professional licenses required by Alaska Statute.

## BIDDERS WITH DISABILITIES:

The State of Alaska complies with Title II of the Americans with Disabilities Act of 1990. Individuals with disabilities who may need auxiliary aids, services, and/or special modifications to participate in this procurement should contact the Division of Transportation at one of the following numbers no later than 10 days prior to bid opening to make any necessary arrangements.

Telephone: 907.269.0793

Fax: 907.269.0801

TDD: 907.269.0713

## COMPLIANCE WITH ADA:

By signature of their bid the bidder certifies that they comply with the Americans with Disabilities Act of 1990 and the regulations issued thereunder by the federal government.

Services or activities furnished to the general public on behalf of the state must be fully accessible. This is intended to ensure that agencies are in accordance with 28 CFR Part 35 Section 35.130 and that services, programs or activities furnished to the public through a contract do not subject qualified individuals with a disability to discrimination based on the disability.

## PREFERENCE QUALIFICATION:

In order to qualify for an Alaska Veterans Preference, Employment Program Preference, or Alaskans with Disabilities Preference, a bidder must add value by actually performing, controlling, managing, and supervising the services provided, or a bidder must have sold supplies of the general nature solicited to other state agencies, governments, or the general public.

## CONTRACT PERFORMANCE LOCATION:

By signature on their bid, the bidder certifies that all services provided under this contract by the contractor and all subcontractors shall be performed in the United States.

If the bidder cannot certify that all work will be performed in the United States, the bidder must contact the procurement officer in writing to request a waiver at least 10 days prior to the deadline for receipt of bids.

The request must include a detailed description of the portion of work that will be performed outside the United States, where, by whom, and the reason the waiver is necessary.

Failure to comply with these requirements may cause the state to reject the bid as non-responsive, or cancel the contract.

## HUMAN TRAFFICKING:

By signature on their bid, the bidder certifies that the bidder 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.

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

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

## NOTICE OF INTENT TO AWARD:

After the responses to this ITB have been opened and evaluated, a tabulation of the bids will be prepared. This tabulation, called a Notice of Intent to Award, serves two purposes. It lists the name of each company or person that offered a bid and the price they bid. It also provides notice of the state's intent to award a contract(s) to the bidder(s) indicated. A copy of the Notice of Intent will be mailed to each company or person who responded to the ITB. Bidders identified as the apparent low responsive bidders are instructed not to proceed until a Purchase Order, Contract Award, Lease, or some other form of written notice is given by the contracting officer. A company or person who proceeds prior to receiving a Purchase Order, Contract Award, Lease, or some other form of written notice from the contracting officer does so without a contract and at their own risk.

## PAYMENT FOR STATE PURCHASES:

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 that establishes a lower interest rate or precludes the charging of interest.

## CONTRACT ADMINISTRATION:

The administration of this contract is the responsibility of State Equipment Fleet, Contracting Officer, Department of Transportation.

## 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. The state will deduct the cost of the damaged goods from the invoice prior to payment. The contractor must file all claims against the carrier(s) for reimbursement of the loss.

## 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.

## INSURANCE:

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 notice of cancellation, non-renewal, or material change of conditions in accordance with policy provisions. 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.

Proof of insurance is required for the following:

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.

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.

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.

Failure to supply satisfactory proof of insurance within the time required will cause the state to declare the bidder non-responsible and to reject the bid.

## BRAND AND MODEL OFFERED:

Unless otherwise specified, when brand names and model numbers are used to specify the type and quality of the goods desired, bidders must clearly indicate the brand names and model numbers they intend to provide. The bidder's failure to identify the brand and model offered will cause the state to consider the offer non-responsive and reject the bid.

## ANNOTATED LITERATURE:

Bidders must annotate their product literature to identify for the state the location of the supporting information regarding each product specification set out in this ITB. A bidder's failure to comply with this clause, within the time set by the state, will cause the state to consider the offer non-responsive and reject the bid.

## SUPPORTING INFORMATION:

The state strongly desires that bidders submit all required technical, specification, and other supporting information with their bid, so that a detailed analysis and determination can be made by the contracting officer that the product offered meets the ITB specifications and that other requirements of the ITB have been met. However, provided a bid meets the requirements for a definite, firm, unqualified, and unconditional offer, the state reserves the right to request supplemental information from the bidder, after the bids have been opened, to ensure that the products offered completely meet the ITB requirements. The requirement for such supplemental information will be at the reasonable discretion of the state and may include the requirement that a bidder will provide a sample product(s) so that the state can make a first-hand examination and determination.

A bidder's failure to provide this supplemental information or the product sample(s), within the time set by the state, will cause the state to consider the offer non-responsive and reject the bid.

## FIRM, UNQUALIFIED AND UNCONDITIONAL OFFER:

Bidders must provide enough information with their bid to constitute a definite, firm, unqualified and unconditional offer. To be responsive a bid must constitute a definite, firm, unqualified and unconditional offer to meet all of the material terms of the ITB. Material terms are those that could affect the price, quantity, quality, or delivery. Also included as material terms are those which are clearly identified in the ITB and which, for reasons of policy, must be complied with at risk of bid rejection for non-responsiveness.

## NONDISCLOSURE AND CONFIDENTIALITY:

Contractor agrees that all confidential information shall be used only for purposes of providing the deliverables and performing the services specified herein and shall not disseminate or allow dissemination of confidential information except as provided for in this section. The contractor shall hold as confidential and will use reasonable care (including both facility physical security and electronic security) to prevent unauthorized access by, storage, disclosure, publication, dissemination to and/or use by third parties of, the confidential information. “Reasonable care” means compliance by the contractor with all applicable federal and state law, including the Social Security Act and HIPAA. The contractor must promptly notify the state in writing if it becomes aware of any storage, disclosure, loss, unauthorized access to or use of the confidential information.

Confidential information, as used herein, means any data, files, software, information or materials (whether prepared by the state or its agents or advisors) in oral, electronic, tangible or intangible form and however stored, compiled or memorialized that is classified confidential as defined by State of Alaska classification and categorization guidelines (i) provided by the state to the contractor or a contractor agent or otherwise made available to the contractor or a contractor agent in connection with this contract, or (ii) acquired, obtained or learned by the contractor or a contractor agent in the performance of this contract. Examples of confidential information include, but are not limited to: technology infrastructure, architecture, financial data, trade secrets, equipment specifications, user lists, passwords, research data, and technology data (infrastructure, architecture, operating systems, security tools, IP addresses, etc.).

If confidential information is requested to be disclosed by the contractor pursuant to a request received by a third party and such disclosure of the confidential information is required under applicable state or federal law, regulation, governmental or regulatory authority, the contractor may disclose the confidential information after providing the state with written notice of the requested disclosure ( to the extent such notice to the state is permitted by applicable law) and giving the state opportunity to review the request. If the contractor receives no objection from the state, it may release the confidential information within 30 days. Notice of the requested disclosure of confidential information by the contractor must be provided to the state within a reasonable time after the contractor’s receipt of notice of the requested disclosure and, upon request of the state, shall seek to obtain legal protection from the release of the confidential information.

