ADDENDUM #1 IFB#: 24-10-3484LE

NAVAJO NATION FISCAL RECOVERY FUND OFFICE INVITATION FOR BID (IFB) IFB #: 24-10-3484LE FOR PURCHASE OF HEAVY EQUIPMENT USING RRR FUNDING FOR THE NAVAJO NATION CHAPTERS (7)

Addendum is as follows:

- Removal of (1) John Deere 50G Mini Excavator
- Due Date is extended to <u>October 14, 2024</u>

All other terms as outlined in the IFB remain the same.

Bid Questions shall be emailed ONLY in writing to the following individual:

Dawnell Begay Planner/Estimator Email: dbegay@nndcd.org

NAVAJO NATION FISCAL RECOVERY FUND OFFICE INVITATION FOR BID (IFB) IFB #: 24-10-3484LE FOR PURCHASE OF HEAVY EQUIPMENT USING RRR FUNDING FOR THE NAVAJO NATION CHAPTERS (7)

I. **BID INSTRUCTIONS**

Bid Proposal shall be delivered, electronically, via email ONLY to the following individual:

Attention: Dawnell Begay, Planner/Estimator Division of Community Development ARPA/FRF Office Administration Building #2, 2nd Floor South Window Rock, AZ 86515 EMAIL: <u>dbegay@nndcd.org</u>

Bid Proposal shall be provided in the following format:

- Subject Title of Email shall state: "IFB # (BID FOR PURCHASE OF HEAVY EQUIPMENT USING RRR FUNDING FOR THE NAVAJO NATION CHAPTERS (7)"
- The following documents should be labeled subject to the following name format:
 a. Heavy Equipment (Name of Vendor) (Name of File)
- 3. The following documents (files) are required to be submitted as <u>separate</u> file attachments. Failure to comply with this formatting will subject the bid to being disqualified:
 - a. Letter of Interest
 - b. Specifications (Attachment 1)
 - c. Navajo Nation Suspension and Debarment Form (Exhibit A)
 - d. W-9 (Exhibit B)
 - e. Vendor Quote

Navajo Nation businesses bidding under the Navajo Business Opportunity Act shall clearly note their Priority 1 or Priority 2 status in the letter of interest.

Any bids or portion thereof received after the submittal deadline will not be considered and returned to the submitting entity.

Bid Questions shall be emailed ONLY in writing to the following individual:

Dawnell Begay Planner/Estimator Email: dbegay@nndcd.org

The due date for bids is October 14, 2024 at 12:00 pm

II. SCOPE OF WORK

The NNDCD is soliciting bids under this IFB to accomplish the purchase and delivery of heavy equipment for various chapters on the Navajo Indian Reservation as part of the American Rescue Plan ACT (ARPA) funding from the federal government. The specific equipment under this IFB are as follows:

- (7) John Deere Model 772GP motor grader or equivalent with ripper attachment.
- (2) John Deere Model 850L crawler dozer or equivalent with ripper attachment.
- (1) John Deere Model 450LGP crawler dozer or equivalent.
- (2) John Deere 320P backhoe or equivalent with forks

The following are additional requirements to be included in the bid and priced, as applicable, with the aforementioned equipment:

- Standard warranty with terms and conditions.
- Optional warranty with pricing (separately).
- Operator training at time of delivery.
- Anticipated equipment delivery timeframe.
- Length of bid price is valid.

III. BID SCHEDULE

Issuance of Invitation for Bids:	October 4, 2024
Bids Due:	October 14, 2024
Bid Opening:	TBD
Notice of Selection:	TBD

IV. BASIS FOR AWARD

- 1. Completeness of the Bid Proposal, including the completed Suspension and Debarment and W9 Forms.
- 2. Proposal meets the specifications defined in Attachment 1
- 3. Proposal meets the Maximum Feasible Cost per equipment.
- 4. Proposal meets all the terms and conditions specified herein, including equipment availability.

IV. REQUIREMENTS/SPECIFICATION

Bidders responding to this solicitation shall ensure the equipment proposed meets the following requirements:

- 1. Equipment shall be new.
- 2. Equipment shall meet the minimum specifications defined in Attachment 1 of this solicitation. Deviations to these specifications shall be clearly noted in accordance with paragraph XVII below.

V. WARRANTY

The manufacturer's published warranty shall be documented in the bid. The price for a 5-year Extended Warranty must be in the response. The Bidder shall explain the specific coverage of each Warranty, including where maintenance covered under the Warranty will be performed.

VI. SHIPPING AND DELIVERY

The Backhoe is expected to be delivered to the Navajo Nation within 90 days after receiving a signed Purchase Order.

The Navajo Nation shall take delivery of the equipment at the Division of Community Development ARPA/FRF Office Administration Building #2, Window Rock, AZ 86515

At time of delivery, equipment training, vehicle title, warranty, operating manual, and other licensing documentation shall be included.

Shipping and delivery costs are considered the responsibility of the bidder and shall be included in the bid proposal.

VII. INSPECTION AND ACCEPTANCE

Inspection and Acceptance of each equipment shall be performed by the receiving Chapter at time of delivery. The Bidder(s) shall coordinate three business days in advance of each delivery to ensure the Chapter will have representatives available to perform Inspections and Acceptance.

VIII. BUY AMERICAN ACT

The bid shall include a statement in the letter of interest that the equipment complies with the requirements of the Buy American Act.

IX. FULLY LICENSED DEALERSHIP

Bidders must be an authorized and fully certified licensed equipment dealership that meets all the standards and qualifications required by the equipment manufacturers. All bidders shall include a statement certifying their Dealer licensing.

X. PREFERENCE OF NAVAJO AND INDIAN-OWNED BUSINESS

Preference of Navajo and Indian-owned businesses will be given under the Navajo Nation Business Opportunity Act, 5 NNC §201 et. Seq. and the Navajo Nation Procurement Act 12 NNC §303. Certification of Navajo Owned Business will be assured by certificate held by the Navajo Business Regulatory Department. It is the responsibility of the offeror to identify themselves as certified under the Navajo Nation Business Opportunity Act in the letter of interest. As specified in the previous paragraph, vendors must demonstrate they are certified dealerships.

XI. PROPRIETY INFORMATION

Any restrictions on the use of data continued within any proposals must be clearly stated in the proposal itself. Proprietary information submitted in response to this IFB will be handled in accordance with applicable purchasing procedures. Each and every page of the proprietary material must be labeled or identified with the word "Proprietary".

XII. RESPONSE MATERIAL OWNERSHIP

All material submitted in this IFB shall become property of the Navajo Nation and will not be returned to the business.

XIII. AWARD OF BID – REJECTION OF BID

The Navajo Nation reserves the right to accept bids all or in part. At the time of acceptance, the Navajo Nation also reserves the right to increase or decrease quantities of any item at the same price bid. The Navajo Nation reserves the right to reject any and all proposals not within the projected budget.

XIV. NOTIFICATION OF AWARD OF BID

Upon Selection, the winning Bidder will be contacted by the Navajo Nation to arrange the formal contract documents (Purchase Order) to complete the purchase.

XV. NAVAJO NATION SALES TAXES

All goods delivered within the territorial jurisdiction of the Navajo Nation are subject to the six percent (6%) Navajo Sales TAX. 24 N.N.C §601 et. Seq. These taxes shall be included and itemized on the FEE schedule for all Bidders.

Bidders shall apply for exemptions of any Federal, State, and local taxes (including Federal Excise Taxes (FET)) at their own cost, including obtaining AZ5000 tax exempt forms in AZ, and equivalent exemptions in NM, Utah, or other US States. The Navajo Nation shall not be responsible for obtaining or providing tax exemptions.

XVI. WITHDRAWAL OF BID

No bid proposal shall be withdrawn for a period of 90 calendar days after the submission of the bid without the consent of the owner.

XVII. DEVIATIONS

All specifications listed in Attachment 1 are intended to be the preferred design and performance requirements. Where deviations from the specification are necessary, Bidder will annotate equivalent reliability or performance. If there is insufficient room for detailing a deviation, please indicate "see deviation" and attach, clearly indicating the requirement on any such attachments. Failure to detail all such deviations will provide a basis for rejections of the entire proposal. Substantial deviations will not be considered.

XVIII. BILLING AND PAYMENTS

Billing and payment shall conform with all Navajo Nation Procurement procedures. To receive timely payment, the winning Bidder has an obligation and responsibility to present invoices that are timely and accurate. The payment procedures established by the Division of Finance shall be adhered to and are to begin whenever Goods or Services are delivered and accepted.

XIX. DISCLAIMER

Nothing in this IFB is intended to or shall have the effect of waiving Navajo Nation sovereignty. The Navajo Nation is a sovereign government, and all procurements shall comply with Navajo Nation laws, regulations, including the Navajo Nation Business Opportunity Act, Navajo Preference in Employment, and applicable federal laws and regulations.

