North Dakota Department of Transportation
**REQUEST FOR BID**

| | |
|---|---|
| Bid Number: 760-90-15-050 | Bid Opening Date & Time: 05/22/2015 02:00 PM |
| Items: Compact Excavator, Track, 8 Ton | Buyer: Vanessa Brosten |
| Bid Mailing Address: 608 East Boulevard Avenue | Telephone Number: 701-328-4466 |
| City, State, Zip: Bismarck, North Dakota, 58505 | Email: vbrosten@nd.gov |
| Contract Period: 05/22/2015 TO 10/31/2015 | Date Prepared: 05/07/2015 |

Please submit your bid response on the attached forms in conformance with the instructions and specifications in the NDAC 04-12-01 - 04-12-16.

One copy of your bid response must be returned to the North Dakota Department of Transportation (NDDOT) prior to the time and date specified for bid opening. Bid responses received after the time and day specified for bid opening will be rejected. Mark envelope as instructed in "**Mailing Instructions**".

In consideration of the acceptance by the state of the offer made pursuant to the bid response, the vendor agrees and promises to sell, furnish, and deliver to the state, at the time, places, and prices specified in the bid response, all goods, merchandise, supplies, commodities, equipment, or other items contained in the bid response. The vendor shall fully perform in accordance with the terms and conditions contained in the bid response including all specifications, rules, or regulations mentioned therein, and shall comply with all applicable provisions of the NDAC 04-12-01 - 04-12-16 promulgated by the State Purchasing Division; such manual being made a part of this invitation by reference. The Risk Management Appendix and Appendices A and E of the Title VI Assurances, attached, are hereby incorporated into and made a part of this Request for Bid.

Bids may be rejected if the following is not signed by OWNER, PARTNER, CORPORATE PRESIDENT, VICE PRESIDENT, other AUTHORIZED CORPORATE OFFICER or a duly authorized representative. If signed by other authorized Corp. Officer or representative, please attach a letter signed by the OWNER, PARTNER, CORP. PRES., or VICE PRES. indicating the individual has authority to enter into a contract on behalf of the company (or a Power of Attorney).

By issuance of a purchase order, a contract is made and entered into by and between the North Dakota Department of Transportation and:

| | | |
|---|---|---|
| Vendor Name: Swanston Equipment | | |
| Mailing Address: 3915 Burdick Expressway East | | |
| Telephone Number: 701-837-9901 | Fax Number: 701-837-9904 | E-mail Address: wyatt.greene@swanston.com |

Chris Shea VP
Name & Title (Type or Print)

Chris Shea
Signature

5-30-15
Date

To be signed by **Owner; Partner; Corp. Pres., Vice Pres., or other authorized Corp. Officer** or bid may be rejected. (if signed by other authorized Corp. Officer, please attach copy of Power of Attorney or other documentation showing authority to sign.)

NDDOT North Dakota Department of Transportation

CLA 54214 (Div. 50)

## MAILING INSTRUCTIONS

Mail only one completed and signed request for bid document per envelope, unless instructed otherwise. Request for bid documents not signed or received after the date and time specified in the request for bid will be rejected.

**BID IS: ☒ SEALED ☐ NOT SEALED**

Address the envelope containing your response in the following manner:

BID NUMBER - 760-90-15-050
BID OPENING DATE/TIME - May 22, 2015; 2:00 p.m. Central
N. D. DEPT. OF TRANSPORTATION
PROCUREMENT SECTION
608 E BOULEVARD AVE
BISMARCK ND 58505-0700

## BIDDERS INSTRUCTIONS

1. **Acceptance/Rejection/Waiver.** The state of North Dakota reserves the right to accept or reject any or all bids and to waive minor irregularities or technicalities, provided such waiver does not substantially change the offer or provide a competitive advantage to any vendor, in the judgment of the state.

2. **Affirmative Action.** The contractor will take affirmative action in complying with all Federal and State requirements concerning fair employment and employment of individuals with disabilities, and concerning the treatment of all employees without regard to discrimination by reason of race, color, religion, sex, national origin, or disability.

3. **Assistance to Bidders with a Disability.** Bidders with a disability and/or language assistance, contact Civil Rights Division, NDDOT, 701-328-2978 or civilrights@nd.gov or TTY 711, as soon as possible so that reasonable accommodations can be made. Additionally, the Request for Reasonable Accommodations form (SFN 60135) can be accessed at the following NDDOT website location: http://www.dot.nd.gov/forms/sfn60135.pdf.

4. **Alterations and/or Corrections.** The person signing the bid response must initial any or all manual alterations and/or corrections to the bid response. Those bid responses with alterations and/or corrections that are not initialed may be rejected.

5. **Award.** Award will be made to a responsive, responsible bidder with the lowest price considering conformity with specifications, terms of delivery, quality, and serviceability. NDDOT reserves the right to consider bids varying in minor respects from any specific requirements herein, but judged to meet the intent of this request.

Contracts are not awarded at the bid opening. Bid responses will be firm for 30 days, unless stated otherwise.

6. **Awards, Splitting of.** The state reserves the right to make awards by item, groups of items, or on the total low bid for all the items specified as indicated in the detailed specifications. Bidders interested only in the total low bid for all items are to state 'all or nothing' on their bid response.

7. **Bidder Checklist.** HAVE YOU REMEMBERED TO:
   - Bid F.O.B. Destination (Ship To: Address) Freight Prepaid.
   - Mark envelope as indicated.
   - Review Standard Terms and Conditions contained in this solicitation.
   - Sign your bid on the cover sheet.
   - Initial all bid/pricing changes you made.
   - Bid responses must be submitted in ink or type written.
   - Review and complete all requirements contained in this solicitation to ensure compliance.

8. **Bidder's Responsibility and Late Bids.** It is the bidder's responsibility to ensure that a bid response is physically deposited with the NDDOT Procurement Office prior to the date and time specified for the opening. Late bid responses will not be opened and will be rejected and returned regardless of the degree of lateness or the reasons. It is the bidder's responsibility to comply with the State of North Dakota's laws and regulations.

9. **Bid Summary.** Bid summaries are available when the bid has been awarded. When bids are issued using the State's electronic bidding system, the bid summary will be posted and available for download from: http://www.nd.gov/spo/

Bid summaries will be mailed to those bidders who supply a self-addressed, stamped envelope with their bid response. A copy of the bid summary may also be obtained by visiting the NDDOT Procurement Office during normal working hours.

10. **Bid Bond.** Waived in this instance: however, bidder(s) failing to enter into a contract with this office, upon notification of award, may be subject to removal from the bidder's list.

11. **Clarifications, Bid Changes and Questions Deadline.** The Procurement Officer is the point of contact. Any irregularities, lack of clarity, requested bid changes and all questions regarding this bid and the procurement process must be addressed to the Procurement Officer referenced on the first page of this document **not later than end of business May 14, 2015.** (Contact information is indicated on cover page). If a bid amendment is required, it will generally be issued after this date.