The following information shall not be considered confidential information: information previously known to be public information when received from the other party; information freely available to the general public; information which now is or hereafter becomes publicly known by other than a breach of confidentiality hereof; or information which is disclosed by a party pursuant to subpoena or other legal process and which as a result becomes lawfully obtainable by the general public.

# SPECIFICATION-LOT 1 #357

## GENERAL SPECIFICATION:

It is the purpose of this specification to describe a new, and of the manufacturer's latest current model and design, minimum 42,340 pound operating weight, as per typically equipped in manufacturers brochure, diesel powered motor grader with tandem drive, and 14 foot blade.

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

APPLICATION:

Primary application is for high-speed snow removal. Secondary application will be for general purpose grading.

Grader will experience occasional high impact and shock loading. Grader will be subject to varying weather conditions from minus 50 degrees to plus 110 degrees, Fahrenheit.

DOCUMENTATION REQUIRED:

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

TYPICAL UNIT:

CATERPILLAR Model 140 or JOHN DEERE 670G. Provided all of the following minimum specifications are met.

## POWER TRAIN:

* 1. Engine:
		1. Diesel, water cooled, six (6) cylinder.
		2. Horsepower: Developing a minimum 230 NET HP in 8th gear.
		3. Peak Torque: Minimum 840 pound foot.
		4. Displacement: Minimum 9.0 liter.
		5. Engine must meet current EPA requirements at time of delivery.
	2. Exhaust System:
		1. Exhaust pipe with curved elbow design.
		2. Horizontal or vertical mounted muffler shall not extend more than 24 inches above hood or impair operator's vision to the rear.
	3. Air Intake System:
		1. Two (2) stage air cleaner, dual element type.
		2. Air filter restriction indicator, in cab, in plain view of operator.
		3. Pre-cleaner: CATERPILLAR Dust Ejector, ENGINAIR, or TURBO II.
	4. Cooling System:
		1. Winter Front: 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.
		2. Anti-freeze: Permanent type, affording protection to minus 50 degrees Fahrenheit. Shall be DELO extended life coolant (red), or compatible.
		3. To include in-line valves, for inlet and outlet lines, connecting the cab heater to engine. Valves to be located as close to heater as possible providing minimum coolant loss when servicing heaters.
	5. Fuel System: Fuel tank capacity capable of operating ten (10) hours under full load while plowing snow.
	6. Accelerator/Decelerator: A foot-operated unit overriding the friction lever (or electronic) type hand throttle is required.
	7. Starting Aids:
		1. Glow plugs or grid heater.
		2. Heaters:
			1. Engine Block Heater: Immersion type, highest wattage available, 110 volt AC (OEM if available). Tank type heater is not acceptable.
			2. Transmission Oil Pan Heater: To be immersion type if available. If silicone pad is required, 300-Watt, minimum.
			3. Engine Oil Pan Heater: To be immersion type if available. If silicone pad is required, 300-Watt, minimum.
			4. All three (3) of these heaters can be together in one (1) plug.
		3. Battery Trickle Charger:
			1. To be BATTERY TENDER, waterproof, automatic charger model 022-0157-1 or 022-0158-1.
			2. To be mounted in the engine compartment, functional with the electrical Master Switch in the “OFF” position.
		4. 110-volt AC power cords for engine heaters, transmission heater, hydraulic oil tank and battery charger to be plugged into waterproof, 20 amp, 110 volt AC, junction box equipped with four (4) each amp rated receptacles. Electrical cord, 20-amp, male plug portion of 20 amp cord with 20 amp weather resistant plug to run out to the rear of the unit for easy access by ground personnel.
			1. Cords being plugged into the junction box are to be labeled (permanent label, not a *DYMO* type) as to what they are for, such as; “Engine Block Heater”, “Heaters: Transmission Oil, Engine Oil, Hydraulic Oil” and “Battery Charger”.
			2. The location of the cord(s) outlet box are to be in a weather protected area in the engine compartment.
		5. All wiring to be adequately secured and protected in a loom or similar protection.

## DRIVETRAIN:

* 1. Transmission:
		1. To be sequential, direct drive or power shift.
		2. Minimum eight (8) speeds forward, six (6) reverse.
		3. Travel speeds at rated RPM in top gear (with 14.00x24 specified tires):
			1. Forward speed, minimum 28 MPH.
			2. Reverse speed, minimum 23 MPH.
		4. To include foot-operated transmission disconnect on-off valve in cab, easily accessible to operator. Foot pedal is to provide inching capabilities for "close-quarters" maneuvering.
		5. Transmission to have replaceable filter element or CATERPILLAR removable magnetic filter.
		6. Guard: If transmission is unprotected in the front, to include bolt-on and hinged type transmission guard.
	2. Final Drive: Equipped with automatic or driver controlled differential lock and unlock.

## CHASSIS:

* 1. Operating Weight: Total grader operating weight to be a minimum 42,340 pounds minimum, as per typically equipped in manufacturers brochure.
	2. Frame: Articulated with articulation 20 degrees minimum, left and right. Articulation must have the option to be disconnected for certain locations.
	3. Steering:
		1. Full power assist.
		2. Turning Radius (outside front tire - using front wheel steering, frame articulation, and with differential unlocked): 26 feet maximum.
		3. Supplemental Emergency Power Steering: To include emergency power assist for steering during engine power loss.
	4. Front Axle:
		1. Wheel Lean: 17.5 degrees left and 17.5 degrees right, minimum.
		2. Axle Oscillation: 16 degrees up and 16 degrees down, minimum.
		3. Axle Ground Clearance: 23 inches minimum.
		4. To be equipped with thermal relief valve in leaning wheel circuit.
	5. Brakes (Three independent systems required):
		1. Service brakes: To be wet (oil) disc, adjustment free, foot operated, power boosted, air or hydraulic providing braking of rear tandem wheels.
		2. Secondary (backup) braking system: Dual circuit system with an individual circuit to each tandem to provide backup braking in the event of loss of service brake capacity.
		3. Parking brake: Hand operated parking brake independent of other braking systems, capable of holding machine on 20 percent grade.
		4. All brake lines within 24 inches of the tires will have heavy duty brake line covers to prevent damage from tire chains.
		5. Air Dryer: To be included on systems with air brakes and mounted where easily accessible for servicing.
	6. Tires and Wheels:
		1. Seven (7) tires, including spare, shall be BRIDGESTONE Model VSW V-Steel Snow Wedge, GOODYEAR Model AS-3A(G-3), or MICHELIN Model SXNOPLUS M&S, 14.00R24, radial, on demountable rims. The front and rear tires shall be of the same size.
			1. NOTE: All subsequent tire substitutions, due only to non-availability of the above tires, must be approved by the Contracting Office prior to shipment. The request must include the make, size and tread pattern for approval.
		2. The front and rear wheels shall be interchangeable.
		3. To include spare wheel and mounted tire, shipped loose.
	7. Tire Chains:
		1. To include six (6) each LACLEDE model 2615; domestic.
		2. To include appropriate heavy-duty chain repair tool bar.
		3. Tire Chain Clearance: Motor grader is not to have any fixture or lines within 24 inches of any tire (level ground) and not protected, such as brake, air, hydraulic, or electrical, which may be damaged because of a broken chain link.