Bid specifications for Deere 450 LGP or Equal Crawler Dozer

Additional supplemental information explaining compliance can be added as an attachment to the bid. Please reference the Compliance Number. Listed below in bold are the attachments that are required to be included Compliance with the bid. **Overall Machine** 1 yes no Made in the U.S.A. Engine The crawler engine shall meet EPA Final Tier 4/EU Stage IV emissions. It will have a minimum of 71 SAE net 2 yes no hp (53 kW), with four cylinders and beturbocharged. 3 yes no The crawler engine shall have a minimum displacement of 4.0 liters (244 cubic inches) yes no Engine shall have wet-sleeve cylinder liner design for maximum cooling and engine life. 4 The crawler engine shall meet EPA Final Tier 4/EU Stage IV emissions without the use of Diesel Exhaust 5 yes_ no_ Fluid (DEF). The pressurized liquid cooling system shall have a water pump driven with an automatically adjusting belt. Radiator shall be filled with manufacturer's approved anti-freeze solution that provides protection to at least -6' yes no 34° F (-37° C). The fuel system shall have a fuel shut-off valve to prevent fuel loss during filter changes. The system shall yes no have a water separator located between the fuel tank outlet and the fuel filters. 7 The exhaust after treatment device shall consist of both a Diesel Oxidation Catalyst (DOC) and a Diesel Oxidation Catalyst (DPF). Both the DOC and DPF shall be serviced independently in the event of a repair or yes no replacement. 8 Diesel Particulate Filter (DPF) shall be rated to last the life of the engine. Please Provide as an attachment 9 yes no the warranty on the exhaust after treatment system. 10 yes no Dozer engine shall have a programmable automatic engine shutdown system 11 yes no Dozer shall have an automatic turbo cool-down system that protects the engine from damage. The primary and secondary fuel filters shall be remote mounted outside of the engine compartment for easy 12 yes no access and a reduced risk of fuel leaks near the engine. Severe duty fuel filter - water separator will be available if required which will include a heating element to 13 yes_ no_ prevent freezing of separated water 14 yes_no_Engine Air Precleaner-Rotary Style The engine lubrication shall be of adequate design to permit operation on slopes up to 45° in any direction. 15 yes no The engine oil and filter change interval shall be 500 hours Electrical Batteries shall have a minimum capacity of 950 CCA, 190-min. rated reserve. Electrical system must be 24 16 yes_no_volts 17 yes no Unit shall have cab mounted lights Front Mounted (2), Rear Mounted (2), and 2 rear reflectors Transmission 18 yes no Dual-path hydrostatic drive with infinite speed capability, dynamic braking, full power turns and counter 19 yes no A load sensing system that works to downshift and upshift automatically The transmission system shall be sealed and have a reservoir independent of hydraulic system. There shall be adequate filtration and cooling of the hydraulic system to support 4,000 hour oil and filter changes. Oil 20 yes_ no_ shall be multi-viscosity engine oil. Transmission shall have the ability for the operator to easily adjust operating parameters such as: FNR shift 21 yes no rate, Steering rate, Steering Modulation, Decel pedal response and Reverse Ratio. Dozer shall have an automatic hill hold feature that automatically applies the parking brake when the transmission is in neutral and motion is detected. Parking must automatically be released upon shifting from 22 yes no neutral. 23 yes no A sight gauge shall be provided for checking the hydrostatic fluid. 24 yes no Transmission filter restriction shall be displayed in the cab The single pedal decelerator will allow the operator to choose between slowing travel speed and engine rpm or travel speed only to help maintain traction without affecting engine power and hydraulic response. Fully 25 yes_no_depressing the pedal applies the brakes. Steering Hydrostatic drive is preferred for full power turns and counter rotation. Steering shall be fully modulated at all 26 yes no speeds to provide smooth operation. Steering brakes shall be oil-cooled.

Final Drive

27 yes_no_ Triple reduction, bull gear final drives must be isolated from the track frames.

Bid specifications for Deere 450 LGP or Equal Crawler Dozer

Tracks and Undercarriage

Six track rollers with front and rear track guides and sprocket guards. The dozer shall have one carrier roller 28 yes_no_ on each side. Sealed and life-time lubricated rollers, idlers and track chain.

LGP Track gauge 1651 mm (65 in.). The track length on the ground shall be a minimum 2433 mm (96 in.)

LGP. Track shall be 406 MM(16 in.) grouser track shoes. Ground pressure not to exceed 31.3 kPa (4.5 psi). 29 yes_no_Minimum ground clearance of 329 mm (13 in.).

Sealed and lubricated with Moderate Service Shoes- With Maximum extended Life Undercarriage. Max Life undercarriage with SC2 Bushings along with larger track links, rollers, and idlers to increasecomponent life 30 yes no before replacement in needed.

Dozer

The dozer shall be a hydraulically actuated, inside mounted all hydraulic blade (power-angle-tilt PAT). The blade hydraulic system shall provide raise, lower, tilt, angle and float. The blade capacity shall be a minimum 31 yes no 3.1 cu. yd. (2.3 m³ for an LGP machine.

The dozer tilt shall be a minimum of (15.7 in.) for LGP. The minimum blade height 1067 mm 42 in.) for LGP, 32 yes_no_ and minimum blade width of 3150 mm (124 in.) for LGP track frame.

The dozer blade must be equipped with a three-piece replaceable cutting edge. The dozer shall have

33 yes_no_adjustable blade pitch from 52° cutting edge angle in the back position to 60° in the forward position .

Hydraulic System

34 yes_no_The system shall have a maximum flow of 16 gpm (60.1 Umin .) flow and provide adequate cooling . The hydraulic system shall be sealed and have a reservoir independent of transmission system. There shall be adequate filtration and cooling of the hydraulic system to support 4,000 hour oil and filter changes. Oil

35 yes_no_shall be multi-viscosity engine oil.

36 yes_no_All hoses shall be of an a-ring seal design to reduce leakage and facilitate repairs.

37 yes_no_4 Function Manual Hyraulic controls for the Power-Angle-Tilt (PAT)

Operator's Station

The enclosed operator's station shall be ROPS (ISO 3471 - 2008) and FOPS (ISO 3449 - 2005) certified. It shall be isolation mounted and include a roof panel. Instrumentation vandal protection shall be included on 38 yes no ROPS canopy unit.

The operator seat shall have adjustments for operator height and weight, and lumbar adjustment in the 39 yes_no_ backrest.

The cab shall include air conditioning with two fresh air filters and a separate recirculation air filter for 40 yes_no_operator protection.

EH controlled machines shall have touchscreen primary monitor displaying gauges and monitoring system that will include: transmission temperature, engine coolant temperature, engine oil pressure, transmission charge pressure, hydraulic filter restriction, transmission filter restriction, electric voltage, engine RPM,

41 yes_ no_ transmission speed range/direction and hour meter.

42 yes_no_ The cab shall have continuous and unobstructed glass from roofline to floor for visibility in tight quarters.

Cab shall have two cup holders. Personal cooler holder/storage compartment for operator's manua, land a 43 yes_no_rubber floor mat

The operator station shall have an electronic touchscreen monitor system with audible and visual warning for: low alternator voltage; engine oil pressure; engine coolant temperature; indicator; hydraulic oil filter restriction; transmission oil filter restriction; transmission oil temperature; engine air restriction indicator;

- 44 yes_no_fasten seat belt and park brake warning.
- 45 yes_no_ 3" retractableseat belt shall be standard equipment with an operator presence safety system
- 46 yes_no_The footrests and full-length armrests shall be adjustable
- 47 yes_no_Rear Wiper and Washer for rear cab class.
- 48 yes_no_Rear Camera includes touchscreen POU

Additional Equipment

- 49 yes_no_Key-less start with multiple security modes
- 50 yes_no_Horn
- 51 yes_ no_ 12 Volt power port

Cold weather Package with ether starting aid, engine block heater (110V}, and All season oil good for -40F to 52 yes_no_104F

- 53 yes_no_Dry-type air cleaner with safety element and restriction indicator
- 54 yes_no_Perforated engine side shields

Bid specifications for Deere 450 LGP or Equal Crawler Dozer

55 yes_no_Reverse warning alarm

56 yes_no_Vandal protection providing lockable protection to all openable panels and fuel fill

57 yes_no_Heavy-duty bottom guard to include protection to the engine, mid-frame and transmission.

58 yes_no_ Front idler shaft guards

59 yes_no_ Front pull hook, bolt on.

Periodic maintenance and lube chart shall be posted for easy reference to ensure that maintenance is 60 yes_no_performed according to schedule.

61 yes_ no_ Full-Length Rock Guards

62 yes_no_Front Counterweight 240lbs

63 yes_no_Heavy-duty Parallelogram ripper with 5-shank Pockets and (3) Shank/teeth.

64 yes_no_Fluid sampling ports for engine oil, hydraulic, and hydrostatic systems.

Quick Service Package with ports and plumbing for quick evacuation and fill of hydraulic oil, engine oil, and

65 yes_ no_ engine coolant.

66 yes_ no_ Heavy Duty Front Grille

Additional Equipment

Weight of the dozer must be minimum of 24,200 lbs. Must include base weight with standard equipment, rollover protections structure (ROPS) full fuel tank, 175lb. Operator plus the dozer blade, ripper and other

67 yes_ no_ optional components.

Safety

68 yes_no_ In Cab mounted 2.5 lb. Fire Extinguisher and Bracket.