The bidder is cautioned that the requirement of this solicitation can be altered only by written amendments and that verbal communications from whatever source are of no effect.

12. **Definitions.**
- Bidder - any person or firm submitting a competitive bid in response to a solicitation.
- Bid summary - a summary of all bid responses received by the NDDOT Procurement Office.
- Bid response - the executed document submitted by a bidder in response to a solicitation.
- Contract - a deliberate written agreement between two or more competent persons to perform specific act or acts.
- Contractor - any person or firm having a contract with a governmental body.
- Solicitation - the process of notifying prospective bidders that the state wishes to receive bids for furnishing goods or services.

13. **Deviation from Specifications Supplied by NDDOT.** Unless otherwise indicated by the bidder, it will be assumed that specifications will be met in all respects. Any deviation from the minimum specifications indicated herein must be clearly pointed out PRIOR TO THE DEADLINE FOR RECEIPT OF QUESTIONS; otherwise, it will be considered that the items offered are in strict compliance with these specifications, and the bidder will be held responsible.

14. **Electronic & Facsimile Bids.** Bid responses are not to be email attached or faxed to the NDDOT unless this transmittal method has been authorized by the Procurement Officer or bid document. (Contact the Procurement officer regarding additional requirements and exceptions.) Bid responses electronically submitted or faxed may be rejected as non-responsive.

15. **Freight/F.O.B. Destination.** Freight and transportation charges are to be included in the price of the products, unless otherwise specified in the solicitation. (F.O.B. - Free On Board).

16. **Indemnification.** The attached Risk Management will be incorporated into the contract. The successful Bidder may be required to furnish proof of insurance, as detailed in the Risk Management Appendix.

17. **Multiple Bid(s).** Bidders may submit more than one bid response(s) for the item(s) specified in the solicitation. Each bid submitted must comply in all aspects with the bid requirements and these instructions.

18. **Negotiation.** NDDOT reserves the right to negotiate with the successful bidder to ensure the best possible consideration is afforded to all concerned.

19. **Open Records.** After award, bid documents will be subject to the North Dakota open records law. Records are closed or confidential only if specifically stated in law. If a request for public information is received, the procurement officer will determine whether the information is an exception to the North Dakota open records law, and the information will be processed appropriately. Those interested in reviewing the bid file are to make arrangements with the NDDOT Procurement Office. The NDDOT Procurement Office hours are 8:00 a.m. - 12:00 p.m. and 1:00 p.m. - 5:00 p.m. Monday through Friday.

20. **Packaging.** All shipments are to be packaged according to accepted commercial practices to avoid damage in shipment.

21. **Performance Bond.** Successful bidders will not be required to furnish a performance bond; however, failure to perform satisfactorily will result in the immediate termination of the contract(s) and bidders may be subject to removal from the bidder's list.

22. **Preparation of Bid.** Bids will be accepted on NDDOT forms only. If the document is located on the State Procurement Office website, then bidder is to download the document and type or write their responses as indicated by the bid document. Alteration of the bid document may be cause for bid rejection. Bidders are cautioned to examine specifications and all instructions. Failure to do so will be at the bidder's risk.

23. **Pricing.** Unit prices are to be stated in United States currency and based on the unit of measurement specified in the solicitation, F.O.B. Destination, to the NDDOT delivery locations specified herein.

In the event of mathematical differences between the unit price and extended total, the unit price will prevail.

24. **Protest of Award.** An interested party may protest the award within seven days after receiving notice in accordance with N.D.C.C. 54-44.4-12 and N.D.A.C. 4-12-14.

25. **Receipt of Bids.** All sealed bids received by the NDDOT Procurement Office will be opened and read at 608 East Boulevard Avenue, Bismarck, North Dakota, at the time specified in the solicitation.

26. **Rejection.** Bid responses may be rejected if:

- The bid response is not legible.
- The bid response is not submitted on the form supplied.
- The bid response is not completed as requested.
- The bid response is completed and/or signed in pencil.
- The bid response is faxed to the procurement office.
- The bid response is not signed by an authorized company representative.
- The bid response is not responsive to the specifications or other requirements of the solicitation.
- Changes to the bid response are not initialed.
- The bid response is received after the time and date specified.
- The bidder has not met Vendor Registration requirements or is suspended or debarred.
- The bid document has been altered by the bidder.
- The bidder is determined to be not responsible (N.D.A.C. 4-12-11-04).
- The price is not fair and reasonable
- Or a combination of above.

27. **Signature.** The bid must be signed manually in ink. The name and title of the person signing the bid response must be typed or printed above the signature. The bid must be signed by **Owner, Partner, Corp. Pres., Vice Pres., or other authorized Corp. Officer** or the bid may be rejected. If signed by other authorized Corp. Officer or representative, please attach a letter signed by the Owner, Partner, Corp. Pres., or Vice Pres. indicating the individual has authority to enter into a contract on behalf of the company (or a Power of Attorney).

28. **Supplemental Terms and Conditions.** Bids including supplemental terms and conditions will be accepted, but supplemental conditions that conflict with any conditions contained in this ITB or that diminish the State's rights will be considered null and void. The State is not responsible for identifying conflicting supplemental terms and conditions before issuing a contract award.

After award of contract:

a) If a conflict arises between a supplemental term or condition included in the bid and a term or condition of the ITB, the term or condition of the ITB will prevail, and,
b) If the State's rights would be diminished as a result of application of a supplemental term or condition included in the bid, the supplemental term or condition will be considered null and void.

Changes, modifications, additions, or alterations to the bid document could be cause for rejection of the submitted bid at the sole discretion of the NDDOT. Contact the Procurement Officer in writing prior to the deadline for clarifications.

29. **Taxes.** The State does not pay sales tax or federal excise tax. The state sales tax exemption number is E-2001. The federal tax-free transaction number is 45-0309764.

30. **Vendor Registration.** Bids will be accepted from bidders who are not currently Approved Bidders for the State of North Dakota; however, the successful bidder may be required to become approved prior to award, in accordance with N.D.C.C. 54-44.4-09. To become an Approved Bidder, you must: 1) register with the North Dakota Secretary of State (fees apply), and 2) submit a completed Bidder List Application to the ND State Procurement Office. Registration instructions and forms are available on-line at: www.nd.gov/spo/vendor. Contact the ND State Procurement Office at 701-328-2683 or infospo@nd.gov for assistance.

31. **Withdrawal or changes to a bid response prior to the bid opening date and time.** A bidder may withdraw or make a change to his bid response prior to the bid opening date and time. The request to make a change or withdraw must be in writing by a representative of the firm. The request to withdraw or change must be signed by the bidder or his designated representatives.