## ELECTRICAL:

* 1. 24-volt system.
	2. Alternator: Minimum 150 AMP- 24V.
	3. Batteries: Minimum 1400 CCA.
	4. Battery Box: Shall be metal with metal cover (or inside the engine compartment) with hold-downs for batteries. Constructed and located in such a manner to minimize damage from obstacles such as broken chain links, mud, and snow while grader is in operation, and in such a manner that cover may be lifted and batteries removed without obstruction.
	5. Master Switch: Single high-ampere, wired in ground loop to cut off power source from battery to ground and remainder of electrical system. To be POLLACK Model 51-904 with 51-303 face plate or COLE HERSEE #284-02 or equivalent. Located where accessible but not ordinarily visible to persons unfamiliar with machine.
	6. Jump Starting Hookup:
		1. To make jump starting less time consuming and safer, the following is to be provided.
		2. Two (2) each panel mounted receptacles (utilizing a panel mount plate) are to be mounted through the engine cowling near the batteries and hooked to the batteries with minimum 2/0 battery cable.
		3. The mounting plate shall be clearly marked for polarity. The mounting plate shall include heavy-duty identification plates(s) with a minimum size of 4x4 inches for both the positive and negative receptacles. The plates shall include the appropriate “+” or “-“sign, the appropriate “12 VOLTS” or “24 VOLTS” and be appropriately colored as red for positive and black for negative.
	7. Toggle switches controlling electrical components to be metal (plastic rocker type switches are acceptable).
	8. Lighting System:
		1. Front headlights Halogen.
		2. Work Lights: Two (2) rear work lights and two (2) front work lights LED.
		3. Stop, turn, tail and backup lights shall be LED.
		4. Dome light.
	9. Strobe Lights:
		1. 1 pair WHELEN L31 beacons located on top of cab left and right. Left lens (street side) shall be amber and right lens (curb side) shall be blue.
		2. All wiring to be enclosed in non-metallic weatherproof loom.
	10. To be a 12-volt LED light system.

## CAB:

* 1. OEM, fully enclosed, fully insulated, sound suppressed, pressurized, and meeting ROPS standards.
	2. To have lockable doors.
	3. Glass to be laminated.
	4. Heater(s):
		1. OEM heater to be minimum 40,000 BTU, hot water type, dual-fan configuration, independently switched, with high/low switch.
		2. Air intake for heater to be filtered and drawn in from top of cab. If secondary heater’s air is drawn from outside, it too shall be filtered.
	5. Air Conditioning: OEM Standard.
	6. Window Wipers and Washers:
		1. Power operated, front and rear, plus front lower window wipers and washers.
		2. To include OEM minimum two (2) speed controls for upper front and rear wipers.
	7. Seat: Suspension type, cloth, shall be fully adjustable with armrests. Vinyl covering is not acceptable.
	8. All operating controls including power control levers shall be located in such a position as to be within easy reach of the operator.
		+ 1. To include fully adjustable control console and joystick steering at a minimum, steering wheel optional.
	9. Visibility must be such that the operator can clearly observe his work from sitting position, to both sides, as well as front and rear.
	10. Panoramic convex mirror, minimum of 50 square inches, mounted inside cab in upper front.
	11. Outside rear view mirrors, two (2) each, *WEST COAST* type, heated (to include on/off switch), corrosion proof, minimum 88 square inches, mounted front left and right corners.
	12. OEM backup/rearview camera.
	13. To include an OEM weather resistant toolbox mounted in an accessible location. Cab mounted is not acceptable.

## INSTRUMENTATION:

* 1. All gauges shall read in U.S. units of measure (not metric).
	2. All gauges and indicators are to be in plain view of operator and include as a minimum:
		1. Tachometer.
		2. Engine Coolant: High temperature (to include visual warning system) and low level sight gauge.
		3. Engine oil pressure (to include visual warning system).
		4. Ammeter or voltmeter gauge, or indicator light.
		5. Hour meter, mounted in cab, running engine activated.
		6. Fuel level gauge.
		7. Air pressure (if air system equipped, to include audio and visual warning system).
		8. Transmission temperature.
		9. Parking brake “ON” indicator light.

## HYDRAULIC SYSTEM:

* 1. Power Control: To be direct acting hydraulic, with suitable hand operated control levers or electronic joystick. Operating control system shall be designed to withstand the maximum stress imposed on it. Any ball joints and split bearings shall be provided with adequate means of taking up wear.
	2. Pump: To be closed center variable pressure type displacement piston pump and include hydraulic bypass for cold starting, or no load system.
	3. To include canister or spin-on type hydraulic oil filter, minimum 10 micron or CATERPILLAR 20 micron in the tank filter. Servicing of filter to be accomplished without having to drain oil from the tank or excessive loss of oil.
	4. Hydraulic tank to have easy access to fill cap and level indicator.
	5. Lift Circuit: Designed to provide system relief from shock loading; blade lift accumulators are required.
	6. Shock Load Protection: To include a pressure relief system to reduce shock loading and minimize impact damage to the circle and moldboard systems. Can be by the use of a slip clutch, accumulator, relief valve or other appropriate mechanism(s) or design. Relief setting(s) to be approximately 500 PSI above system working pressure.
	7. Anti-drift Mechanism: System shall include hydraulic or pilot operated anti-drift check valves or similar arrangement to minimize cylinder drift on blade lift, tilt, circle shift, articulation, and wheel lean.
	8. Moldboard Float: To include cab controlled hydraulic moldboard float valves (each side to be separately controlled), with electrical or mechanical control, controlling moldboard in float position.
	9. Rear Hydraulics: To include six (6) in-cab control and hydraulic lines to the front and the rear of the unit for ordered or future attachments. Lines are to be capped off when not utilized.
	10. Thermal relief’s to be in all blade and attachment lift hydraulic circuits to protect circuits from expansion due to temperature changes.
	11. Hydraulic hoses or valves in the operator's cab are not acceptable.
	12. Hydraulic hoses, at articulation points are to be armor wrapped.
	13. All hydraulic hoses are to be Arctic Grade to minus 40 degrees Fahrenheit, minimum.
	14. Hydraulic fluid to be rated to minus 40 degrees Fahrenheit, minimum.