69 yes_no_Rear Camera includes touchscreen POU

Warranty and Machine Maintenance Plan

70 yes_no_Include in the price and list Standard Factory Warranty.

71 yes_no_Include in the price 60-Months/3000 Hour Extended Powertrain Plus Hydraulics Warranty.

Include as an attachment the Extended Warranty Options for more years and hours of both powertrain plus hydraulics and Full Machine (Comprehensive). Include what the deduct for the 60/3000 hour Powertrain plus hydraulics warranty quoted in bid would be if another extended

72 yes_ no_ warranty option is selected.

Include in the price a 60-Month/3000 Hour Maintenance Plan with travel included up to 100-Miles. Please 73 June no list what is covered under the Maintenance Plan on the quote or as a separate attachment.

	, <u> </u>	
		Additional Trailer Bid to Haul Dozer
74	yes_ no_	30,000 lbs. 15-Ton Capacity Pintle Hithch Trailer with Beavertail with Trailer Weight of 8,100 lbs.
75	yes_ no_	Deck width 8'6" with 34" deck height and 21' Length
76	yes_ no_	Deck to have 2" aptong outside with DSS pine Center
77	yes_ no_	two speed jack standard equipment
78	yes_ no_	20Ton Ramps with Apitong Wood filled Ramps, standard springs.
		Frame Mainrails W14'x22 lbs. wide flange I-Beam, one piece cold formed Hi-tensile 50,0000 PSI steel
79	yes_ no_	Mainrails from front to drawbar to rear of trailer 8Deg. Tail (safe low loading angel)
80	yes_ no_	Crossmembers 6"x 3.7 lbs. per ft. I-Beam pierced through mainbeam
81	yes_ no_	Headboard 8" High, Full width of trailer with Drawbar Storage Area
		Lights sealed L.E.D., 12 volt DOT approved with USA star plus sealed Modular Wiring Harness w/ 7-Way
	yes_no_/	•
83	yes_ no_	Hitch one piece solid cast steel (adjustible) lunette eye and flange mount
84	yes_ no_	Two Safety Chains 1/2" blue-Krome Plated high test, safety hook with Latch
85	yes_ no_	70,000 lbs. Static/ 40,000 lbs. lift (Heavy Duty 2-Speed screw type)
		5-tie downs per side with Rota Rings with 360Deg. Swivel 2-Tie Downs each sid on the beavertail for total of
86	yes_ no_	7 each side.
87	yes_ no_	Eight 215/75R147.5 (H) Steel belted Radials
88	yes_ no_	Four disc typ hubs, egith 6.75 x17.5, 8-Bolt Hub Piloted disc wheels, oil seals
89	yes_ no_	Hutch H-9700, Three Leaf, capacity 50,000 lbs. tandem
		Two Heavy Duty Dexter, 15,000 lbs. each
		12 1/4" x 5" Electric Brakes
		Break-away 12 Volt, wet cell battery with integrated battery charging system
93	yes_ no_	Standard Factory Warranty

Bid specifications for Final Tier 4 Compliand Deere 850L or Equal Crawler Dozer

Compliance

Additional supplemental information explaining compliance can be added as an attachment to the bid. Please reference the Compliance Number. Listed below in bold are the attachments that are required to be included with the bid.

Overall Machine

1 yes_ no_ Made in the U.S.A.

Engine

2 yes_no_Engine meets EPA Final Tier 4/EU Stage IV Emission Standards

3 yes_no_Six cylinder engine with variable geometry and fixed turbochargers in series.

- Engine shall have a wet-sleeve cylinder liner design for improved cylinder cooling over dry sleeve and cast-in-bore
- 4 yes_no_design and for improved cylinder and piston ring durability
- 5 yes_no_Engine SAE net rated power at 1700 RPM shall be no less than 225 hp (168 kW)
- 6 yes_no_The system shall have a water separator located between the fuel tank outlet and the fuel filters.
- 7 yes_no_The engine shall be isolation mounted to reduce vibration and operator fatigue.

8 yes_no_The engine lubrication shall be of adequate design to permit operation on slopes up to 45° Fore-Aft, 30° Side Slope.

9 yes_no_The engine oil and filter change interval shall be no more than 500 hours to reduce operating costs.

Cooling

10 yes_no_Unit shall have a proportionally controlled, hydraulically driven fan with auto reversing function.

To reduce plugging, the radiator, hydrostatic and hydraulic coolers shall all be rated at no more than 7 fins per inch 11 yes_ no_ and turbo aftercooler shall be no more than 6.5 fin per inch. All coolers shall be configured in a single plane.

The pressurized liquid cooling system shall have a water pump driven with an automatically adjusting belt. Radiator 12 yes_no_shall be filled with manufacturer's approved anti-freeze solution that provides protection to at least -34° F (-37° C).

13 yes no Machine must have a heavy duty grill for protection of cooling fan.

Powertrain/Brakes

Transmission shall have the ability for the operator to easily adjust operating parameters such as: FNR shift rate, 14 yes_ no_ Steering rate, Steering Modulation, Decel pedal response and Reverse Ratio.

Dual-path hydrostatic drive with infinite speed capability, dynamic braking, full power turns and counter rotation is preferred. The dozer shall be capable of achieving a speed of 6.8 mph (11.0 km/h) for forward and reverse. Design 15 yes no must permit unrestricted speed and direction changes under full engine rpm and load.

Automatic, dual-path, hydrostatic drive; load-sensing feature automatically adjusts speed and power to match changing load conditions; each individually controlled track is powered by a variable-displacement piston pump and motor combination; ground speed selection buttons on single-lever steering and direction control; independently selectable reverse speed ratio presets of 100% ,115% or 130% of forward ground speed, or independent forward and

- 16 yes_no_reverse speeds; decelerator pedal controls ground speed to stop and includes service brake function.
- 17 yes_ no_ The transmission filter shall be no more than 10 micron rated, vertically mounted, spin-on, for quick no-spill changes. The dozer steering will have a singe-lever, direction control and counter rotation with full power turns and infinitely
- 18 yes_no_variable track speeds to provide optimum control and maneuverability.

The single pedal decelerator will allow the operator to choose between slowing travel speed and engine rpm or travel speed only to help maintain traction without affecting engine power and hydraulic response. Fully depressing the addel applies the pervise brakes

19 yes_ no_ pedal applies the service brakes.

Exclusive safety feature engages wet, multiple-disk brakes whenever the park brake button is selected, whenever the engine stops, whenever the decelerator is depressed to the end of travel, or whenever the transmission control switch is placed in the neutral position and motion is detected; machine cannot be driven with brake applied, reducing wear out or need for adjustment; spring-applied, hydraulic release. The operator presence system will only release the park

- 20 yes_no_brake after the operator is seated with the seatbelt fastened.
- 21 yes_ no_ The park brake shall be sufficient capacity to hold weight of crawler on slope.
- 22 yes_ no_ Diagnostic ports available to check the transmission system
- Double-reduction, planetary final drives transfer torque loads over three planet gears; mounted independently of track 23 yes no frames and dozer push frames for isolation from shock loads
- 24 yes_no_Machine must be capable of counter-rotation while if Forward, Neutral, or Reverse.

Hydraulic System

- 25 yes_no_Hydraulic filter shall be spin-on, vertical mounting, no more than 10 micron rated filtration.
- 26 yes_no_The hydraulic system shall be variable displacement piston pump with load-sensing proportional pump flow.
- 27 yes_ no_ The hydraulic pump flow will be 41 gpm (155L/pm) to deliver precise metering to low-effort pilot controls.
- 28 yes_no_Hydraulic reservoir shall have adequate cooling and filtration to permit 4,000 hour oil drain intervals
- 29 yes_ no_ The hoses shall use O-ring face seals to provide maximum leak prevention

Electrical

30 yes_no_ Batteries shall have a minimum CCA rating of 950

31 yes_no_Alternator shall be sealed with and have a minimum of 130 amps

32 yes no The dozer shall come with LED work lights (10 LED lights total) 26,000 lumens

Undercarriage

Eight track rollers on all PAT and OSD configurations with front and rear track guides and sprocket guards. The dozer shall have a minimum of two carrier rollers on each side. Sealed and life-time lubricated rollers, idlers and track

33 yes_no_ chain.

The dozer shall have two carrier rollers on each side, through-hardened, sealed and lubricated for added wear 34 yes_no_resistance

24" Extreme Service Shoes and Extended Life Undercarriage for use in highly abrasive material and rocky conditions. Heavy-duty sealed and lubricated rollers, idlers and track chain. Chains must be Sealed and lubricated with SC2

35 yes_ no_ Bushings.

36 yes_ no_ Full Length Rock Guards

37 yes_ no_ Sprocket Segments with Recesses for heavy mud conditions.

Operator Station

38 yes_no_The enclosed operators station shall be ROPS/FOPS certified.

The operators seat shall have adjustments for operator height and weight and lumbar adjustment in the backrest, heat 39 yes_no_ and ventilation with heavy-duty air suspension.

