

INVITATION TO BID

State of Ohio
Department of Administrative Services
General Services Division
Office of Procurement Services

The original signed bid must be submitted to the Office of Procurement Services to receive consideration for award.		BIDDER NAME	
BID NUMBER 0B100214	OPENING DATE (1:00 p.m.) OCTOBER 16, 2013	STREET ADDRESS <input type="checkbox"/> Check if remit address is different and list on separate sheet	
General Services Division Office of Procurement Services 4200 Surface Road Columbus, OH 43228-1395 Attn: Bid Desk		CITY STATE ZIP	
		COUNTY	MBE/EDGE CERTIFICATE NUMBER
		TELEPHONE NO. ()	TOLL FREE NO. 1 - ()
REQ./INDEX NO. N/A	BID NOTICE DATE 09/24/2013	CONTACT PERSON	FAX NO. ()
CONTRACTOR'S E-MAIL ADDRESS			
SELECT YOUR PREFERRED METHOD OF RECEIVING PURCHASE ORDERS AND ENTER THE E-MAIL OR FAX NUMBER INFORMATION (ONLY SELECT ONE METHOD)			
<input type="checkbox"/> E-Mail <input type="checkbox"/> Fax			
In addition to the standard terms for payment, the payment terms for state agency(ies) will be 2%, 10 Days, Net 30 Days unless otherwise stated in the following space. If no discount is offered, bidder should circle "Net 30 Days". _____%, _____ Days, Net 30 Days			
BILL TO: Ohio Department of Natural Resources Division of Parks and Recreation 2045 Morse Road Columbus, OH 43229-6693		SHIP TO: Multiple, see "SHIP TO LOCATIONS" on page 4	
DELIVERY REQUESTED F.O.B./DEST. P.P.D. ASAP		DELIVERY OFFERED (IF DIFFERENT) F.O.B./DEST.P.P.D. _____	
<p>THE DEPARTMENT OF ADMINISTRATIVE SERVICES, OFFICE OF PROCUREMENT SERVICES IS SOLICITING BIDS FOR:</p> <p>DREDGE, TWO (2), TRANSPORTABLE, COMBINATION; CONVENTIONAL SWING AND SWING LADDER</p> <p>QUANTITY AND DURATION: This Invitation to Bid, which is not a contract, is considered to be a one-time procurement offer for the product(s)/service(s) as listed herein. The successful Contractor may commence performance of the awarded contract upon receipt of an official state of Ohio Purchase Order (ADM0523/ORDE). Upon completion of the contract and upon receipt of proper invoices, payment will be provided by the ordering agency. The contract will then be considered as complete and no further purchases may be placed against the contract. With the exception of approved overrun/underrun tolerances, any deviations from the quantity listed in the awarded contract shall not be permissible nor acceptable.</p> <p>INSTRUCTIONS, TERMS AND CONDITIONS FOR BIDDING; STANDARD CONTRACT TERMS AND CONDITIONS; AND SUPPLEMENTAL CONTRACT TERMS AND CONDITIONS, Rev. 09/2012 are a part of this Invitation to Bid. Copies may be downloaded by clicking on this link: Instructions: Terms and Conditions for Bidding, Standard Contract Terms and Conditions, and Supplemental Contract Terms and Conditions. All prior versions of Instructions to Bidders, Contract Terms and Conditions are null and void.</p> <p>Any questions or clarifications regarding this Invitation to Bid should be directed to the Office of Procurement Services through the Internet at www.ohio.gov/procure. All questions should be submitted a minimum of five (5) working days prior to the bid opening date.</p>			
PRINTED/TYPED SIGNATURE	AUTHORIZED SIGNATURE (ORIGINAL SIGNATURE ONLY) (Please sign in blue ink)		DATE

The original signed bid must be submitted to the Office of Procurement Services by 1:00 o'clock p.m. on the above listed opening date to receive consideration for award. It is requested that the bidder not sign their bid in black ink. Bidder certifies, by signature affixed to this bid, that the information provided by it in its bid including the certified statements, is accurate and complete. Bidder declares to have read and understood and agrees to be bound by all of the instructions, terms, conditions and specifications of this Invitation to Bid and agrees to fulfill the requirements of any awarded contract at the prices bid.