## BLADE ASSEMBLY:

* 1. Moldboard:
		1. Length: 14 feet. Blade extension(s) are not acceptable.
		2. Minimum of 22.5 in height and minimum of 7/8 (0.875) inch thick. Height measurement is to be taken on outside of moldboard curvature (dimension does not include cutting edge).
		3. Hydraulic side shift and hydraulic tilt to be included.
			1. Note: Moldboard side shift cylinder to be mounted as to expose the cylinder ram on the left side (street-side) of unit to prevent cylinder ram damage from right side (curb-side) mounted wing mast.
		4. The moldboard is to be constructed of high carbon steel, securely mounted to prevent displacement or chattering in any position and shall be designed to give a rolling tumble to materials.
		5. Cutting Edge: In lieu of standard cutting edge, to be equipped with replaceable bolt-on KENNEMETAL Dual-Carbide-Insert, or BLACK CAT Dual Carbide Blades, or equivalent, cutting edge with 3/4 (0.75) inch diameter grade eight (8) plow bolts and nuts on six (6) inch centers, and end bits of alloy or high carbon steel.
			1. Inserts to reduce to 5/8 inch are to be provided (shipped loose).
		6. End Bits: To be hardened, minimum (0.600) inch thick with 3/4 (0.75) inch diameter grade eight (8) plow bolts and nuts.
			1. Inserts to reduce to 5/8 inch are to be provided (shipped loose).
	2. Moldboard Range:
		1. Reach of specified 14-foot moldboard beyond outer edge of tires on both left and right side, to average minimum 75 inches.
		2. Moldboard slide both left and right, to average minimum 23 inches.
		3. Circle side shift both left and right, to average minimum 24 inches.
		4. Blade tilt forward minimum 40 degrees, tilt back minimum five (5) degrees.
		5. High Lift: For bank sloping angle to the right and to the left, 90 degrees minimum.
		6. Moldboard (not cutting edge) ground clearance with blade centered not less than 17½ (17.5) inches.
		7. Full hydraulic (manual adjustments not acceptable).
	3. Circle:
		1. Machine shall be equipped with a full circle drawbar suspension and a provision to adjust for wear.
		2. The circle rotation shall operate through 360 degrees. The circle power shall be sufficient to permit blade rotation under full blade load (material to be gravel).
		3. Circle drive system to have a relief mechanism to guard against damage caused by sudden impacts or shock loading at high speeds.

## AUTO LUBE SYSTEM (OPTIONAL – Pricing is required – Refer to Bid Price Schedule)

* 1. To include an automatic lubricating system, Grease Commander, BEKA-MAX or GROENEVELD, provided unit will work with NLGI Class 2 grease, per all Alaska conditions.
	2. All zerk fittings shall be served (drivelines being the exception).
	3. All lines are to be routed and protected as necessary.
	4. Lines are to be ARCTIC FOX wire braid or state approved equivalent on all moving points

## ATTACHMENTS:

* 1. Push Block: (OPTIONAL – Pricing is required – Refer to Bid Price Schedule)
		1. A push block is required to be ordered on all units not equipped with a front mounted State Class #866 Multi-Directional Plow)
		2. To be an OEM front mounted push block, bolt-on.
	2. Snow Wing: (OPTIONAL – Pricing is required – Refer to Bid Price Schedule)
		1. Installed right-hand rear mounted 12 foot snow wing. To be CATERPILLAR Work Tool by WELDCO-BEALES, HENKE Model AWH-12, RYLIND Model RW-12H, or WELDCO-BEALES, provided the following specifications are met.
		2. Controls: When available, the controls are to be on the right hand bank. The benching control may be located to the left of the operator.
		3. Front wing mast to be mounted such that the motor grader can:
			1. Utilize optimum moldboard angle (minimum 40 degrees for both moldboards), operator visibility, and tire chain clearance.
			2. Provide moldboard inboard and outboard float system.
		4. Direct hydraulic wing with hydraulic rear brace height adjustment (cable design is not acceptable).
		5. To include compression spring and shear pin in rear strut.
		6. All hydraulic cylinders to be dual action type.
		7. All hydraulic lines and control valves to be of sufficient size to optimize hydraulic response in cold weather operations.
		8. Moldboard to be smooth rolled and designed to maximize rolling action of the snow.
		9. Moldboard Thickness: Minimum 3/16" (0.1875 inch).
		10. Moldboard Dimensions:
			1. Nose Height: Minimum 28 inches. Measurement is to be taken on outside of moldboard curvature and is not to include cutting edge height to moldboard.
			2. Discharge Height: Minimum 42 inch. Measurement is to be taken on outside of moldboard curvature and is not to include cutting edge height to moldboard.
			3. Benching Height: Minimum 60 inch (vertical distance).
			4. Cutting Edge Length: Minimum 12 foot.
		11. Cutting Edge:
			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.
			2. The main body of the cutting edge blade to be minimum 7/8 (0.875) inch thick.
		12. End bits to be of alloy or high carbon steel and include 5/8 (0.625) inch diameter grade eight (8) plow bolts and nuts.
	3. Multi-Directional Heavy-Duty Plow (OPTIONAL – Pricing is required – Refer to Bid Price Schedule)
		1. To be front mounted with full hydraulic controls. To be CATERPILLAR Work Tool by WELDCO-BEALES, HENKE, RYLIND, or WELDCO-BEALES, provided all of the following specifications are met.
		2. To include adjustable and replaceable mushroom design shoes.
		3. Blade angle cylinders to include accumulator system or hydraulic cross-over relief(s).
		4. Clearing width, minimum 133 inches, in bulldozer position.
		5. Center blade height, minimum 40 inches.
		6. Tip blade height, minimum 46 inches.
		7. Center Cutting Edge(s):
			1. In lieu of standard cutting edge, to be equipped with replaceable bolt-on KENNEMETAL Dual-Carbide-Insert, or equivalent, cutting edge with 5/8 (0.625) inch diameter grade eight (8) plow bolts and nuts on six (6) inch centers.
			2. The main body of the cutting edge blade to be minimum 7/8 (0.875) inch thick.
			3. To include AASHTO punching including 5/8 (0.625) inch punching on three (3) three (3) six (6) six (6) - - - - - six (6) six (6) three (3) three (3) inch centers.
				1. Example for eight (8) foot moldboard:
				2. 3-3-6-6-6-6-6-6-6-6-6-6-6-6-6-6-3-3
		8. To include valves, controls and lines necessary for installation and full operation.
			1. Lift circuit to include detented valve for float position.
			2. To include hydraulic controlled locking pins.
		9. Hydraulic lines must be secured and wrapped in wear areas to prevent chaffing.
		10. To be equipped with mechanical quick disconnect allowing easy removal of the plow assembly without having to remove pins. The hydraulic lines are to include quick connect fittings with chained caps at the grader end (hoses to stay with plow).
			1. Quick connects shall be connect under pressure style; STUCCI VEP or state approved equivalent.

## TRAINING (OPTIONAL – Pricing is required – Refer to Bid Price Schedule)

* 1. Total of 16 hours at the State Equipment Fleet Maintenance Facility as listed on the Purchase Order. For award purposes, price should include all travel and training related costs to Anchorage, Alaska. Any travel beyond Anchorage will be billed at the actual rate and a separate Purchase Order will be issued. (Refer to Bid Price Schedule)
		1. Bidder to provide a qualified factory trained instructor(s), within 30 days of acceptance by the State. Advanced notice is required.
	2. To include a minimum of eight (8) hours of operator training including the following, as a minimum applicable agenda:
		1. Operating procedures per operating manual.
		2. Break-in procedures.
		3. Equipment limitations.
		4. Operator maintenance.
		5. Before operations checks and lubrication.
		6. Safety.
		7. Cold weather operations.
		8. Jump starting.
		9. Welding on equipment.
		10. Towing or transporting equipment.
		11. Instruments and controls.
		12. Gauge interpretation.
		13. Equipment operation, Do’s and Don’ts.
		14. Attachment operation, Do’s and Don’ts.
	3. 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:
		1. Electronics.
		2. Electrical.
		3. Hydraulics.
		4. Air system.
		5. Drive train.
		6. Engine and transmission electronics.