- 40 yes_no_Operators station will be mounted using viscous style cab isolators and be equipped with a 3 in (76 mm) seat belt.
- 41 yes_ no_ Two 12 volt power ports will be provided.
 - The dozer instrumentation will include dash mounted gauges and/or monitoring system that will include: transmission temperature, engine coolant temperature, engine oil pressure, hydraulic filter restriction, transmission filter restriction,
- 42 yes_ no_ fuel, DEF , electric voltage, and hour meter.

Machine shall be equipped with Eco Mode that is operator enabled to save fuel with no loss in performance. Eco 43 yes_no_ Mode can be permanently turned on or off by the owner so the operator can not override Eco Mode status.

- The operator station shall have electric, illuminated gauges for engine coolant temperature , engine oil pressure; fuel, 44 yes_no_DEF level and hour meter
- The cab shall include air conditioning with one fresh air filter and a separate recirculation air filter for operator 45 yes no protection.
- 46 yes_no_The cab HVAC system shall be equipped with Auto Temperature Control (ATC).
- 47 yes_no_An HVAC powered precleaner for harsh environments.

48 yes_no_Machine must have a keyless starting feature with the ability to store up to 10 operator codes.

- 49 yes_no_Machine must have operator presence detection integrated with the seat belt to release the park brake.
- 50 yes_no_Factory integrated rear-view camera that is displayed via the main machine monitor.
 - Operator's station must be able to be tilted up to 65 degrees to the rear of the machine by use of an integrated jack system to allow full access to the components below the cab. **Please supply operation and proceedure to lift Cab**
- 51 yes_ no_ as an attachment to the bid.

General Specifications

Periodic maintenance and lube chart shall be posted for easy reference to ensure that maintenance is performed 52 yes_no_according to schedule.

Unit shall have a vandal protection package that includes a lockable battery compartment, engine access doors, fuel 53 yes_ no_ tank, hydraulic and transmission access door.

The unit will be equipped with all standard equipment and shall include: Keyless ignition switch with safety start, horn, 12 volt power port, engine after treatment device, heavy-duty hinged and lockable engine side shields, reverse

54 yes_no_warning alarm, engine fuel filter, mounting steps and safety hand-holds, front idler shields.

The unit shall come with a factory installed Telematics Machine Monitoring System with lifetime Message Service. If life time is not offered please supply longest time period with bid. **Please provide cost of perscriptions and/or fees**

55 yes_no_for this service to be life time as an attachment to the bid.

56 yes_no_Unit shall have a 146" wide PAT blade with cutting edges for finish grading applications.

57 yes_no_Unit shall have a Heavy Duty Parallelogram Ripper with 5-Shank Pockets and 5-Shanks/Teeth

Safety Specifications

58 yes_ no_ In Cab mounted 2.5 bs. Fire Extinguisher and bracket.

59 yes_ no_ Rear Camera

60 yes_ no_ Beacon Light

Warranty and Machine Maintenance Plan

61 yes_no_Include in price and list Standard Factory Warranty

62 yes_no_Include a 60-Months/3000 Hour Extended Powertrain Plus Hydraulics Warranty

Include as an attachment the Extended Warranty Options for more years and hours of both powertrain plus hydraulics and Full Machine (Comprehensive). Include what the deduct for the 60/3000 hour Powertrain plus

- **63** yes_no_hydraulics warranty quoted in bid would be if another extended warranty option is selected. 64 yes_no_Include in price a 60-Month/3000 Hour Maintenance Plan with travel included up to 1OD-Miles.
- 65 yes_ no_ Supply what is covered and what is not covered with the Plan.

Bid specifications for Deere 320 P or Equal Backhoe Loader

C	ompliance	Additional supplemental information explaining compliance can be added as an attachment to the bid. Please reference the Compliance Number. Listed below in bold are the attachments that are required to be included with the bid.
		Overall Machine
	yes_ no_	Made in the U.S.A.
		Engine
	yes_no	_ Four cylinder, turbocharged isolation mounted diesel engine designed and built by the manufacturer
~		Engine shall be certified to EPA Final Tier 4/EU Stage IV emissions without requiring the use of a DPF (Diesel Particulate Filter)
2	yes_no_	or EGR (Exhaust Gas Recirculation) aftertreatment components for increased uptime
0		Engine shall have an individually replaceable, wet-sleeve cylinder liner design to dissipate heat for reduced ring wear and oil
3 ⊿		breakdown
4 5		Engine displacement shall be no less than 4.5 liters (276 cu. in.) Engine net peak power (ISO9249) shall be no less than 113 hp (84 kW) @ 1900 rpm
6		Engine shall develop at least a 30% torque rise and should have at least 339 lb-ft (459 Nm) net torque@ 1600 rpm
7		Daily check points shall be accessible from the right side of the engine and shall be done from ground level
		Engine shall have a serpentine belt with automatic belt tensioner reducing required maintenance
•	,	Under-hood engine air cleaner shall be dry type, dual element with evacuator valve, restriction sensor and in-cab restriction
9	yes no	warninglight
		The backhoe shall have a one-piece tilt hood for easy engine access without having to remove engine side shields
11	yes_no_	The backhoe shall have an under hood after treatment device (DOC) with curved-end exhaust stack
12	yes_ no_	Engine shall have no more than 10-micron rated primary fuel filter with water separator
		Cooling
		Engine coolant shall be rated to -40 degrees (-40 C)
		The backhoe shall be equipped with an oil-to-water engine oil cooler
		Unit shall have a coolant recovery tank provided
10	yes_no_	Unit shall have an electronically-controlled, variable rate suction-type fan with fan-guard
17	ves no	The AC condenser will be swing-out for fast radiator clean-out. Remote mounted transmission and hydraulic coolers will offer better air exchange and fewer stacked cores.
17	yes_no_	The hydraulic circuit is oil-to air system and transmission circuits will be water cooled for fast winter warm-up for increased
18	ves no	productivity
10	yoo_no_	Powertrain
		The transmission shall be a hydraulically actuated powershift with Autoshift control and a torque converter with maximum
		transport speed of 24.9 mph. Clutch-free; fully synchronized five forward (automatically shifts between 2nd and 5th gear when
19	yes_ no_	Autoshift is engaged), three reverse speeds
		The sealed axle, with no breather, will be mechanical -front-wheel-drive with traction control limited-slip differential with electric
20	yes no	on/off control
	,	The machine will disengage MFWD in 4th gear to allow for longer life of tires and drive train but will engage MFWD when brakes
21	yes_ no_	are applied for four wheel braking
22	yes_ no_	The axle will be sealed to protect against contamination
23	yes_ no_	The driveshaft will be painted for protection, and will have an optional, factory installed, full guard.
		Full MFWD driveshaft Guard
		The clutch engaged MFWD can be engaged on the fly during operation.
		The transmission shall be isolation mounted to the mainframe to minimize shock load stress
27	yes_no_	The rear axle shall be 100% hydraulically locking
20		The single electric Transmission Control Lever will have gear selection fully integrated in the lever as well as forward, neutral and
		reverse (FNR power shuttle). Transmission oil cooler shall be provided as standard equipment
		The backhoe shall have hydrostatic power steering with emergency manual mode
50	yes_no_	The machine will have a dial throttle that will allow the operator to road the machine on cruise control. Upon engagement of the
31	ves no	brake pedal, the engine RPMs return to idle
•	,	The final drives shall be heavy-duty outboard planetary distributing loads over three gears sealed in cooling oil bath for long-life
32	yes no	and trouble free service.
		The front axle shall have remote grease bank for front axle for easy access.
		The rear axle bearings shall be self-lubricating and shall not need to begreased
		The service brakes shall be inboard, wet-multiple disk, self-adjusting and self equalizing and hydraulically actuated for a long and
35	yes_no_	trouble-free life, sealed from water, mud and dust contamination
		The parking brake shall be independent of service brakes, spring applied, hydraulically released, wet multi-disk, and sealed from

36 yes_no_water, mud and dust contamination. 37 yes_no_Tires shall be 19.5-24,12.5/80