32. **Withdrawals after the bid opening date and time.** Withdrawals after the bid opening will be allowed only upon written approval from the NDDOT Procurement Office. Vendors continually withdrawing bids after the bid opening may be removed from the Vendor Database.

## GENERAL CONTRACT TERMS AND CONDITIONS

1. **Applicable Law and Venue.** Any dispute arising out of this agreement will be resolved under the laws of the State of North Dakota.

2. **Binding Contract.** The acceptance of a bid response in writing by the purchasing agency constitutes a contract between the bidder and the State. Written acceptance from the purchasing agency will be in the form of a purchase order, notification of award, or contract. Any oral agreement or arrangement by a bidder with a State employee or purchasing agency will have no force or effect unless reduced to writing.

3. **Compliance with Laws, Nondiscrimination and Affirmative Action.** The contractor must, in performance of work under this contract, fully comply with all applicable federal, state or local laws, rules, regulations and policies, including those relating to nondiscrimination, affirmative action, accessibility and civil rights including Title VI of the Civil Rights Act of 1964. The contractor agrees to file all required reports on time, to make required payroll deductions, and to pay all taxes and premiums owed on time, including sales and use taxes and unemployment compensation and workers' compensation premiums. The contractor shall have and keep current at all times during the term of this contract all licenses and permits required by law.

4. **Contract Amendments, Waivers.** After a binding contract has been entered into, no changes (i.e. additions, substitutions, subcontracting or a price adjustment) may be made, unless prior approval has been obtained from the purchasing agency and Procurement Officer.

The terms of this contract shall not be waived, altered, modified, supplemented, or amended, in any manner whatsoever, except by written instrument signed by the parties. No waiver consent, modification or change of terms of this agreement shall bind either party unless in writing and signed by both parties. Such waiver, consent, modification, or change, if made shall be effective only in the specific instance and for the specific purpose given. There are no understandings, agreements, or representations, oral or written, not specified herein regarding this agreement.

5. **Contract Termination.**

   a. **Termination without Cause.** This contract may be terminated by mutual consent of both parties, or by either party upon 30 days' written notice.

   b. **Termination for Lack of Funding or Authority.** The State may terminate this contract effective upon delivery of written notice to the contractor, or on any later date stated in the notice, under any of the following conditions:
      i. If funding from federal, state, or other sources is not obtained and continued at levels sufficient to allow for purchase of the services or supplies in the indicated quantities or term. The contract may be modified by agreement of the parties in writing to accommodate a reduction in funds.
      ii. If federal or state regulations or guidelines are modified, changed or interpreted in such a way that the services are no longer allowable or appropriate for purchase under this contract or are no longer eligible for the funding proposed for payments authorized by this contract.
      iii. If any license or certificate required by law or regulation to be held by the contractor to provide the services required by the contract is for any reason denied, revoked or not renewed.

   Any such termination of this contract under (i), (ii), or (iii), above, shall be without prejudice to any obligations or liabilities of either party already accrued prior to such termination.

   c. **Termination for Cause.** The State by written notice to the contractor may terminate the whole or any part of this contract:
      i. If the contractor fails to provide services required by this contract within the time specified herein or any extension thereof; or
      ii. If the contractor fails to perform any of the other provisions of this contract, or so fails to pursue the

work as to endanger performance of this contract in accordance with its terms and after receipt of written notice from the State, fails to correct such failures within ten days or such longer period as NDDOT may authorize.

iii. The rights and remedies of the State provided in the above clause related to defaults by the contractor are not exclusive and are in addition to any other rights and remedies provided by law or under this contract.

d. **Termination, Deliveries.** If the contract is terminated for any reason, the contractor is responsible for delivery of all commodities and services ordered prior to the termination, unless those orders had been canceled by the Purchasing Agency or Entity.

6. **Materials and Workmanship.** All material and workmanship shall be subject to inspection and testing at the discretion of the purchasing agency.

7. **Inspection and Investigations.** The State reserves the right to conduct inspections and investigations related to the bidder and offered commodities or services to make determinations regarding compliance with the bid requirements and responsibility of the bidder.

8. **Billing and Payment Procedures.** Purchase orders will be issued by NDDOT Procurement office to the awarded contractor.

Invoices are to be submitted as indicated on the purchase orders unless otherwise instructed. Failure to submit correct invoices to the appropriate NDDOT office may delay contractor payment.

Payment will normally be made within thirty days after delivery and acceptance of commodities or services under this contract and receipt of a correct invoice. All invoice and payment inquiries must be directed to the purchasing agency.

9. **Subcontracts. Assignment.** The contractor shall not subcontract, assign or transfer the contractor's interests or duties under this contract without express written consent of the purchasing agency.

10. **Successors in Interest.** The provisions of this agreement shall be binding upon and shall inure to the benefit of the parties hereto, and their respective successors and assigns.

11. **Receiving.** Deliveries must arrive at the designated destination(s) during normal business hours unless other shipping/receiving instructions are issued by NDDOT personnel. The contractor shall contact the NDDOT to schedule delivery dates and times at least 24 hours in advance of delivery.

All NDDOT offices will be closed in recognition of State holidays. Any day declared a holiday by the President or Governor will also be recognized by office closure.

12. **Service Representative.** The contractor must provide a dedicated service representative to provide support for this contract. The contractor shall notify the Procurement Officer in the event the representative is changed.

NAME: Bennie Skalicky
_____(Name of person servicing this contract)

BUSINESS NAME: Swanston Equipment

MAILING ADDRESS: 3915 Burdick Expressway East

CITY & STATE: Minot ND ZIP CODE: 58703

PHONE NUMBER:_____ TOLL FREE: _____ FAX NUMBER:

_____ E-MAIL:_____

phone 701-837-9901
Tollfree 800-210-8766
Fax 701-837-9904
email bennie.skalicky@swanston.com

(05-07-15)

SSP-74-590-4

**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION**
**SPECIFICATIONS**
**FOR**
**COMPACT HYDRAULIC EXCAVATOR, TRACK TYPE, 8 TON CLASS**
**(Bobcat E85 or Similar Model)**

**Bidder's Instructions: Indicate compliance to the specifications on the "COMPLY YES/NO" line by each specification. Indicate any deviations from the specifications whether the minimum specifications are met or not on the "SPECIFICATION DEVIATIONS" line. Failure to comply with bid specifications may result in rejection of the bid. The state reserves the right to waive minor deficiencies or technical variances.**