## MISCELLANEOUS:

* 1. Weight Scale Ticket: Required not later than time of delivery. To include all items, as ordered, but without operator.
	2. 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.
	3. Vandalism Protection:
		1. Shall include locks for batteries, fuel tank, hydraulic tank, engine lube oil filler, and radiator.
		2. Locking panels for compartments are acceptable.
		3. If padlocks are utilized, they shall be keyed alike (OEM, meaning that one key will fit all loaders of the same make). Three (3) sets of keys, minimum, to be provided.
	4. Backup Alarm: Electronic, self-adjusting sound level, located on rear of unit, as per manufacturer’s recommendations.
	5. Paint: Manufacturer’s standard yellow.
	6. FINAL ACCEPTANCE REMINDER: Final acceptance is at final destination; however, all major tests will be conducted at the contractor's place of business unless the State has reason to believe alterations or damages have taken place which may have changed the performance or design characteristics of the unit since the time of inspection at the contractor's location.
	7. Diagnostic Software (OPTIONAL – Pricing is required – Refer to Bid Price Schedule)
		1. OEM Diagnostic software must be available for purchase by SOA. Aftermarket software or scanners will not be acceptable.
		2. Must be capable of the following; at a minimum:
			1. Must be capable of retrieving and clearing all chassis, engine, transmission, or cab diagnostic codes.
			2. Must be capable of displaying live streaming data. (E.G. Engine sensor temperatures, pressures, speeds, etc.)
			3. Have the ability to perform calibrations and diagnostic tests.
			4. If applicable, must be able to communicate a replaced DPF to the ECM.
		3. Training must not be a requirement for software purchase.
		4. Pricing must include ALL hardware and software necessary to perform listed duties. Does not include a laptop, if needed.
		5. Supporting documentation of products being offered and itemized costs may be requested.
	8. VHF Radio (OPTIONAL – Pricing is required)
		1. To be an ICOM Model ICA120 VHF (AM) aeronautical band and MOTOROLA APX 1500, complete with microphone, speaker, external transmit/receive antenna mounted on cab, and to include frequency(s) if listed on the Purchase Order.
		2. The MOTOROLA APX 1500 shall be 700/800 MHz, Model M36URS9PW1AN with optional dash mount and no antenna.
		3. Installation:
			1. To include noise canceling microphones, external speakers (for inside cab), and cab mounted external antennas.
			2. To be shipped loose and installed by State of Alaska personnel.

# SPECIFICATION-LOT 2 #359

## GENERAL SPECIFICATION:

It is the purpose of this specification to describe a new, and of the manufacturer's latest current model and design, minimum 44,540 pound operating weight, as per typically equipped in manufacturers brochure, diesel powered motor grader.

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

APPLICATION:

Primary application is for high-speed snow removal. Secondary application will be for general purpose grading.

Grader will experience occasional high impact and shock loading. Grader will be subject to varying weather conditions from minus 50 degrees to plus 110 degrees, Fahrenheit.

DOCUMENTATION REQUIRED:

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

TYPICAL UNIT:

CATERPILLAR Model 160 or JOHN DEERE Model 870G. Provided all of the following minimum specifications are met.

## POWER TRAIN:

* 1. Engine:
		1. Diesel, six (6) cylinder, turbocharged.
		2. Horsepower: Developing a minimum 265 NET HP in 8th gear.
		3. Peak Torque: Minimum 1,000 pound foot, in fourth gear and up.
		4. Displacement: Minimum 9.0 liter.
		5. Engine must meet current EPA requirements at time of delivery.
	2. Exhaust System:
		1. Exhaust pipe with curved elbow design.
		2. Horizontal or vertical mounted muffler shall not extend more than 32 inches above hood or impair operator's vision to the rear.
	3. Air Intake System:
		1. Two (2) stage air cleaner, dual element type.
		2. Air filter restrict6ion indicator, in cab, in plain view of operator.
		3. Pre-cleaner: CATERPILLAR dust ejector, ENGINAIR, or TURBO II.
	4. Cooling System:
		1. Winter Front: 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.
		2. Anti-freeze: Permanent type, affording protection to minus 50 degrees Fahrenheit. Shall be *DELO* extended life coolant (red), or compatible.
		3. To include in-line valves, for inlet and outlet lines, connecting the cab heater to engine. Valves to be located as close to heater as possible providing minimum coolant loss when servicing heaters.
	5. Fuel System: Fuel tank capacity capable of operating ten (10) hours under full load while plowing snow.
	6. Accelerator/Decelerator: A foot-operated unit overriding the friction lever (or electronic) type hand throttle is required.
	7. Starting Aids:
		1. Glow plugs or grid heater.
		2. Heaters:
			1. Engine Block Heater: Immersion type, highest wattage available, 110 volt AC (OEM if available). Tank type heater is not acceptable.
			2. Transmission Oil Pan Heater: To be immersion type if available. If silicone pad is required, 300-Watt, minimum.
			3. Engine Oil Pan Heater: To be immersion type if available. If silicone pad is required, 300-Watt, minimum.
			4. All three (3) of these heaters can be together in one (1) plug.
		3. Battery Trickle Charger:
			1. To be BATTERY TENDER, waterproof, automatic charger model 022-0157-1 or 022-0158-1.
			2. To be mounted in the engine compartment, functional with the electrical Master Switch in the “OFF” position.
		4. 110-volt AC power cords for engine heaters, transmission heater, hydraulic oil tank and battery charger to be plugged into waterproof, 20 amp, 110 volt AC, junction box equipped with four (4) each amp rated receptacles. Electrical cord, 20-amp, male plug portion of 20 amp cord with 20 amp weather resistant plug to run out to the rear of the unit for easy access by ground personnel.
			1. Cords being plugged into the junction box are to be labeled (permanent label, not a *DYMO* type) as to what they are for, such as; “Engine Block Heater”, “Heaters: Transmission Oil, Engine Oil, Hydraulic Oil” and “Battery Charger”.
			2. The location of the cord(s) outlet box are to be in a weather protected area in the engine compartment.
		5. All wiring to be adequately secured and protected in a loom or similar protection.

## DRIVE TRAIN:

* 1. Transmission:
		1. To be sequential, direct drive, power shift.
		2. Minimum eight (8) speeds forward, six (6) speeds reverse.
		3. Travel speeds at rated RPM in top gear (with 14,00x24 specified tires).
			1. Forward speed, minimum 28 MPH.
			2. Reverse speed, minimum 23 MPH.
		4. To include foot-operated transmission disconnect on-off valve in cab, easily accessible to operator. Foot pedal is to provide inching capabilities for "close-quarters" maneuvering.
		5. Transmission to have replaceable filter element or CATERPILLAR removable magnetic filter.
		6. Guard: If transmission is unprotected in the front, to include bolt-on and hinged type transmission guard.
	2. Final Drive: Equipped with automatic or driver controlled differential lock and unlock.