		Pid aposifications for Dears 220 B or Equal Poskhoo Loadar
		Bid specifications for Deere 320 P or Equal Backhoe Loader Additional supplemental information explaining compliance can be added as an attachment to the bid. Please reference the
C	Compliance	Compliance Number. Listed below in bold are the attachments that are required to be included with the bid.
		Hydraulic System
38		Hydraulic cooler will have an independent reservoir for continuous running of attachments at high ambient outside air temperatures
39		The hydraulic fittings shall have "O"-ring face seal connectors to secure a tight, leak-free seal
40		Machine shall be equipped with Auto Idle to lower rpm when hydraulics are not active to conserve fuel and reduce noise levels. Machine shall be equipped with Economy Mode with dual feature that can be applied to backhoe or loader functions separately or
41	yes_no_t	ogether for improved fuel economy. The hydraulic filter shall be no more than 4 micron and will be vertically mounted, spin on design for ease of installation and leak-
42		free replacement.
		An automatic bucket return-to-dig control will be standard Hydraulic pump shall be 43 gpm (163L/min.) @ 2,200 rpm at 3,625 psi (24 993 kPa) closed center hydraulic pressure
44	yes_no_	compensated load sensing (PSLS), axial piston driven
45		Electrical
45	yes_no_	The backhoe shall have a 12 volt system with 145 amp alternator
		Dual maintenance free batteries shall be included, 12 volt,1900 CCA, 350-min. rated reserve with disconnect and jump posts The machine shall have blade type, multi-fused circuits
		The starter shall have a bypass start safety cover
		Cab will be pre-wired for rotating beacon magentic mounted and radio-ready
	,	Unit shall be equipped with 10 halogen driving/working lights, (4) front driving/working; (4) rear; (2) side docking lights . The front
50	yes_ no_ l	ights shall be adjustable and the bulbs shall be no less than 32,500 candlepower each.
51	yes_no_l	Jnit shall be equipped with two front and two rear turn signal/flashing and two rear stop and tail lights and two rear reflectors Machine connectivity to be free from subscriptions or annual renewals that can provide machine data, tack utilization, and review diagnostic alerts remotely. Please provide cost of subscriptions and/or fees for this service to be life time as an
52	yes_no_a	attachment to the bid.
		Operator Station
53	yes_ no_ l	Jnit shall be equipped with isolation mounted modular design ROPS/FOPS canopy and molded roof
F 4		Access to the cab shall be from the right and left side with protected, wide, rigid, slip-resistant steps and ergonomically located
		hand-holds 3" (76mm) retractable seat belt shall beprovided
00	yoo_no_0	Coat hook, built-in beverage holder, operator manual storage compartment, interior rearview mirror and two 12 volt outlet shall be
56	yes_ no_	
57	ves no a	and fuellevel.
	,	The monitor system shall have audible and visual warnings: engine air restriction, low alternator voltage, engine oil pressure, hydraulic filter restriction, hydraulic oil temperature, parking brake on/off, and low brake pressure. The seat belt will have a visual
58	yes_ no_	warning.
50		Machine manufacturer will provide a factory installed onboard security system for total machine integration. System will have the
		ability to accommodate no less than ten operator codes. The keyless start will have an electric fuel shut-off and ability to have auto shutdown setup in monitor
		The monitor will have a multi-language (English, French and Spanish) digital monitor for diagnostics (including diagnostic
		nessages and fault code readings), calibrations and machine information. Unit will have a machine security electronic protection system provided through the monitor or sealed switch module.
		Unit will have a machine security electronic protection system provided through the monitor of sealed switch module.
		Unit shall have digital display for: engine rpm, engine hours, system voltage, and hydraulic oil temperature
		The foot throttle shall be suspended
		he machine will have a cab and air conditioner available from the factory.
67	yes_no_N	Machine shall have 2-Lever Mechanical Controls .
68	yes_ no_ 1	he seat shall be air suspension cloth swivel, with fully adjustable armrests and lumbar support. General Specifications
69	yes_ no_ ∖	/andal protection lockable for Cab, Engine hood, toolbox, hydraulic reservoir and fuel filler
70	yes_ no_ T	he tilt hood shall have two service positions for easy operation
71	yes_no_A	An easy to read periodic maintenance and grease chart shall be easily accessible on the machine
70		Fuel tank capacity shall be no less than 34 gallons (128.7 L) and shall be accessible from the ground and lockable. DEF tank to
		e no less than 3.6 gallons and accessible from ground and lockable.
		Factory installed fluid sampling valves. Operating weight shall be no more than 15.754 lbs without optional equipment.
14	yes_no_	Operating weight shall be no more than 15,754 lbs without optional equipment.

Bid specifications for Deere 320 P or Equal Backhoe Loader Additional supplemental information explaining compliance can be added as an attachment to the bid. Please reference the Compliance Compliance Number. Listed below in bold are the attachments that are required to be included with the bid. **Frames and Structures** 75 yes no The mainframe shall be a one-piece unitized construction for maximum strength 76 yes no Unit shall have four built-in vehicle tie downs, two in front and two in rear for safe transport between jobs 77 yes no The side plate thickness on the loader boom, backhoe boom and mainframe shall be 4.5 mil or greater 78 yes no Machine shall be equipped with an exterior mounted, ground level accessed and lockable storage compartment 79 yes no Optional, replaceable, bolt-on rubber bumpers will be available to protect the grille frame for severe loading applications Backhoe 80 yes no The backhoe with standard dipperstick digging depth shall be at least 14 ft 3 in (4.34 m) 81 yes no The boom lift capacity at ground level shall be no less than 3283 lb (1489 kg) 82 yes no Maximum SAE dig depth with extendable dipperstick extended shall be no less than 18 ft 2 in (5.53m) 83 yes no The lift capacity at full height with standard dipperstick shall be no less than 7415 lb (3364 kg) with Lift Mode 84 yes_no_The swing lock pin shall be stored in the operator's station 85 yes_ no_ The stabilizers shall have reversible Heavy Duty pads 86 yes_ no_ Extendible dipperstick shall extendno less than 3 ft 6 in (1.07 m) 87 yes_ no_ The backhoe boom shall be a curved design. yes no The backhoe boom shall be a power curve design, hourglass shape for maximum strength and optimized visibility to the work tool. 88 yes no Digging force with standard backhoe, bucket cylinder shall be at least 12,356 lb (55.0 kN) 89 The backhoe shall be equipped with a rubber bumper/linkage style boom locks to keep the backhoe from vibrating on the swing 90 yes no frame 91 yes no Unit shall be equipped with two lever mechanical (ISO) backhoe controls. 92 yes no The swing casting shall have dual yokes: on top and on the bottom 93 yes no 24" HD Backhoe Bucket 94 yes no Standard Quick Coupler (non-hydraulic) Loader 95 yes no Lift Capacity with 1.3 cu yd at full height shall be at least 7390 lbs (3352 kg) 96 yes_no_ Dump Clearance@ 45 deg. shall be no less than 8 ft 10 in (2.7 m) 97 yes no Digging depth below ground, bucket level shall be no less than 5.0 in. (128mm) 98 yes no Bucket breakout force shall be no less than 10,541 lb (46.9 kN) 99 yes_no_Single, greaseless bucket tilt cylinder and bucket level indicator 100 yes_ no_ The loader shall have hydraulic self-leveling and bucket-level indicator. 101 yes_ no_ The loader shall have divergent loader arms for excellent visibility to the bucket 102 yes_ no_ For truck loading , the loader arms will have a curved-knee design for loading into the center of the truck bed 103 yes_ no_ The loader control will be single-lever with electric clutch disconnect 104 yes_no_Factory installed loader coupler will be available that will fit CAT IT, or current Deere attachments. 105 yes no Loader shall have a single cylinder and linkages for tilt and curl on bucket 106 yes_no_ The loader shall have a non-removable, hinged loader boom service lock. 107 yes_ no_ 1.3 Cyd. Coupler Bucket with bolt on cutting edge. 108 yes no Coupler 60x60 Set of HD Pallet Forks Warranty and Machine Maintenance Plan 109 yes no Include in the price and list Standard Factory Warranty. 110 yes no Include in the price a 60-Months/3000 Hour ExtendedPowertrain Plus Hydraulics Warranty Include as an attachment the Extended Warranty Options for more years and hours of both powertrain plus hydraulics and Full Machine (Comprehensive). Include what the deduct for the 60/3000 hour Powertrain plus hydraulics warranty 111 yes no quoted in bid would be if customer chooses to add any of the longer options. Include in the price a 60-Month/3000 Hour Maintenance Plan with travel included up to 100-Miles. Please list what is covered

112 yes_no_ under the maintenance plan on the quote or as a separate attachment.