REQUIRED CERTIFICATION FOR BIDDING

Those bidders claiming preference for Domestic Source End Products and/or the Ohio preference, pursuant to Revised Code Sections 125.09 and 125.11 and Administrative Code Section 123:5-1-06 must complete the following information. Bidders who qualify as an "Ohio" bidder (offer an Ohio product or who have significant Ohio economic presence) or who qualify as a Border State bidder are eligible to receive a five percent (5%) preference over non-Ohio/Border state bidders. The state reserves the right to clarify any information during the evaluation process. **BIDDERS MUST COMPLETE THIS CERTIFICATION TO RECEIVE THE PREFERENCE.**

A. DOMESTIC PREFERENCE (BUY AMERICA): [Not applicable to "Excepted Products"]

- Where is each product/services being offered mined, raised, grown, produced or manufactured?
 United States: _____(State) Canada Mexico (Go to B-1)
 Other: (Specify Country)_____ (Go to A-2)
- End product is manufactured outside the United States and at least 50% of the cost of its components are produced, mined, raised, grown or manufactured within the United States. The cost of components may include transportation costs to the place of manufacture and, in the case of components of foreign origin, duty whether or not a duty free entry certificate is issued.
 Yes (Go to Section B-1) No (Go to Section A-3)
- The Bidder hereby certifies that each end product, except the products listed below, is a domestic source end product as defined in the Buy America Act and that components of unknown origin have been considered to have been mined, produced, grown or manufactured outside the United States.
_____(Item) _____(Country) of
Origin)
_____(Item) _____(Country) of
Origin)

A domestic end source product is deemed to be excessively priced if it exceeds the cost of the foreign product by more than 6%. Pursuant to FAR, Part 25, the state of Ohio does not acquire supplies or services that cannot be imported lawfully into the United States. The contractor, their subcontractor(s) and any agent of the contractor or subcontractor must not acquire any supplies or services originating from sources within, or that were located in or transported from or through Cuba, Iran, Iraq, Libya, North Korea, Sudan Territory of Afghanistan controlled by the Taliban, or Serbia (excluding the territory of Kosovo).



B. OHIO PREFERENCE (BUY OHIO):

- The products/services being offered are raised, grown, produced, mined or manufactured in Ohio.
 Yes (Go to C) No (Go to B-2)
- Bidder has significant economic presence within the state of Ohio. Yes (Answer a, b, c, d below) No
(Go to B-3)
 - Bidder has paid the required taxes due the state of Ohio Yes No
 - Bidder is registered with the Ohio Secretary of State
 Yes (Charter/Registration No.: _____) No
Questions regarding registration should be directed to (614) 466-3910 or visit their web site at:
<http://www.sos.state.oh.us/>
 - Bidder has ten or more employees based in Ohio or border state. Yes No (Go to B-2d)
 - Bidder has seventy-five percent or more employees based in Ohio or border state.
 Yes No (Go to B-3)
- Border state bidder:
 Yes (Specify which state then go to B-2c): KY MI NY PA IN) No (Go to B-4)
- Border state bidder: mined products mined in respective border state Yes No Not Applicable

C. E.D.G.E. DESIGNATION

Bidder is certified E.D.G.E. business Yes No

For information on E.D.G.E. designation, please visit the DAS Equal Opportunity Division website at:

<http://das.ohio.gov/Eod/Edge/Index.htm>

PRICE SCHEDULE:

Bidders shall not insert a unit cost more than 3 digits after the decimal point. Digit(s) beyond 3, after the decimal point, shall be dropped by the Office of Procurement Services and not used in evaluation and any subsequent order.

ITEM NO.	QTY.	UNIT	DESCRIPTION	UNIT PRICE	EXTENDED AMOUNT
1.	2	EA	DREDGE, TWO (2), TRANSPORTABLE, COMBINATION; CONVENTIONAL SWING AND SWING LADDER	\$	\$

SCOPE: The dredge will be used to excavate silt, muck, sand, peat, clay, gravel and mixtures thereof from lake and river bottoms. The dredge is conventional swing model in design.

MANUFACTURER IDENTIFICATIONS OF COMMODITY:

All bidders shall indicate in the spaces below the manufacturer's name, model, brand or style number, warranty, for all commodities they bid. Failure to comply with this stipulation may result in the offer being rejected.

Manufacturer: _____
 Model: _____
 Brand: _____
 Style: _____
 Warranty: _____

Product offered is the latest style (model) being marketed by the manufacturer: _____ Yes _____ No

WARRANTY: Manufacturer shall provide a minimum of one year parts and labor warranty, from date of delivery and acceptances, excluding normal maintenance wear parts. Manufacturer's warranty information shall be provided with bid submittal. If not provided as part of the bid response, the Bidder must provide said warranty information within seven (7) calendar days after request/notification by the Office of State Purchasing to do so. Failure of the bidder to furnish manufacturer's warranty information either as part of their bid response or within the time specified herein may deem the bidder not responsive.