## CHASSIS:

* 1. Operating Weight: Total grader-operating weight to be a minimum 44,540 pounds as per typically equipped in manufacturers brochure.
	2. Frame: Articulated with articulation 20 degrees, left and right minimum. Articulation must have the option to be disconnected for certain locations.
	3. Steering:
		1. Full power assist.
		2. Turning Radius (outside front tire – using front wheel steering, frame articulation, and with differential unlocked): 26 feet maximum.
		3. Supplemental Emergency Power Steering: To include emergency power assist for steering during engine power loss.
	4. Front Axle:
		1. Wheel Lean: 18 degrees left and 18 degrees right, minimum.
		2. Axle Oscillation: 16 degrees up and 16 degrees down, minimum.
		3. Axle Ground Clearance: 22.5 inches minimum.
		4. To be equipped with thermal relief valve in leaning wheel circuit.
	5. Brakes (Three independent systems required):
		1. Service brakes: To be wet (oil) disc, adjustment free, foot operated, power boosted, air or hydraulic providing braking of rear tandem wheels.
		2. Secondary (backup) braking system: Dual circuit system with an individual circuit to each tandem to provide backup braking in the event of loss of service brake capacity.
		3. Parking brake: Hand operated parking brake independent of other braking systems, capable of holding machine on 20 percent grade.
		4. All brake lines within 24 inches of the tires will have heavy-duty brake line covers to prevent damage from tire chains.
		5. Air Dryer: To be included on systems with air brakes and mounted where easily accessible for servicing.
	6. Tires and Wheels:
		1. Seven (7) tires, including spare, shall be BRIDGESTONE Model VSW V-Steel Snow Wedge, GOODYEAR Model AS-3A(G-3), or MICHELIN Model SXNOPLUS M&S, 14.00R24, radial, on demountable rims. The front and rear tires shall be of the same size.
			1. NOTE: All subsequent tire substitutions, due only to non-availability of the above tires, must be approved by the Contracting Office prior to shipment. The request must include the make, size and tread pattern for approval.
		2. The front and rear wheels shall be interchangeable. (NA on AWD)
		3. To include spare wheel and mounted tire, shipped loose.
	7. Tire Chains:
		1. To include six (6) each LACLEDE model 2615; domestic.
		2. To include appropriate heavy-duty chain repair tool bar.
		3. Tire Chain Clearance: Motor grader is not to have any fixture or lines within 24 inches of any tire (level ground) and not protected, such as brake, air, hydraulic, or electrical, which may be damaged because of a broken chain link.
	8. Hitch: Each unit to be equipped with rear pin type tow hitch of sufficient strength to tow unit.

## ELECTRICAL:

* 1. 24 volt system.
	2. Alternator: Minimum 150 AMP- 24V.
	3. Batteries: Minimum 1400 CCA.
	4. Battery Box: Shall be metal with metal cover (or inside the engine compartment) with hold-downs for batteries. Constructed and located in such a manner to minimize damage from obstacles such as broken chain links, mud, and snow while grader is in operation, and in such a manner that cover may be lifted and batteries removed without obstruction.
	5. Master Switch: Single high-ampere, wired in ground loop to cut off power source from battery to ground and remainder of electrical system. To be POLLACK Model 51-904 with 51-303 face plate or COLE HERSEE #284-02 or equivalent. Located where accessible but not ordinarily visible to persons unfamiliar with machine.
	6. Jump Starting Hookup:
		1. To make jump starting less time consuming and safer, the following is to be provided.
		2. Two (2) each panel mounted receptacles (utilizing a panel mount plate) are to be mounted through the engine cowling near the batteries and hooked to the batteries with minimum 2/0 battery cable.
		3. The mounting plate shall be clearly marked for polarity. The mounting plate shall include heavy-duty identification plates(s) with a minimum size of 4x4 inches for both the positive and negative receptacles. The plates shall include the appropriate “+” or “-“sign, the appropriate “12 VOLTS” or “24 VOLTS” and be appropriately colored as red for positive and black for negative.
	7. Toggle switches controlling electrical components to be metal (plastic rocker type switches are acceptable).
	8. Lighting System:
		1. Front headlights Halogen.
		2. Work Lights: Two (2) rear work lights and two (2) front work lights LED.
		3. Stop, turn, tail and backup lights shall be LED.
		4. Dome light.
	9. Strobe Lights:
		1. 1 pair WHELEN L31 beacons located on top of cab left and right. Left lens (street side) shall be amber and right lens (curb side) shall be blue.
		2. All wiring to be enclosed in non-metallic weatherproof loom.
	10. To be a 12-volt LED light system.

## CAB:

* 1. OEM, fully enclosed, fully insulated, sound suppressed, pressurized, and meeting ROPS standards.
	2. To have lockable doors.
	3. Glass to be laminated.
	4. Heater(s):
		1. OEM heater to be minimum 40,000 BTU, hot water type, dual-fan configuration, independently switched, with high/low switch.
		2. Air intake for heater to be filtered and drawn in from top of cab. If secondary heater’s air is drawn from outside, it too shall be filtered.
	5. Air Conditioning: OEM Standard.
	6. Window Wipers and Washers:
		1. Power operated, front and rear, plus front lower window wipers and washers.
		2. To include OEM minimum two (2) speed controls for upper front and rear wipers.
	7. Seat: Suspension type, cloth, shall be fully adjustable with armrests. Vinyl covering is not acceptable.
	8. All operating controls including power control levers shall be located in such a position as to be within easy reach of the operator.
	9. To include fully adjustable control console and joystick steering standard, steering wheel optional.
	10. Visibility must be such that the operator can clearly observe his work from sitting position, to both sides, as well as front and rear.
	11. Panoramic convex mirror, minimum of 50 square inches, mounted inside cab in upper front.
	12. Outside rear view mirrors, two (2) each, *WEST COAST* type, heated (to include on/off switch), corrosion proof, minimum 88 square inches, mounted front left and right corners.
	13. OEM backup/rearview camera.
	14. To include an OEM weather resistant toolbox mounted in an accessible location. Cab mounted is not acceptable.

## INSTRUMENTATION:

* 1. All gauges shall read in U.S. units of measure (not metric).
	2. All gauges and indicators are to be in plain view of operator and include as a minimum:
		1. Tachometer.
		2. Engine Coolant: High temperature (to include visual warning system) and low level sight gauge.
		3. Engine oil pressure (to include visual warning system).
		4. Ammeter or voltmeter gauge, or indicator light.
		5. Hour meter, mounted in cab, running engine activated.
		6. Fuel level gauge.
		7. Air pressure (if air system equipped, to include audio and visual warning system).
		8. Transmission temperature.
		9. Parking brake “ON” indicator light.