С	omplia	ince	Additional supplemental information explaining compliance can be added as an attachment to the bid. Please reference the Compliance Number. Listed below in bold are the attachments that are required to be included with the bid.
			Overall Machine
	yes_	no_	Made in the U.S.A.
~			Engine
2			Engine meets EPA Final Tier 4 and European Union Stage IV standards The engine shall have dual safety air cleaner elements, radial seal, dry type
3	yes_	_ 110	Engine shall have a wet-sleeve cylinder liner design for improved cylinder cooling over dry sleeve and cast-in-bore design and
4	ves	no	for improved cylinder and piston ring durability.
	J		Engine shall be a turbo-charged direct injection, four stroke, 6-cylinder diesel engine with 4 valves per cylinder designed and
6	yes_	_no_	built by the manufacturer
7	yes_	_no_	Engine displacement for standard engine shall be no less than 9.0 liters (548 cu. in.)
			Environmental and the OAE with service in the service of O
8	VAS	no	Engine shall reach no less than SAE net horsepower in the gears 1-8: 1st 210hp, 2nd 225hp, 3rd 240hp, 4th 250hp, 5th 255hp, 6th 265hp, 7th 275hp, 8th 265hp; 6WD is active in gears 1-7 only
9			Engine will have a minimum torque rise of 55% in all gears
0	yee_		Unit shall be equipped with Engine Power Management System for variable horsepower for up to 265 SAE net and shall meet
11	yes	no	FT4 standards
			Ether starting aid must automatically meter ether injection to prevent engine damage.
			Machine shall be equipped with electronic over-speed protection to prevent the engine and transmission from over speeding, as
13	yes_	_no_	a standard feature.
			Electronic Throttle Control (cruise control) shall be available, and shall be controlled by a switch, located on the right-hand
14	yes_	_no_	console for resuming and decreasing throttle set. Unit shall be equipped with engine stall prevention (ESP) as standard equipment
			Engine will offer on-the-fly exhaust filter cleaning
			Engine will offer automatic de-rating
18	yes_	no	Engine shall be rubber isolation mounted to reduce noise and vibration
			Engine will offer a lifetime viscous crankshaft damper
20	yes_	_no_	Adjustable height engine pre-cleaner. Rotary Ejector Precleaner
21	VOS	no	Cooling Coolant levels should be easily checked by an overflow tank
		no [.]	
			The engine shall have an air-to-air after cooling for low engine speed lugging
			Unit shall have charged air cooler with restriction sensor and in-cab restriction warning light
			Engine fan shall automatically adjust fan speed via a variable displacement hydraulic fan pump to meet engine cooling
25	VAS	no	requirements to minimize power demand from the engine, reduce vehicle noise levels, improve fuel economy, and improve vehicle performance.
20	yoo_		Engine power shall automatically compensate for power draw of the fan system to maintain a constant horsepower available to
26	yes	no	maintain vehicle performance independent of cooling system power draw.
			Engine fan shall be able to automatically reverse and allow the operator to choose the time interval for the reversal to occur
27	yes_	_no_	through the vehicle monitor.
28	yes_	_no_	Cooling system shall be isolated from the engine compartment
20		20	Pivoting coolers provide access for quick cleanout of dust and debris. Please provide cleaning proceedure of coolers as an attachment named "Coolers and Radiator Cleaning Prooceedure."
29	yes_	_no_	A rear access fan door shall be provided to provide quick air cleanout of dust and debris for the engine radiator, charge air
~ ~			cooler, transmission cooler, axle cooler, hydraulic oil cooler and fuel cooler.Please provide cleaning proceedure of coolers as
30	yes_	_no_	an attachment named "Coolers and Radiator Cleaning Prooceedure."
31	Ves	no	Power Train Direct-Drive Power Auto-Shift Plus Transmission
			Machine shall have no drive shafts that cross over the articulation hitch
			The transmission shall have eight forward and eight reverse speeds with built-in diagnostics
34	yes_	no_	Transmission shall have 5 working gears between 0-10.2 mph (0-16.4 km/h), for dirt applications
35	yes_	no_	Machine shall be equipped with an electronic inching pedal for improved modulation and machine control
36	yes_	_no_	The transmission system shall have an independent oil reservoir, filtration and cooling system with 31 GPM hydraulic gear pump
37	yes_	no_	Transmission shall be event based shifting (EBS) or use load sensing electronic shift modulation with over speed protection
20	1000	20	Transmission shall have clutch overheating protection to prevent clutch failures due to excessive and overuse of the inching
	yes_		pedal Transmission shall be equipped with built-in self-diagnostic capability
			A guard to protect the machine's transmission from debris as standard equipment
			6WD: Automatic dual-path hydrostatic drive with separate left and right systems
42	yes_	no_	6WD: Operator-selectable 15-position rotary aggressiveness control

- 43 yes no 6WD: Inching capability down to O mph and precision mode (propelled by front wheels only)
- 6WD: Precision mode is front wheel drive only and allows for seemelss shifting from front wheel drive to 6wd on-the-fly without 44 yes no stopping the machine.
- 45 yes no 6WD: Effective Gears 1 7 forward and reverse

Axles/Brakes/Tandems

- 47 yes no The brakes shall be continuously pressurized, filtered, oil cooled
- 48 yes_no_ The brakes shall be internal self-adjusting maintenance free, wet multi-disk, inboard of tandem pivot
- 49 yes_no_The park brake shall have an independent oil reservoir, filtration and cooling system
- 50 yes no The parking brake shall be automatic, spring-applied, hydraulic released
- 51 yes no Service brakes shall be multi-disc, oil-cooled and completely sealed
- 52 yes no Service brakes shall be hydraulically actuated, utilizing dual independent brake circuits
- 53 yes_ no_ Entire braking system shall meet all requirements of ISO 3450
- 54 yes no Differential Lock/Unlock shall be electro-hydraulically controlled, as a standard feature
 - Differential Lock/Unlock shall be capable of being engaged or disengaged at any time during vehicle operation without incurring damage to the differential and differential lock system. Engagement shall not be restricted or determined by vehicle speed,
- 55 yes no vehicle shifts, or tandem tractive conditions (tandems slipping).
- 56 yes_ no_ Differential Lock/Unlock shall be a multi-disc design
- Unit shall be equipped with system capable of automatically engaging and disengaging differential lock to optimize tractive capability, while at the same time providing the operator with the ability to manually engage differential lock during any vehicle 57 yes_no_ operation
- Parking brake shall be multi-disc, oil-cooled, spring-applied, hydraulically released, sealed, adjustment-free, and integrated into 58 yes no the transmission
- yes no Parking brake shall be serviceable without removing the transmission 59
- 60 yes_ no_ Engaged parking brake shall neutralize the transmission
- 61 yes_no_ The axles shall be planetary single reduction final drive
- The rear axle shall have clutch style hydraulic differential lock that can be engaged on the go to achieve maximum traction 62 yes no instantly when required
- The rear-axle shall be a bolt-on modular design offering easy access to differential components, improving serviceability and 63 yes_ no_ contamination control
- 64 yes_ no_ Final drive shall be a planetary design
- 65 yes no Front axle shall be an arched design for maximum ground clearance while maintaining performance
- 66 yes no Front wheel steering angle shall be no less than 48.5 degrees left or right
- 67 yes no Front wheel spindle bearings shall be a large diameter taper roller bearing for radial and axial load
- Tandems shall be capable of oscillating 15 degrees front tandem up and 15 degrees front tandem down, with full machine
- yes no articulation and having no interference between tandem wheel and machine structure 68
- yes no Distance between center of tandem wheels shall be no less than 60.8 in (1540 mm) 69 70 yes no Maximum front wheel lean shall be no less than 20 degrees left or right
- yes no Replaceable, sealed bushings shall be used at the axle and wheel pivot points 71

Hydraulic System

- Motor grader shall have an option of up to six auxiliary control valves and control levers integrated into the main control rack and yes no valve stack, 14 possible control levers on main control rack.
- 73 ves no Left and right blade lifts shall have hydraulic float control.
- yes_no_Asight gauge will be provided for checking hydraulic reservoir fluid 74
- The hydraulic tank shall have a baffling system to improve reservoir effectiveness to prevent aeration, contaminant settling, and 75 yes no heat dispersion and dissipation.
- yes_no_Hydraulic system shall be fully sealed, using O-ring seals to prevent contamination and spillage. 76
- yes_ no_ Hydraulics system shall be a closed center, load sensing type, with a variable displacement, axial piston-type pump. 77
- The maximum hydraulic system pressure shall be no less than 2,750 psi (18.961 kPa) and the hydraulic system shall have a 78 yes no 56.0 gpm (212 Lim) main hydraulic axial piston pump.
- Implement valves shall be proportional priority pressure compensating for consistent response, when multi-functioning any
- yes no combination of implement controls and independent of engine speed. 79
- 80 yes_no_Lock valves shall be integrated into the main implement valve to prevent cylinder drift.
- 81 yes no Steering capabilities shall be ISO 5010
- 82 yes no The hydraulic system filter shall have a minimum filtration rating of 5 micron rating to protect hydraulic system components

Electrical

- 83 yes no The electrical system shall be 24 volt with 200 amp alternator.
- 84 yes no Machine shall have 1400 CCA extra heavy-duty batteries with 440 minute reserve capacity
- 85 yes_no_A 24V to 12V converter with 25-amp continuous, 30-amp peak capacity. For use with CB Radios.
- yes_no_ All core machine systems shall be electronically connected optimizing performance and preventing machine damage 86
- yes_ no_ LED turn signal, marker and brake lights shall be provided 87
- Unit shall be equipped with LED driving lights, two high and two low beam LED headlights with front and rear turn signals, front yes no and rear marker lights, brake lights and hazard warning lights. 88
 - Premium LED (high intensity) light grading package. Includes (in addition to those listed above) 14 additional work lights all LED

(2 - bottom cab, 2 - mid-frame, 2 - reversing lights on rear grill), 4 - corner cab, 2 front cab and 2 - right side cab roof) Total of

89 yes_no_18-LEDLights.