The intent of this specification is to describe a compact track-type hydraulic excavator. The excavator will be used for year round maintenance activities to include, but not limited to, culvert clean-out work, culvert removal/installation, and ditch grading. The excavator shall be standard production of the latest model with standard accessories and in addition meet or exceed the following minimum specifications:

| | | COMPLY YES | COMPLY NO | SPECIFICATION DEVIATIONS |
|---|---|---|---|---|
| **1.** | **Engine** | | | |
| a. | Liquid cooled diesel, 54 HP minimum. Tier 4 EPA compliant | ✓ | | |
| b. | Cold weather starting aid | ✓ | | |
| c. | Manufacturer's air precleaner and in-cab restriction indicator or equal warning system | ✓ | | |
| d. | Spin-on throw away type oil filter | ✓ | | |
| e. | Engine block heater | ✓ | | |
| f. | Automatic idling system | ✓ | | |
| **2.** | **Drive** | | | |
| a. | Two-speed drive system | ✓ | | |
| b. | Track brakes | ✓ | | |
| c. | Two independent levers controlled by hand or by foot | ✓ | | |
| **3.** | **Electrical** | | | |
| a. | 12 volt, 50 amp alternator or 24 volt, 30 amp alternator | ✓ | | |
| b. | 12 or 24 volt battery, low maintenance | ✓ | | |
| c. | Motion sensor alarm | ✓ | | |
| d. | Must mount a Whelen Mini Freedom amber linear LED 4-lamp warning light to the cab, wired to illuminated on/off switch in cab (**The Whelen Strobe light will be purchased by the NDDOT and delivered to the successful bidders location. The switch and installation of the light shall be provided by the successful bidder)** | ✓ | | |

BIDDER Chris Shea

| | COMPLY YES | COMPLY NO | SPECIFICATION DEVIATIONS |
|---|---|---|---|
| e. Front work lights frame and boom mounted, maximum available | ✓ | | |
| **4. Frame/Chassis** | | | |
| a. Operator entry step/platform with safety grab handles | ✓ | | |
| i. All steps/platforms shall be slip resistant and prevent build up of material under most conditions | ✓ | | |
| b. Engine panels hinged & lockable | ✓ | | |
| **5. Undercarriage/Track** | | | |
| a. X-shaped frame or equal | ✓ | | |
| b. Undercarriage designed to reduce ground pressure and increase stability | ✓ | | |
| c. Sealed and lubricated track rollers, idlers, and carrier rollers | ✓ | | |
| d. Hydraulic track adjustment or equal | ✓ | | |
| e. Hydraulically driven or equal | ✓ | | |
| f. Factory mounted rubber tracks | ✓ | | |
| g. Must have proper width tracks to achieve a maximum of 6 psi of ground pressure (specify size track in the deviations line) | ✓ | | |
| h. Rear maximum factory installed counter weights to accommodate the loaded bucket, bucket digging/lifting capacities, and machine capabilities | ✓ | | |
| **6. Hydraulics** | | | |
| a. Variable displacement axial piston pump | ✓ | | |
| i. Exposed hoses shall be covered and protected from damage, Cordura, spring guard, or equal | ✓ | | |
| b. Shall be load sensing, variable displacement piston pump, or equal | ✓ | | |
| c. All weather hydraulic fluid | ✓ | | |
| d. Cylinders shall have hardened chrome plated rods | ✓ | | |
| e. Two joysticks to control all swing, boom, and bucket functions | ✓ | | |
| i. Control pattern adjustability, change valve or equal | ✓ | | |

BIDDER Chris Shea

| | COMPLY YES | COMPLY NO | SPECIFICATION DEVIATIONS |
|---|---|---|---|
| ii. Excavator to backhoe control patterns | ✓ | | |
| f. Auxiliary hydraulics at arm/stick for different work tools (hydraulic hammer, swivel, thumb, etc) | ✓ | | |
| g. Hydraulics shall be capable of operating all functions simultaneously. The boom, arm/stick, bucket, and tracks shall all function at the same time | ✓ | | |
| h. Auxiliary hydraulics shall be quick couplers plumbed to end of arm/stick | ✓ | | |
| **7. Swing System** | | | |
| a. Swing speed 9 rpm | ✓ | | |
| b. Centrally lubricated | ✓ | | |
| **8. Boom/Arm/stick** | | | |
| a. Designed reach at ground level 22' with proper combination of boom and arm/stick | ✓ | | |
| b. Quick attach hydraulic coupler at end of arm/stick for ease of connectivity and change of work tools (must be able to operate quick attach from cab | ✓ | | |
| c. Hydraulic thumb | ✓ | | |
| **9. Bucket/Work Tools** | | | |
| a. Properly sized for boom and arm/stick | ✓ | | |
| i. 24" width, heavy duty general purpose bucket with replaceable teeth and side cutting edges | ✓ | | |
| ii. 36" width, ditching bucket without teeth | ✓ | | |
| **10. Cab/Operators Station**, shall be certified with certification sticker | | | |
| a. Fully enclosed pressurized cab, all weather, must meet all applicable FOPS & TOP standards | ✓ | | |
| b. Shall be designed in a manner that reduces cab noise and vibrations | ✓ | | |
| c. Windshield wipers upper (lower if applicable) | ✓ | | |
| d. Factory installed air conditioning, R134a | ✓ | | |
| e. Heater | ✓ | | |
| i. Defroster vents with ducting and adjustable louvers to keep all windows clear (defrosting windows solely with in-cab circulating fan not acceptable) | ✓ | | |

BIDDER Chris Shea

| | | COMPLY YES | COMPLY NO | SPECIFICATION DEVIATIONS |
|---|---|---|---|---|
| | ii. Filtered fresh air intake | ✓ | | |
| f. | Left and right side mirrors | ✓ | | |
| g. | Tinted glass | ✓ | | |
| | i. Removable or capability to fully open | ✓ | | |
| h. | Deluxe cloth suspension seat, fully adjustable, reclining padded back rest and adjustable armrests | ✓ | | |
| i. | SAE certified, retractable seatbelt | ✓ | | |
| j. | Standard factory installed radio, AM-FM minimum | ✓ | | |
| k. | Two 12V plug-in receptacles | ✓ | | |
| l. | Rubber floor mat | ✓ | | |
| m. | Interior cab light(s), adequate enough to illuminate entire cab interior | ✓ | | |
| n. | Standard conveniences, such as; cup holder, coat hook, storage area, etc. | ✓ | | |
| o. | Vandalism protection | ✓ | | |
| **11.** | **Instrumentation/Engine Monitoring System** shall be in clear view of the operator, shall be illuminated and include, but not limited to: | ✓ | | |
| a. | Hour meter, shall not mark time without engine running | ✓ | | |
| b. | Ammeter/voltmeter | ✓ | | |
| c. | Fuel level or LCD display | ✓ | | |
| d. | Engine coolant or LCD display | ✓ | | |
| e. | Hydraulic oil temperature | ✓ | | |
| f. | Engine oil pressure | ✓ | | |
| g. | Travel speed indicator | ✓ | | |
| h. | Engine speed | ✓ | | |
| **12.** | **Dozer blade** | | | |
| a. | 7' backfilling blade minimum | ✓ | | |
| b. | Moldboard to accept a standard bolt-on cutting edge with standard hole punching, edge to be provided and installed | ✓ | | |
| c. | Blade to be mounted to the undercarriage frame | ✓ | | |