## HYDRAULIC SYSTEM:

* 1. Power Control: To be direct acting hydraulic, with suitable hand operated control levers or electronic joystick. Operating control system shall be designed to withstand the maximum stress imposed on it. Any ball joints and split bearings shall be provided with adequate means of taking up wear.
	2. Pump: To be closed center variable pressure type displacement piston pump and include hydraulic bypass for cold starting, or no load system.
	3. To include canister or spin-on type hydraulic oil filter, minimum 10 micron or CATERPILLAR 20 micron in the tank filter. Servicing of filter to be accomplished without having to drain oil from the tank or excessive loss of oil.
	4. Hydraulic tank to have easy access to fill cap and level indicator.
	5. Lift Circuit: Designed to provide system relief from shock loading; blade lift accumulators are required.
	6. Shock Load Protection: To include a pressure relief system to reduce shock loading and minimize impact damage to the circle and moldboard systems. Can be by the use of a slip clutch, accumulator, relief valve or other appropriate mechanism(s) or design. Relief setting(s) to be approximately 500 PSI above system working pressure.
	7. Anti-drift Mechanism: System shall include hydraulic or pilot operated anti-drift check valves or similar arrangement to minimize cylinder drift on blade lift, tilt, circle shift, articulation, and wheel lean.
	8. Moldboard Float: To include cab controlled hydraulic moldboard float valves (each side to be separately controlled), with electrical or mechanical control, controlling moldboard in float position.
	9. Rear Hydraulics: To include six (6) in-cab control and hydraulic lines to the front and the rear of the unit for ordered or future attachments. Lines are to be capped off when not utilized.
	10. Thermal relief’s to be in all blade and attachment lift hydraulic circuits to protect circuits from expansion due to temperature changes.
	11. Hydraulic hoses or valves in the operator's cab are not acceptable.
	12. Hydraulic hoses, at articulation points are to be armor wrapped.
	13. All hydraulic hoses are to be Arctic Grade to minus 40 degrees Fahrenheit, minimum.
	14. Hydraulic fluid to be rated to minus 40 degrees Fahrenheit, minimum.

## BLADE ASSEMBLY:

* 1. Moldboard:
		1. Length: 14 feet. Blade extension(s) are not acceptable.
		2. Minimum of 22.5 in height and minimum of 7/8 (0.875) inch thick. Height measurement is to be taken on outside of moldboard curvature (dimension does not include cutting edge).
		3. Hydraulic side shift and hydraulic tilt to be included.
			1. Note: Moldboard side shift cylinder to be mounted as to expose the cylinder ram on the left side (street-side) of unit to prevent cylinder ram damage from right side (curb-side) mounted wing mast.
		4. The moldboard is to be constructed of high carbon steel, securely mounted to prevent displacement or chattering in any position and shall be designed to give a rolling tumble to materials.
		5. Cutting Edge: In lieu of standard cutting edge, to be equipped with replaceable bolt-on KENNEMETAL Dual-Carbide-Insert, or BLACK CAT Dual Carbide Blades, or equivalent, cutting edge with 3/4 (0.75) inch diameter grade eight (8) plow bolts and nuts on six (6) inch centers, and end bits of alloy or high carbon steel.
			1. Inserts to reduce to 5/8 inch are to be provided (shipped loose).
		6. End Bits: To be hardened, minimum (0.600) inch thick with 3/4 (0.75) inch diameter grade eight (8) plow bolts and nuts.
			1. Inserts to reduce to 5/8 inch are to be provided (shipped loose).
	2. Moldboard Range:
		1. Reach of specified 14 foot moldboard beyond outer edge of tires on both left and right side, to average minimum 75 inches.
		2. Moldboard slide both left and right, to average minimum 23 inches.
		3. Circle side shift both left and right, to average minimum 24 inches.
		4. Blade tilt forward minimum 40 degrees, tilt back maximum five (5) degrees.
		5. High Lift: For bank sloping angle to the right and to the left, 90 degrees minimum.
		6. Moldboard (not cutting edge) ground clearance with blade centered not less than 17½ (17.5) inches.
		7. Full hydraulic (manual adjustments not acceptable).
	3. Circle Assembly:
		1. Machine shall be equipped with a full circle drawbar suspension and a provision to adjust for wear.
		2. The circle rotation shall operate through 360 degrees. The circle power shall be sufficient to permit blade rotation under full blade load (material to be gravel).
		3. Circle drive system to have a relief mechanism to guard against damage caused by sudden impacts or shock loading at high speeds.

## AUTO LUBE SYSTEM (OPTIONAL – Pricing is required – Refer to Bid Price Schedule)

* 1. To include an automatic lubricating system, Grease Commander, BEKA-MAX or GROENEVELD, provided unit will work with NLGI Class 2 grease, per all Alaska conditions.
	2. All zerk fittings shall be served (drivelines being the exception).
	3. All lines are to be routed and protected as necessary.
	4. Lines are to be ARCTIC FOX wire braid or state approved equivalent on all moving points.

## ATTACHMENTS:

* 1. Push Block:(OPTIONAL – Pricing is required – Refer to Bid Price Schedule)
		1. A push block is required to be ordered on all units not equipped with a front mounted State Class #866 Multi-Directional Plow)
		2. To be an OEM front mounted push block, bolt-on.
	2. SnowWing**:** (OPTIONAL – Pricing is required – Refer to Bid Price Schedule)
		1. Installed right-hand rear mounted 12 foot snow wing. To be CATERPILLAR Work Tool by WELDCO-BEALES, HENKE Model AWH-12, RYLIND Model RW-12H, or WELDCO-BEALES, provided the following specifications are met.
		2. Controls: When available, the controls are to be on the right hand bank. The benching control may be located to the left of the operator.
		3. Front wing mast to be mounted such that the motor grader can:
			1. Utilize optimum moldboard angle (minimum 40 degrees for both moldboards), operator visibility, and tire chain clearance.
			2. Provide moldboard inboard and outboard float system.
		4. Direct hydraulic wing with hydraulic rear brace height adjustment (cable design is not acceptable).
		5. To include compression spring and shear pin in rear strut.
		6. All hydraulic cylinders to be dual action type.
		7. All hydraulic lines and control valves to be of sufficient size to optimize hydraulic response in cold weather operations.
		8. Moldboard to be smooth rolled and designed to maximize rolling action of the snow.
		9. Moldboard Thickness: Minimum 3/16 (0.1875) inch.
		10. Moldboard Dimensions:
			1. Nose Height: Minimum 28 inches. Measurement is to be taken on outside of moldboard curvature and is not to include cutting edge height to moldboard.
			2. Discharge Height: Minimum 42 inch. Measurement is to be taken on outside of moldboard curvature and is not to include cutting edge height to moldboard.
			3. Benching Height: Minimum 60 inch (vertical distance).
			4. Cutting Edge Length: Minimum 12 foot.
		11. Cutting Edge:
			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.
			2. The main body of the cutting edge blade to be minimum 7/8 (0.875) inch thick.
		12. End bits to be of alloy or high carbon steel and include 5/8 (0.625) inch diameter grade eight (8) plow bolts and nuts.
	3. Multi-Directional Heavy-Duty Plow: (OPTIONAL – Pricing is required – Refer to Bid Price Schedule)
		1. To be front mounted with full hydraulic controls. To be CATERPILLAR Work Tool by WELDCO-BEALES, HENKE FV-12, or WELDCO-BEALES, provided all of the following specifications are met.
		2. To include adjustable and replaceable mushroom design shoes.
		3. Blade angle cylinders to include accumulator system or hydraulic cross-over relief(s).
		4. Clearing width, minimum 133 inches, in bulldozer position.
		5. Center blade height, minimum 40 inches.
		6. Tip blade height, minimum 46 inches.
		7. Center Cutting Edge(s):
			1. In lieu of standard cutting edge, to be equipped with replaceable bolt-on KENNEMETAL Dual-Carbide-Insert, or equivalent, cutting edge with 5/8 (0.625) inch diameter grade eight (8) plow bolts and nuts on six (6) inch centers.
			2. The main body of the cutting edge blade to be minimum 7/8 (0.875) inch thick.
			3. To include AASHTO punching including 5/8 (0.625) inch AASHTO punching on three (3) three (3) six (6) six (6) - - - - - six (6) six (6) three (3) three (3) inch centers.
				1. Example for eight (8) foot moldboard:
				2. 3-3-6-6-6-6-6-6-6-6-6-6-6-6-6-6-3-3
		8. To include valves, controls and lines necessary for installation and full operation.
			1. Lift circuit to include detented valve for float position.
			2. To include hydraulic controlled locking pins.
		9. Hydraulic lines must be secured and wrapped in wear areas to prevent chaffing.
		10. To be equipped with mechanical quick disconnect allowing easy removal of the plow assembly without having to remove pins. The hydraulic lines are to include quick connect fittings with chained caps at the grader end (hoses to stay with plow).
			1. Quick connects shall be connect under pressure style; STUCCI VEP or state approved equivalent.