72

- Unit shall have indicator or warning for: high beams, seat belt, turn signals, cruise control, low alternator voltage, engine air filter 90 yes no restriction, engine oil pressure, engine coolant temperature, wait to start (glow plugs), hydraulic filter restriction 91 yes_no_ Machine shall have back-up lights and sounding alarm as standard when reverse gears are selected Unit shall be equipped with a single LCD monitor displaying gauges for: DPF cleanliness level, engine coolant temperature, transmission oil temperature, hydraulic oil temperature, rear steer articulation angle and fuel level with low level visual warning. The LCD monitor should also be capable of displaying vehicle performance data, diagnostic information, and diagnostic trouble 92 yes_no_codes. Unit shall have digital readout displayed on a single LCD monitor for: engine rpm, odometer, transmission gear indicator, 93 yes_ no_ speedometer, hour meter 94 yes_ no_ Starting system shall be a 24V direct electric type 95 yes_ no_ All light and wiper switches will be solid-state distribution 96 yes_ no_ The in-cab switch module shall be sealed to keep out dirt, dust and airborne debris 97 yes_ no_ The unit shall have an electric key fuel shut-off switch Electrical system shall have a master disconnect switch with a padlock provision (in addition to the ignition switch), accessible 98 yes_ no_ from the ground level yes_ no_ Cab shall have two beacons LH and RH side with Flip DownBrackets 99 100 yes_ no_ The unit shall have a LH and RH side engine compartment light Operator Station (GP) Grade control ready package is standard from the factory. This package shall include integrated mounting brackets, hydraulic valves, electrical harnesses, circle rotate and slope sensors for quick, easy installation of your preferred grade control system 101 yes_ no_ (Topcon, Trimble, Leica).systems. 102 yes_ no_ Dual Joystick Controls with steering Wheel included. 103 yes no Available Fingertip armrest-mounted electro-hydraulic controls including steering lever as an option to Joystick Controls. 104 yes_ no_ Steering wheel and control console shall be tiltable The ergonomically designed steering wheel with EH Joystick controls or EH Fingertip Controls the steering wheel shall take 6 105 yes_ no_ 1/4 turns (lock to lock). 106 yes_ no_ Steering wheel included as standard equipment 107 yes_ no_ Left and right side cab doors are standard 108 yes_no_ Cab doors shall have a hold-open clasp with a ground-level release and in addition to, a release in the cab 109 yes_no_Machine shall provide dual exits allowing for emergency egress should one side become obstructed 110 yes no Cab shall have cup holder, personal cooler holder/storage compartment for operator's manual, with a molded floor mat 111 yes_ no_ Air vents shall be provided for all front and side tinted windows 112 yes_ no_ Cab air pre-cleaner shall be installed to extend filter life by pre-cleaning outside air 113 yes_no_ Three rear view mirrors shall be provided, one interior and two breakaway exterior mounted adjustible heated mirrors. 114 yes_no_AM/FM/WB Radio with Bluetooth,AUX, two speakers, antenna and wiring. 115 yes_ no_ A front window sun visor and a rear window sun shade. The motor grader shall be equipped with low ROPS/FOPS enclosed air conditioned cab, isolation frame mounted for noise and 116 yes_ no_ vibration reduction Premium heated, leather/fabric, high wide back, air-suspension seat with armrest, with adjustments for fore-aft position, seat 117 yes no height, seat back angle, thigh support, and lumbar support and 3-inch (76 mm) retractable seat belts, A machine security system shall be available to electronically code keys selected by the user to limit usage by individuals or by 118 yes_ no_ time parameters. Left and right side tandem case assemblies shall be covered with punched steel plate to provide an adequate platform for 119 yes_ no_ standing and walking. 120 yes_ no_ The unit will come standard with front and rear window defrost 121 yes_ no_ Decelerator pedal. 122 yes_ no_ The upper front and rear windshield washers with intermittent wipers shall be standard Grade Pro cab with Fixed lower front and Side Opening windows, Laminated Glass and Lower front Intermittent Wiper & 123 yes_no_Washer. 124 yes no Cross-slope simplifies holding a consistent slope by reducing operation to single lever as standard equipment. 125 yes no Return to straight automatically straightens an articulated frame. **General Specifications** 126 yes_no_Machine Wheel Base (distance from front axle to mid tandem) shall not be less than 243.0 in (6,172 mm). 127 yes_ no_ Machine shall be designed and built by the manufacturer. 128 yes_no_Transmission shall be designed and built by the machine manufacturer. 129 yes_ no_ Machine height to top of the cab shall not exceed 125 in (3,180 mm). 130 yes_ no_ Turning radius will be no greater than 284 in (7,214 mm) Max operating weight of the machine shall not be more than 55,000 lbs (21 772 kg). Weight shall be the heaviest possible 131 yes_no_ combination of compatible attachments, also including lubricants, full fuel tank and operator of 175 lbs (79 kg). Typical operating weight of the machine shall be 44,570 lbs (20 217 kg). Weight shall include the base machine weight as well 132 yes_ no_ as the front Dozer Blade, rear ripper/scarifier and other equipment Base Machine Weight shall not be less than 38,585 lbs (17,382kg). Weight shall include: standard machine configuration, 133 yes no lubricants, coolants, full fuel tank and operator of 175 lbs (79 kg).
- 134 yes_no_ Six Cylinder, turbocharged with air-to-air after cooler diesel engine and shall be designed and built by the manufacturer

135 yes_ no_	Hydraulic disconnect (soft start) and transmission valve solenoid guards shall be standard equipment
136 yes no	Ground level fueling and filling for diesel and diesel exhaust fluid shall be standard equipment
	Standard grey glare-reducing paint shall be used on the front frame and engine enclosure to decrease glare from other
137 yes no	equipment lights and reflection from the sun and snow.
	The frame shall be ready for snow wing attachment as standard equipment.
	Frames and Structures
139 ves no	The angle of articulation shall be no less than 22 degrees
140 ves no	The articulation joint shall have mechanical locking device to prevent frame articulation while servicing or transporting machine
	Unit will be provided with seven-position pin-locking saddle
,	Unit shall be equipped with 5 tie-down locations for ease of transporting
)	Circle and Mold Board
	Circle shall be a fully sealed bearing style system. Please provide maintenance and adjustment procedures for circle being
143 yes no	
	Circle teeth contact surfaces shall be induction-hardened on the front 120 degrees of the circle
	Circle shall have no circle adjustments or wear inserts
	The unit shall have a circle drive slip clutch to protect the drive pinion from shock loads
	Circle shall be rotated by a hydraulic driven motor
147 yes_ns_	Circle maintenance shall have five greaseable points serviced on a 500 hour interval and a 4000 hour gearbox oil change
148 ves no	interval. No other adjustments or maintenance needed.
140 900_110_	The draft frame pivot connection shall have a double Ball-in-Socket design with a minimum ball diameter of 6.0 in (152.4 mm)
1/10 yes no	and minimum stem diameter of 2.88 in (73 mm)
149 yes_110_	
150 100 00	The standard moldboard shall be at least 14 ft (3657 mm) long, 24 in (610 mm) high and no less than 7/8 in (22 mm) thick with 5/8 in (16 mm) hardware. 8" Culling Edges
	Shall have Reversible Overlay End Bits.
	The mold board shall be pre-stressed during manufacturing for superior strength and durability
	The mold board will have quick change side shift wear inserts, capable of being replaced using only a 9/16" wrench.
	Moldboard shall have a bank slope angle capability of at least 90 degrees to both sides.
	Slide rails shall be hardened, continuously welded, and have replaceable bronze-alloy wear inserts top and bottom.
	Moldboard slide rails shall be constructed of a heat-treated, high carbon steel.
	Moldboard shall have a hydraulic tip control through a range of 42 degrees fore and 5 degrees aft.
100 yes_110_	Throat clearance with standard moldboard shall be at least 4.8 in (123 mm)
150 100 00	Blade lift accumulators for added protection of the moldboard and draft frame from impacts with stationary objects shall be apart
159 yes_no_	
160 100 00	Machine shall have Machine Damage Avoidance to prevent the moldboard from contacting the tires, cab and cab steps. In
100 yes_110_	addition prevents the saddle linkage from contacting the top of the draft frame. Operator can override as needed.
	Serviceability
101	Daily check points shall be accessible from the left side of the engine behind one service door and shall be done from ground
	/el with a light as standard equipment. ccess to engine will be open from both sides with hinged engine side shields and full access servicedoors
102 yes_110_AC	cess to engine will be open norm both sides with ninged engine side shields and full access service doors
163 ves no Fr	gine enclosure and daily service points shall be accessible from ground level, and grouped on the left side of the machine.
100 yes_110_ El	Vandal protection package shall include locking for cab doors, engine side shields (4), top tank radiator access door, engine
161 yes no co	olant surge tank, hydraulic reservoir cap, fuel tank cap and tool box.
	e dip stick for checking transmission fluid shall be at ground-level
166 yes_no_En	gine shall have environmentally friendly fuel drain valves
100 yes_110_E11	Equipped with quick service fluid ports for engine oil, transmission oil, hydraulic oil, axle oil and coolant with ground level quick
167 yes no co	
	rdraulic tank capacity shall not be more than 16 gallons (60.6 L).
	el tank capacity shall not be less than 110 gallons (416 L).
	esel exhaust fluid (DEF) tank capacity shall not be less than 6 gallons (22.5 L)
	poling system capacity shall not be less than 14.5 gallons (55.0 L).
	ngine oil capacity shall not be less than 7.1 gallons (27.0 L).
/	ndem housing capacity shall not be less than 19.5 gallons (74.0 L) each.
	rcle gearbox capacity shall not be less than 1.5 gallons (5.7 L) with an 4000 Hr. Gearbox oil change interval.
1/5 yes_no_En	gine primary and final fuel filters shall have 500-hour service replacement interval.
470	Engine shall have primary fuel filter with fuel water separator and electronicsensor; quick release dual stage filter and primer
176 yes_no_p	ump
177 100 00	Hydroulia, transmission, and differential filters shall be benked and easily appearable through the ensine compartment doors
	Hydraulic, transmission, and differential filters shall be banked and easily assessable through the engine compartment doors. Engine oil filter shall be a 500-hour, vertical spin-on
	Engine oil shall have a service interval of no less than 500 hours
	Hydraulic oil filter shall have a service interval of no less than 2000 hours
	Hydraulic oil change service interval shall be no less than 2000 hours
	Transmission oil change service interval shall be no less than 2000 hours