BIDDER Chris Shea

| | COMPLY YES | COMPLY NO | SPECIFICATION DEVIATIONS |
|---|---|---|---|
| d. All dozer blade operations shall be operable from a single joystick with float | ✓ | | |
| **13. Weights** | | | |
| a. Machine weight approximately 17,000 lb minimum | ✓ | | |
| **14. Manuals/parts information** (NDDOT will accept CD-ROM Manuals if available) | | | |
| a. Two operators manuals | ✓ | | |
| b. One parts book | ✓ | | |
| c. One technical repair manual | ✓ | | |
| d. In cab protective storage | ✓ | | |
| **15. Paint** | | | |
| a. Manufacturer's standard painting process and paint color | ✓ | | |
| **16. Standards** | | | |
| a. Unit shall meet all OSHA standards | ✓ | | |
| **17. Training** | | | |
| a. A minimum of 2 hours of familiarization training shall be given to the delivery location to ensure proper, safe, and efficient usage of the excavator. The training shall include, at a minimum, safety, preventative maintenance, basic service, fluid check/fill points, and operation. This must take place in no less than 5 days after delivery | ✓ | | |
| b. At least 2 working days notice shall be given to the delivery district prior to the delivery and training day | ✓ | | |
| **18. Warranty** | | | |
| a. One year full warranty - Manufacturer's warranty shall apply if for a longer period | ✓ | | |
| i. Warranty items that are longer than 1 year shall be identified | ✓ | | See attached |
| b. The successful bidder or manufacturer's authorized service facility shall be fully responsible for any applicable delivery, pick-up, and/or site visit/service call costs associated with warranty work throughout the warranty period | ✓ | | |

BIDDER Chris Shea

**ITEM NO. 1**
**COMPACT HYDRAULIC EXCAVATOR, 8 TON CLASS, TRACK TYPE**
1 each Minot, ND

**EACH $:** $84,132.23

The excavator shall be delivered as a complete unit ready for operation. The excavator shall be delivered free of any defects due to shipping or workmanship. Product literature shall be submitted with the bid.

EXCAVATOR MAKE: Bobcat MODEL: E85

PARTS/SERVICE/WARRANTY: Swanston Equip. TELEPHONE: 701-837-9901

**ITEM NO. 2. OPTION NO. 1**
**TRADE-IN JCB 1400CM TRACTOR BACKHOE**
The NDDOT reserves the right to exercise the trade-in option
This unit #599 is located in the Williston District

| | |
|---|---|
| Williston Contact: | Ken Esterby @ 701-774-2720 |
| Manufacturer: | JCB |
| Model Number: | 1400CM |
| Year: | 1991 |
| Approximate Hours: | 3875 hours |
| Serial Number: | 14BT2031-363498-7 |

**DEDUCT $:** $5,000.00

**ITEM NO. 3. OPTION NO. 2**
**Plate Compactor Attachment to fit machine quick-tach system**
1 each Minot, ND

**EACH $:** $5,135.80

The excavator attachment shall be delivered as a complete unit including necessary bracketry ready for operation. The plate compactor must have minimum 2,000VPM and dynamic force of 5,000 lbs minimum. Plate size approximately 24" wide and 34" long. The attachment shall be delivered free of any defects due to shipping or workmanship. Product literature shall be submitted with the bid.

ATTACHMENT MAKE: Bobcat MODEL: PCF64

PARTS/SERVICE/WARRANTY: Swanston Equip. TELEPHONE: 701-837-9901

**ITEM NO. 4. OPTION NO. 3**
**Hydraulic Breaker Attachment to fit machine quick-tach system**
1 each Minot, ND

**EACH $:** $10,045.75

The excavator attachment shall be delivered as a complete unit including necessary bracketry ready for operation. The hydraulic breaker must have operating weight of 1,000 lbs, minimum 1,000 BPM, and impact energy class of 850. The breaker shall come with compatible moil point bit. The attachment shall be delivered free of any defects due to shipping or workmanship. Product literature shall be submitted with the bid.

ATTACHMENT MAKE: Bobcat MODEL: HB1380

PARTS/SERVICE/WARRANTY: Swanston Equip. TELEPHONE: 701-837-9901

**ITEM NO. 5**
**Extended Pricing on Item No.1 until October 31, 2015**
Price to include Delivery to any NDDOT District.

**Each $:** $84,132.23

BIDDER Chris Shea

**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION**
**APPENDIX A OF THE TITLE VI ASSURANCES**

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:

1. Compliance with Regulations: The Contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, the Federal Highway Administration, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.

2. Non-discrimination: The Contractor, with regard to the work performed by it during the contract, will 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 will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.

3. 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 will be notified by the Contractor of the Contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.

4. Information and Reports: The Contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the Federal Highway Administration to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a Contractor is in the exclusive possession of another who fails or refuses to furnish the information, the Contractor will so certify to the Recipient or the Federal Highway Administration as appropriate, and will set forth what efforts it has made to obtain the information.

5. Sanctions for Noncompliance: In the event of a contractor's noncompliance with the Nondiscrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:

   a. withholding payments to the Contractor under the contract until the Contractor complies; and/or
   b. cancelling, terminating, or suspending a contract, in whole or in part.

6. Incorporation of Provisions: The Contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The Contractor will take action with respect to any subcontract or procurement as the Recipient or the Federal Highway Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the Contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the Contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the Contractor may request the United States to enter into the litigation to protect the interests of the United States.

**NORTH DAKOTA DEPARTMENT OF TRANSPORTATION**
**APPENDIX E OF THE TITLE VI ASSURANCES**

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the Contractor) agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

**Pertinent Non-Discrimination Authorities:**

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq.*, 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21.
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 *et seq.),* (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 *et seq.),* as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 *et seq.),* (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131-12189) as implemented by Department of Transportation regulations at 49 C.P.R. parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

## Risk Management Appendix

### Supply Contracts with Private Individuals, Companies, Corporations, Etc.:

Each party agrees to assume its own liability for any and all claims of any nature including all costs, expenses and attorney's fees which may in any manner result from or arise out of this agreement.

Contractor, or Contractor's delivery agent, shall secure and keep in force during the term of this agreement, from insurance companies, government self-insurance pools or government self-retention funds authorized to do business in North Dakota, the following insurance coverages:

1) **Commercial general liability** and **automobile liability** insurance.
2) **Workers compensation** insurance.