## TRAINING (OPTIONAL – Pricing is required – Refer to Bid Price Schedule):

* 1. Total of 16 hours at the State Equipment Fleet Maintenance Facility as listed on the Purchase Order. For award purposes, price should include all travel and training related costs to Anchorage, Alaska. Any travel beyond Anchorage will be billed at the actual rate and a separate Purchase Order will be issued. (Refer to Bid Price Schedule)
		1. Bidder to provide a qualified factory trained instructor(s), within 30 days of acceptance by the State. Advanced notice is required.
	2. To include a minimum of eight (8) hours of operator training including the following, as a minimum applicable agenda:
		1. Operating procedures per operating manual.
		2. Break-in procedures.
		3. Equipment limitations.
		4. Operator maintenance.
		5. Before operations checks and lubrication.
		6. Safety.
		7. Cold weather operations.
		8. Jump starting.
		9. Welding on equipment.
		10. Towing or transporting equipment.
		11. Instruments and controls.
		12. Gauge interpretation.
		13. Equipment operation, Do’s and Don’ts.
		14. Attachment operation, Do’s and Don’ts.
	3. 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:
		1. Electronics.
		2. Electrical.
		3. Hydraulics.
		4. Air system.
		5. Drive train.
		6. Engine and transmission electronics.

## MISCELLANEOUS:

* 1. Weight Scale Ticket: Required not later than time of delivery. To include all items, as ordered, but without operator.
	2. 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.
	3. Vandalism Protection:
		1. Shall include locks for batteries, fuel tank, hydraulic tank, engine lube oil filler, and radiator.
		2. Locking panels for compartments are acceptable.
		3. If padlocks are utilized, they shall be keyed alike (OEM, meaning that one key will fit all loaders of the same make). Three (3) sets of keys, minimum, to be provided.
	4. Backup Alarm: Electronic, self-adjusting sound level, located on rear of unit, as per manufacturer’s recommendations.
	5. Paint: Manufacturer’s standard yellow.
	6. FINAL ACCEPTANCE REMINDER: Final acceptance is at final destination; however, all major tests will be conducted at the contractor's place of business unless the State has reason to believe alterations or damages have taken place which may have changed the performance or design characteristics of the unit since the time of inspection at the contractor's location.
	7. Diagnostic Software (OPTIONAL – Pricing is required – Refer to Bid Price Schedule)
		1. OEM Diagnostic software must be available for purchase by SOA. Aftermarket software or scanners will not be acceptable.
		2. Must be capable of the following; at a minimum:
			1. Must be capable of retrieving and clearing all chassis, engine, transmission, or cab diagnostic codes.
			2. Must be capable of displaying live streaming data. (E.G. Engine sensor temperatures, pressures, speeds, etc.)
			3. Have the ability to perform calibrations and diagnostic tests.
			4. If applicable, must be able to communicate a replaced DPF to the ECM.
		3. Training must not be a requirement for software purchase.
		4. Pricing must include ALL hardware and software necessary to perform listed duties. Does not include a laptop, if needed.
		5. Supporting documentation of products being offered and itemized costs may be requested.
	8. VHF Radio (OPTIONAL – Pricing is required)
		1. To be an ICOM Model ICA120 VHF (AM) aeronautical band and MOTOROLA APX 1500, complete with microphone, speaker, external transmit/receive antenna mounted on cab, and to include frequency(s) if listed on the Purchase Order.
		2. The MOTOROLA APX 1500 shall be 700/800 MHz, Model M36URS9PW1AN with optional dash mount and no antenna.
		3. Installation:
			1. To include noise canceling microphones, external speakers (for inside cab), and cab mounted external antennas.
			2. To be shipped loose and installed by State of Alaska personnel.

# BID SCHEDULE:

## **LOT 1- #357**

Item Total

# Unit Description Amount

1 ea. Motor Grader, Minimum 42,340 pound operating weight $228,532

 Year, Make & Model Offered: 2020 Caterpillar 140

109.0 Auto Lube Make/Model: Grease Commander $15,448

110.1 Push Block Make/Model: Caterpillar $4,381

110.2 Snow Wing Make/Model: Henke AHW12FR $16,086

110.3 HD Plow Make/Model: Henke PLG11 Lift Group, FV12 V-Plow $28,865

111.0 Training $ -

112.7 Diagnostic Software$1,846

1128.8 Radios $5,900

105.9 Steering Wheel Option $ Not Available

## **LOT 2- #359**

Item Total

# Unit Description Amount

1 ea. Motor Grader, Minimum 44,540 pound operating weight $261,359

 Year, Make & Model Offered: 2020 Caterpillar 160

209.0 Auto Lube Make/Model: Grease Commander $15,448

210.1 Push Block Make/Model: Caterpillar $4,381

210.2 Snow Wing Make/Model: Henke AHW12FR $16,086

210.3 HD Plow Make/Model: Henke PLG11 Lift Group, FV12 V-Plow $28,865

211.0 Training $ 0

212.7 Diagnostic Software$1,846

212.8 Radios $5,900

205.9 Steering Wheel $ Not Available

The actual 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.

For pricing purposes, the F.O.B. point is dockside Seattle/Tacoma.

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. 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.

Required Delivery: Maximum 180 daysafter receipt of order (ARO).