183 yes no Transmission oil filter service replacement interval shall be 2000 hours	
184 yes no Tandem oil shall have a service interval of no less than 4000 hours	
185 yes_ no_ Engine coolant shall have a service interval of no less than 6000 hours	
186 yes_ no_ Transmission, hydraulic, fuel and axle filter restriction indicator shall be displayed in the cab	
187 yes_ no_ The centralized lube bank shall be at the articulation joint to give access to difficult to reach zerks	
188 yes_no_ Sampling ports shall be accessible from the tandem level and provide access to the engine, hydraulic, coolant, and fuel ports. A two-way communication tool shall give service technicians easy access to stored diagnostic data and allow configuration of	
189 yes_no_ machine parameters. Unit shall be equipped with OEM provided wireless communication system capable of monitoring and communicating machine	
location, fuel burn, as well as multiple other vehicle performance data. In addition, the system shall be capable of updating	
system control software wirelessly. Life Time Service. Please provide how long service is good for and price out life time if	
190 yes no available. Please provide subsription cost with bid as an attachment.	
Diesel particulate filter (DPF) ash service interval as needed (can go up to 15,000 hours between diesel particulate filter ash	
191 yes no removal) Please provide DPF warranty statement on this component as an attachment.	
Tires/ Rims	
192 yes_no_ A 14 in (35.6 cm) by 25 in (63.5 cm) size multi-piece tire rim shall be available to provide mounting for 17.5R25 tires.	
193 yes_ no_ 17.5 R 25 L2 Single Start Radial Tires w/3pc. Rims	
194 yes_no_ Spare tire and rim mounted but shipped loose.	
195 yes_ no_ 1-full set of 4-link tire chains and tighteners.	
Safety	
Standard grey glare-reducing paint shall be used on the front frame and engine enclosure to decrease glare from other	
196 yes_no_ equipment lights and reflection from the sun and snow.	
197 yes_ no_ The unit shall have a fan finger guard	
198 yes no Machine shall have both a Front and Rear high resolution Cameras with ability to show ither front or rear in the main monitor	
199 yes_no_ Machine shall come with a mounted 5.0 lbs. multi purpose (ABC) Dry Chemical Fire Extinguisher	
200 yes no Machine shall have installed a slow moving sign	
201 yes_no_ Machine shall have wheel chocks that can be mounted and stored on the machine	
Other Equipment	
202 yes_ no_ A front mounted Dozer Blade 105" x 37.6" shall be part of the machine	
203 yes_no_ Rear ripper Combination with rear hitch and pin, shall have five ripper shank holders and 9 scarifier shank holders	
204 yes_no_ Rear ripper shall come with five ripper shanks/teeth and 9-scarifier shanks/teeth	
Rear ripper shall have a working penetration of maximum 16.8 in (426 mm) and a minimum penetration force of 21,137 lb (9587	
205 yes_no_ kg) at typically equipped operating weight	
206 yes_no_ A toolbox shall be provided 207 yes_no_ Machine shall come with Front Fenders	
Warranty and Machine Maintenance Plan	
208 yes no Include in the price and list Standard Factory Warranty.	
209 yes no Include in the price a 60-Months/3000 Hour Extended Powertrain Plus Hydraulics Warranty	
Include as an attachment the Extended Warranty Options for more years and hours of both powertrain plus hydraulics	
and Full Machine (Comprehensive). Include what the deduct for the 60/3000 hour Powertrain plus hydraulics warranty	

210 yes_no_quoted in bid would be if another extended warranty option is selected.

Include in the price a 60-Month/3000 Hour Maintenance Plan with travel included up to 100-Miles. Please list what is covered 211 yes_no_ under the maintenance plan on the quote or as a separate attachment.

ATTACHMENT B

W-9 FORM

Request for Taxpayer Identification Number and Certification

Go to www.irs.gov/FormW9 for instructions and the latest information.

Before you begin. For guidance related to the purpose of Form W-9, see Purpose of Form, below.						
	1 Name of entity/individual. An entry is required. (For a sole proprietor or disregarded entity, enter the owner's name on line 1, and enter the business/disregarentity's name on line 2.)					
	2	Business name/disregarded entity name, if different from above.				
Print or type. Specific Instructions on page 3.		Check the appropriate box for federal tax classification of the entity/individual whose name is entered only one of the following seven boxes. Individual/sole proprietor C corporation S corporation Partnership LLC. Enter the tax classification (C = C corporation, S = S corporation, P = Partnership) Note: Check the "LLC" box above and, in the entry space, enter the appropriate code (C, S, or P) f classification of the LLC, unless it is a disregarded entity. A disregarded entity should instead chec box for the tax classification of its owner. Other (see instructions) If on line 3a you checked "Partnership" or "Trust/estate," or checked "LLC" and entered "P" as its tax and you are providing this form to a partnership, trust, or estate in which you have an ownership ir this box if you have any foreign partners, owners, or beneficiaries. See instructions	 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3): Exempt payee code (if any) Exemption from Foreign Account Tax Compliance Act (FATCA) reporting code (if any) (Applies to accounts maintained outside the United States.) 			
See	5	Address (number, street, and apt. or suite no.). See instructions.	Requester's name a	and address (optional)		
	6	City, state, and ZIP code				
	7	List account number(s) here (optional)				
Par	t I	Taxpayer Identification Number (TIN)				
			Social sec	curity number		

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN*, later.

	Em	ŕ
Note: If the account is in more than one name, see the instructions for line 1. See also What Name and		
Number To Give the Requester for auidelines on whose number to enter.		

Part II Certification

Under penalties of perjury, I certify that:

- 1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
- 2. I am not subject to backup withholding because (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
- 3. I am a U.S. citizen or other U.S. person (defined below); and
- 4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and, generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

	Signature of
Here	U.S. person

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to *www.irs.gov/FormW9*.

What's New

Line 3a has been modified to clarify how a disregarded entity completes this line. An LLC that is a disregarded entity should check the appropriate box for the tax classification of its owner. Otherwise, it should check the "LLC" box and enter its appropriate tax classification. New line 3b has been added to this form. A flow-through entity is required to complete this line to indicate that it has direct or indirect foreign partners, owners, or beneficiaries when it provides the Form W-9 to another flow-through entity in which it has an ownership interest. This change is intended to provide a flow-through entity with information regarding the status of its indirect foreign partners, owners, or beneficiaries, so that it can satisfy any applicable reporting requirements. For example, a partnership that has any indirect foreign partners may be required to complete Schedules K-2 and K-3. See the Partnership Instructions for Schedules K-2 and K-3 (Form 1065).

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS is giving you this form because they

Date

ATTACHMENT A

SUSPENSION AND DEBARMENT FORM

NAVAJO NATION CERTIFICATION Regarding Debarment, Suspension, and Contracting Eligibility

- 1. Applicant entity acknowledges that to the best of its knowledge that the Applicant entity, either in its present form or in any identifiable capacity, has not, in accordance with 12 N.N.C. § 361:
 - A. Been convicted of the commission of criminal offenses incident to obtaining or attempting to obtain a public or private contract or subcontract, or in the performance of any such contract or subcontract;
 - B. Been convicted of embezzlement, theft, forgery, bribery, falsification or destruction of records, receiving stolen property, or other offenses indicating a lack of business integrity or honesty, which currently, seriously, and directly affect responsibility as a Navajo Nation contractor;
 - C. Been convicted under antitrust statutes arising out of the submission of bids or proposals;
 - D. Violated contract provisions, including:
 - i. Deliberate failure, without good cause, to perform in accordance with the contract specifications or within the time limit provided in the contract,
 - ii. A recent record of failure to perform or of unsatisfactory performance with the terms of any contract, or
 - Any other cause so serious and compelling as to affect responsibility as a Navajo Nation contractor, including debarment by another governmental entity.
- 2. Applicant acknowledges that if the Navajo Nation determines that the executed Certification provided herein is untrue or not wholly accurate, it shall be grounds for the Navajo Nation to terminate the contract and pursue other legal remedies, at the Navajo Nation's discretion.
- 3. Applicant certifies to the best of its knowledge that it is eligible to do business with the

Navajo Nation, in its present form or in any other identifiable capacity, pursuant to 12 N.N.C. § 1501 and 5 N.N.C. § 301. Applicant also acknowledges that per 12 N.N.C. § 1505, it will not be eligible to contract with the Navajo Nation if deemed ineligible by the appropriate department or entity of the Navajo Nation which receives the Applicant's request for consideration for a business opportunity.

Applicant Name	Name of individual signing on Applicant's behalf (print)
Applicant Address	Title of individual signing on Applicant's behalf
Applicant Address	Signature of individual signing on Applicant's behalf
Applicant Address	Date