**Contractor shall produce certificates of insurance or copies of insurance policies upon request by the State.**

When a portion of a Contract is sublet, the Contractor shall obtain insurance protection (as outlined above) to provide liability coverage to protect the Contractor and the State as a result of work undertaken by the Subcontractor. In addition, the Contractor shall ensure that any and all parties performing work under the Contract are covered by public liability insurance as outlined above. All Subcontractors performing work under the Contract are required to maintain the same scope of insurance required of the Contractor. The Contractor shall be held responsible for ensuring compliance with those requirements by all Subcontractors.

RM Consulted 2007
Revised 6-07

NDDOT
North Dakota
Department of Transportation

# Product Quotation

Quotation Number: 21423D021751
Date: 2015-05-20 14:18:35

| Ship to | Bobcat Dealer | Bill To |
|---|---|---|
| NORTH DAKOTA DEPARTMENT OF TRANSPORTATION<br>Attn: VANESSA BROSTEN<br>PROCUREMENT SECTION<br>608 EAST BOULEVARD AVENUE<br>BISMARCK, ND 58505<br>Phone: 701-328-4466<br>Fax: 701-328-0310 | Bobcat of Fargo, a Division of Swanston Equipment,<br>3450 WEST MAIN AVENUE<br>FARGO ND 58103-1229<br>Phone: (701) 293-7325<br>Fax: (701) 293-9468<br>----------<br>Contact: Mason Persons<br>Phone: 701-293-7325<br>Fax: 701-293-9468<br>Cellular: 701-566-3266<br>E Mail: mpersons@swanston.com | NORTH DAKOTA DEPARTMENT OF TRANSPORTATION<br>Attn: VANESSA BROSTEN<br>PROCUREMENT SECTION<br>608 EAST BOULEVARD AVENUE<br>BISMARCK, ND 58505<br>Phone: 701-328-4466<br>Fax: 701-328-0310 |

| Description | Part No | Qty | Price Ea. | Total |
|---|---|---|---|---|
| E85 T4 Bobcat Compact Excavator | M5583 | 1 | $103,927.00 | $103,927.00 |
| Beacon Kit | 7179686 | 1 | $189.77 | $189.77 |
| Hydraulic Clamp | 7171909 | 1 | $3,895.00 | $3,895.00 |
| 24" Trenching Bucket | 7171893 | 1 | $1,280.00 | $1,280.00 |
| **Description** | **Part No** | **Qty** | **Price Ea.** | **Total** |
| 36" Ditching Bucket Smooth Lip | | 1 | $1,500.00 | $1,500.00 |
| Hydraulic Quick Coupler | | 1 | $3,994.00 | $3,994.00 |
| Operator Manual | | 1 | $77.00 | $77.00 |
| Service Manual | | 1 | $125.00 | $125.00 |
| Parts Manual | | 1 | $110.00 | $110.00 |
| Radio Kit | | 1 | $499.00 | $499.00 |

| | | |
|---|---|---|
| Total of Items Quoted | | **$115,596.77** |
| Dealer P.D.I. | | **$250.00** |
| Freight Charges | | **$743.00** |
| Dealer Assembly Charges | | **$330.00** |
| Discount | Swanston Equipement Discount | **($16,393.77)** |
| Discount | Municipality | **($16,393.77)** |
| Quote Total - US dollars | | **$84,132.23** |

**Notes:**

All prices subject to change without prior notice or obligation. This price quote supersedes all preceding price quotes. Customer must exercise his purchase option within 30 days from quote date.

## Customer Acceptance:

Purchase Order: _____

**Authorized Signature:**

**Print:**_____ **Sign:**_____ **Date:** _____

# Product Quotation

Quotation Number: 21423D021752
Date: 2015-05-21 11:50:58

| Ship to | Bobcat Dealer | Bill To |
|---|---|---|
| NORTH DAKOTA DEPARTMENT OF TRANSPORTATION<br>Attn: VANESSA BROSTEN<br>PROCUREMENT SECTION<br>608 EAST BOULEVARD AVENUE<br>BISMARCK, ND 58505<br>Phone: 701-328-4466<br>Fax: 701-328-0310 | Bobcat of Fargo, a Division of Swanston Equipment,<br>3450 WEST MAIN AVENUE<br>FARGO ND 58103-1229<br>Phone: (701) 293-7325<br>Fax: (701) 293-9468<br>----------<br>Contact: Mason Persons<br>Phone: 701-293-7325<br>Fax: 701-293-9468<br>Cellular: 701-566-3266<br>E Mail: mpersons@swanston.com | NORTH DAKOTA DEPARTMENT OF TRANSPORTATION<br>Attn: VANESSA BROSTEN<br>PROCUREMENT SECTION<br>608 EAST BOULEVARD AVENUE<br>BISMARCK, ND 58505<br>Phone: 701-328-4466<br>Fax: 701-328-0310 |

| Description | Part No | Qty | Price Ea. | Total |
|---|---|---|---|---|
| PCF64 Plate Compactor (PCF64) | 7210256 | 1 | $5,645.00 | $5,645.00 |
| --- PCF64 Cap for E80, E85 | 7210254 | 1 | $625.00 | $625.00 |
| --- PC Hose Kit, E60,E63,E80,E85 (BKHSKT) | 7217836 | 1 | $275.00 | $275.00 |

| | | |
|---|---|---|
| Total of Items Quoted | | **$6,545.00** |
| Dealer P.D.I. | | **$50.00** |
| Freight Charges | | **$339.30** |
| Dealer Assembly Charges | | **$165.00** |
| Discount | Municipality | **($981.75)** |
| Discount | Swanston Equipement Discount | **($981.75)** |
| Quote Total - US dollars | | **$5,135.80** |

**Notes:**

All prices subject to change without prior notice or obligation. This price quote supersedes all preceding price quotes. Customer must exercise his purchase option within 30 days from quote date.

## Customer Acceptance:

Purchase Order: _____

**Authorized Signature:**

**Print:**_____ **Sign:**_____ **Date:** _____

# Product Quotation

Quotation Number: 21423D021753
Date: 2015-05-21 11:51:59

| Ship to | Bobcat Dealer | Bill To |
|---|---|---|
| NORTH DAKOTA DEPARTMENT OF TRANSPORTATION<br>Attn: VANESSA BROSTEN<br>PROCUREMENT SECTION<br>608 EAST BOULEVARD AVENUE<br>BISMARCK, ND 58505<br>Phone: 701-328-4466<br>Fax: 701-328-0310 | Bobcat of Fargo, a Division of Swanston Equipment,<br>3450 WEST MAIN AVENUE<br>FARGO ND 58103-1229<br>Phone: (701) 293-7325<br>Fax: (701) 293-9468<br>----------<br>Contact: Mason Persons<br>Phone: 701-293-7325<br>Fax: 701-293-9468<br>Cellular: 701-566-3266<br>E Mail: mpersons@swanston.com | NORTH DAKOTA DEPARTMENT OF TRANSPORTATION<br>Attn: VANESSA BROSTEN<br>PROCUREMENT SECTION<br>608 EAST BOULEVARD AVENUE<br>BISMARCK, ND 58505<br>Phone: 701-328-4466<br>Fax: 701-328-0310 |

| Description | Part No | Qty | Price Ea. | Total |
|---|---|---|---|---|
| HB1380 Breaker with Nail Point | 7157576 | 1 | $12,825.00 | $12,825.00 |
| --- Hose Kit - HB1180,HB1380,HB2380-E80 & E85 | 7176608 | 1 | $275.00 | $275.00 |
| --- Pin-On Mounting Cap | 7168502 | 1 | $720.00 | $720.00 |

| | | |
|---|---|---|
| Total of Items Quoted | | **$13,820.00** |
| Dealer P.D.I. | | **$50.00** |
| Freight Charges | | **$321.75** |
| Dealer Assembly Charges | | **$0.00** |
| Discount | Municipality | **($2,073.00)** |
| Discount | Swanston Equipement Discount | **($2,073.00)** |
| Quote Total - US dollars | | **$10,045.75** |

**Notes:**

All prices subject to change without prior notice or obligation. This price quote supersedes all preceding price quotes. Customer must exercise his purchase option within 30 days from quote date.

Customer Acceptance: Purchase Order: _____

**Authorized Signature:**

**Print:**_____ **Sign:**_____ **Date:** _____

**Main Office**
3450 Main Avenue
Fargo, ND 58103
Phone (701) 293-7325
FAX (701) 293-9468
*swanston@swanston.com*
*www.swanston.com*

**Branch Office**
3915 Burdick Expressway East
Minot, ND 58703
Phone (701) 837-9901
FAX (701) 837-9904
*minot@swanston.com*
www.swanston.com

BOBCAT ADDITIONAL WARRANTIES:

3 YEAR 3000 HOURS POWERTRAIN

5 YEAR 3000 HOURS EMISSIONS

24 MONTH BATTERY

# Bobcat

# E85

# COMPACT EXCAVATOR

## Effective June 1, 2013

These bid specifications are to be used as guidelines when assisting purchasing agents and governmental specification writers in writing specs for excavators.

It is not the intent of these specifications to cover all details of design or construction. The unit shall be fully equipped to perform the work intended and shall be a new, current production model.

For individual assistance in preparing detailed specifications, contact the Product Management Department in the West Fargo, ND office at 701-241-8700.

**For the most up-to-date Bid Specs go to BobcatNET >>Excavators>>E85>>Bid Specs**

# COMPACT EXCAVATOR BID SPECIFICATIONS (8 TON)

## OPERATING WEIGHTS & GROUND PRESSURES

Operating Weight (Includes Standard Equipment and 24 in. Bucket)
- With Cab, Heat/Air Conditioning ..... 18960 lbs. (8600kg)
- Add for Steel Tracks ..... + 66 lbs. (30 kg)

Ground Pressure with 17.7" (450 mm) rubber tracks: ..... 5.5 psi (38.3 kPa)
Ground Pressure with 17.7" (450 mm) steel tracks: ..... 5.5 psi (38.3kPa)

## WORKING RANGE & DIGGING FORCES

Minimum Arm Length (pin to pin) ..... 89 in. (2250 mm)
Maximum Dig Depth ..... 186 in. (4725 mm)
Maximum Depth of Vertical Wall which can be excavated ..... 148 in. (3755 mm)
Maximum Reach at Ground Level ..... 287 in. (7295 mm)
Maximum Radius of Working Equipment ..... 293 in. (7430 mm)
Maximum Dump Height ..... 197 in. (4995 mm)
Maximum Bucket Tooth Height ..... 275 in. (6980 mm)
Maximum Working Equipment Radius with Boom at Maximum Height ..... 104 in. (2635 mm)
Minimum Bucket Pivot Angle ..... 185°
Maximum Blade Depth ..... 12 in. (304 mm)
Swing Clearance, Rear of Upper-structure ..... 51.2 in. (1300 mm)
Tail Swing Overhang ..... 5.8 in. (147 mm)
Slew Speed ..... 9.5 RPM
Boom Swing (Left) ..... 70°
Boom Swing (Right) ..... 55°

Arm Digging Force ..... 8069 lbf. (35892 N.)
Bucket Digging Force ..... 14509 lbf. (64538 N.)

## DIMENSIONS

Cab Height ..... 104 in. (2640 mm)
Overall Length in Transport Position ..... 247 in. (6265 mm)
Minimum Radius in Transport Position ..... 193 in. (4890 mm)
Clearance, Upper-structure to Groundline ..... 29 in. (735 mm)
Groundline to Top of Engine Cover ..... 67.6 in. (1717 mm)
Length of Track on Ground ..... 87 in. (2200 mm)
Overall Length of Track Assembly ..... 111 in. (2825 mm)
Machine Centerline to Front of Blade ..... 75 in. (1910 mm)
Blade Height ..... 16 in. (408 mm)
Blade Width ..... 91 in. (2300 mm)

## HYDRAULIC SYSTEM

Number of Pumps ..... 2
Pump Type ..... Variable Displacement, Load Sensing, Torque Limiting Piston Pump with Gear Pump
Total Pump Capacity ..... 45.9 GPM (174 L/min)
System Relief Pressure ..... 4279 PSI (295 bar)
Auxiliary Relief, Primary ..... 3045 PSI (210 bar)
Auxiliary Flow, Primary ..... 25.1 GPM (95 L/min)
Auxiliary Relief, Secondary ..... 3625 PSI (250 bar)
Auxiliary Flow, Secondary ..... 13.2 GPM (50 L/min)
Control Valve ..... Closed Center Valve, Individually Compensated
Slew Motor ..... Axial Piston Motor with Planetary Reduction
Oil Cooler ..... Standard Equipment

Hydraulic Function Times

| | | | | |
|---|---|---|---|---|
| Bucket | Curl | 3.1 Seconds | Dump | 2.4 Seconds |
| Arm (cushion in/out) | Retract | 3.6 Seconds | Extend | 2.9 Seconds |
| Boom | Raise | 3.4 Seconds | Lower | 2.6 Seconds |
| Boom Swing | Left | 6.4 Seconds | Right | 8.8 Seconds |
| Blade | Raise | 2.1 Seconds | Lower | 2.8 Seconds |

## DRIVE SYSTEM

Final Drive ..... Each track is independently driven by a hydrostatic axial piston motor
Type of Reduction ..... Three stage planetary gear reduction 45.9 : 1
Maximum Drawbar Pull ..... 14550 lbf. (64722 N)
Maximum Gradability (tractive effort) ..... 30°
Travel Speed
- Low ..... 1.7 mph (2.7 km/hr)
- High ..... 2.9 mph (4.7 km/hr)

## ENGINE/ELECTRICAL

Make/Model/Tier ..... Yanmar / 4TNV98C Tier 4 Final
Fuel/Cooling ..... Diesel/Liquid
Horsepower (Gross) ..... 59.4 hp (44.3 kW)
Rated Engine Speed ..... 2100 RPM
Torque @ 1365 RPM (Gross) ..... 178 ft.–lbs. (241 Nm)
Number of Cylinders ..... 4
Displacement ..... 203 in.$^3$ (3.3 L)
Lubrication ..... Forced Flow
Filter ..... Cartridge Type – Full Flow
Air Cleaner ..... Dry Replaceable Paper Cartridge w/ Safety Element
Alternator ..... 12 volt, 80 amps
Battery ..... 12 volt, 900 cold cranking amps @ 0°F (-18°C)
Starter ..... 12 volt, Gear Reduction Type; 4.0 HP (3.0 kW)

## CONTROLS

Vehicle Steering..... Two hand or foot levers control speed and direction
High/Low (travel speed)..... Controlled by push button on blade lever
Excavating Functions..... Two hydraulic joysticks control boom, arm, bucket & house slew; Boom swing controlled by fingertip switch on left joystick; The blade is controlled by a separate lever
Engine Speed Control..... Rotary Dial with Auto-Idle
Auxiliary Function ..... Controlled by switches on right-hand joystick – variable flow with detent
Service Brake (Travel)..... Hydraulic lock on motor
Parking Brake (Travel)..... Hydraulic lock on motor
Service Brake (Slew)..... Hydraulic lock on motor
Holding Brake (Slew)..... Spring applied multi-disc brake

## CAPACITIES

Fuel Tank..... 29.1 gal. (110 L)
Engine Cooling System ..... 10.6 qts. (10 L)
Engine Oil & Filter..... 10.8 qts. (10.2 L)
Hydraulic System..... 39.1 gal. (148 L)
Hydraulic Reservoir ..... 22.9 gal. (87 L)

## UNDERCARRIAGE

Undercarriage..... Crawler-Type Tractor Design
Track Rollers ..... Sealed, with Reinforced Box-Section Track Roller Frame
Track Adjusters..... Grease-Type with Shock Absorbing Recoil Springs
Track Type / Width (Standard)..... Half-Pitch Rubber, 17.7 in / (450 mm)
Track Type / Width (Optional)..... Steel Shoe, 17.7 in. / (450 mm)
No. of Track Rollers..... 5 each side

## INSTRUMENTATION

Machine shall be equipped with following instrumentation:

- Multi language color screen with Hour Meter & Day/Date/Time
- Auto-Idle Indicator
- Auxiliary Mode Indicator
- Engine Oil Pressure Light with Audible Alarm
- Engine Speed
- Engine Throttle Position
- Engine Coolant Temperature Gauge
- Fuel Gauge
- Hydraulic Charge Pressure Light with audible
- Pre-Heat Glow Plug Indicator with Auto Countdown
- Service Reminder Clock
- Seat Belt Reminder Indicator (with time out)
- Two Speed (High Range) Indicator

## STANDARD FEATURES SHALL INCLUDE:

- Auto-Idle
- Auto-Shift Drive
- Auxiliary Hydraulics with Arm Mounted Flush Face Quick Couplers
- Cab with Heat & Air Conditioning, Radio Ready – (ROPS & TOPS certified)
- Control Console Locks – all Machine Functions
- Control Pattern Selector Valve (ISO/STD)
- Cup Holder
- Dozer Blade with Float
- Engine Condition Monitor with Return to Idle
- Fingertip Auxiliary Hydraulic Control – Joystick Mounted
- Fingertip Boom Swing Control – Joystick Mounted
- Horn
- Hydraulic Joystick Controls
- Mirrors, Left and Right Side
- Password Protection Theft Deterrent System
- Rubber Tracks
- Suspension Seat, Cloth - High Back, with Retractable Seat Belt
- Tier 4 Final Compliant Engine & Exhaust System
- Travel Motion Alarm
- Two-Speed Travel
- Warranty: 12 Months, Unlimited Hours
- Work Lights – Boom Mounted (2) & Cab Mounted (1)

## AVAILABLE OPTIONS/ACCESSORIES:

- Attachment Quick Change Mounting System
- Secondary auxiliary hydraulic circuit shall be available as optional equipment.
- Steel tracks shall be available as optional equipment.
- Top guard and front guard kits shall be available.
- 3" Seat belt kit shall be available as optional equipment.

## ATTACHMENTS

Attachment Requirements:
- Attachment Quick Change Mounting System shall be available.
- Attachment Quick Change Mounting System shall be compatible with Hydraulic Clamp.
- Auxiliary hydraulic circuit shall include a Direct-to-Tank selector valve.
- Excavator arm shall be Clamp ready & control valve shall have auxiliary port relief installed.

Attachments Available:
- Auger
- Buckets: Grading and Trenching
- Hydraulic Breaker
- Hydraulic Tilt Grading Bucket
- Hydraulic Clamp
- Plate Compactor
- Ripper

## SAFETY

- Cab shall meet Rollover Protective Structure (ROPS) in accordance with ISO 12117-2 and Tip Over Protective Structure (TOPS) in accordance with ISO 12117.
- Retractable seat belt shall be provided as standard equipment.
- Additional operator protection shall be provided by deactivating ALL excavator functions when the operator console is in the upright position.
- An automatic spring applied multi-disc brake shall be provided to lock the upper structure to the undercarriage for transporting purposes.
- Grab handles to assist the operator in entering and exiting the excavator will be provided as standard equipment.
- Front working lights for indoor use and low light operation will be standard.
- A weather resistant operator handbook written in English will be attached to inside of cab, providing operational instructions and warning by decals with pictorials and international symbols plus some messages in four basic languages: English, French, German and Spanish.
- Lift Capacity Charts shall be affixed to the machine, within the operators line of sight.

## SERVICEABILITY

- Access to the following items shall be gained by opening the side and / or center access hood:
    - Air cleaner with restriction indicator
    - Battery
    - Cooling system (engine oil and hydraulic oil coolers) for cleaning
    - Coolant recovery bottle
    - Engine oil and fuel filters
    - Engine oil level
    - Sight gauge for hydraulic oil level
- Fuel fill shall have lock for vandal proofing.
- Easy access to all grease points.
- Central grease point for slew bearing, slew pinion, and offset cylinder.
- Cab shall tilt forward to gain access to control valve and slew motor.

## TRAINING RESOURCES

- A comprehensive Excavator Service Safety Training Kit shall be available.
- A comprehensive Excavator Operator Training Kit shall be available.