AMENDMENTS TO CONTRACT TERMS AND CONDITIONS: The following Amendments to the Contract Terms and Conditions do hereby become a part hereof. In the event that an amendment conflicts with the Contract Terms and Conditions, the Amendment will prevail.

EVALUATION: Bids will be evaluated in accordance with Article I-17 of the "Instructions to Bidders".

AWARD: The ITB will be awarded to the lowest responsive and responsible bidder.

AWARD NOTE: Following the evaluation and award of the ITB, the Department of Natural Resources will take the selected bid specifications and offered price to the Controlling Board to secure funding. If funds are not secured for the purchase of the dredge, the ITB will be canceled. If funds are secured, the Department of Natural Resources will issue a Purchase Order to the awarded bidder.

DELIVERY AND ACCEPTANCE: Supplies will be delivered to the participating agency within 240 days after receipt of order and, in accordance with paragraphs S-8, S-9, and S-10 of the SUPPLEMENTAL CONTRACT TERMS AND CONDITIONS. The delivery location will be noted on the purchase order issued by the participating agency. Acceptance (transfer of title) will occur upon the inspection and written confirmation by the ordering agency that the supplies delivered conform to the requirements set forth in the Contract. Unless otherwise provided in the Contract, acceptance shall be conclusive except as regards to latent defects, fraud, or such gross mistakes as amount to fraud.

SHIP TO LOCATIONS: The awarded bidder will deliver one (1) dredge to each of the following locations;

- 1. Indian Lake State Park
12774 State Rt., 235 North
Lakeview, Ohio 43331-9114

- 2. Grand Lake St. Mary's State Park
834 Edgewater Drive
St. Mary's Ohio 45885

DESCRIPTIVE LITERATURE: The Bidder may be required to submit descriptive literature of the supplies or services being offered. If requested, the literature will be used in the evaluation process to determine the lowest responsive and responsible bidder. If not provided as part of the bid response, the Bidder must provide said literature within seven (7) calendar days after request/notification by the Office of State Purchasing to do so. Any references, that may appear in the descriptive literature, that may alter the terms and conditions and specifications of the bid (i.e. F.O.B. Shipping Point or Prices Subject to Change), will not be part of any contract and will be disregarded by the state of Ohio. Failure of the bidder to furnish descriptive literature either as part of their bid response or within the time specified herein will deem the bidder not responsive.

DISCLOSURE OF SUBCONTRACTORS / JOINT VENTURES (See Standard Contract Terms and Conditions, Section (roman numeral) V. General Provisions:, Paragraph Q.):
List names of subcontractors who will be performing work under the Contract.

_____	_____
_____	_____
_____	_____

By the signature affixed to Page 1 of this Bid, Bidder hereby certifies that the above information is true and accurate. The Bidder agrees that no changes will be made to this list of subcontractors or locations where work will be performed or data will be stored without prior written approval of DAS. Any attempt by the Bidder/Contractor to change or otherwise alter subcontractors or locations where work will be performed or locations where data will be stored, without prior written approval of DAS, will be deemed as a default. If a default should occur, DAS will seek all legal remedies as set forth in the Terms and Conditions which may include IMMEDIATE cancellation of the Contract. FAILURE TO COMPLETE THIS PAGE MAY DEEM YOUR BID NOT RESPONSIVE.

DATA SHEET: Shown below are the specification requirements for equipment that the State desires to purchase. These specifications shall only be considered as necessary to establish functional requirements. Proprietary design, exact dimensions, capacities, or restrictive features shall not preclude acceptance of other recognized alternates meeting comparable performance requirements as determined by the administrator of State Purchasing. Bidder signifies compliance or non-compliance with specifications by checking yes or no on the left side of the form and returning it with the State Purchasing copy of the bid. List all deviations from specifications on page 9 of this ITB. Failure to comply may disqualify your bid.

SPECIFICATIONS FOR DREDGE

- | YES | NO | BASIC DESCRIPTION |
|-----------------------|-------|--|
| _____ | _____ | 1. Overall length – 75’ maximum. |
| _____ | _____ | 2. Overall width (including side tanks) – 23’, minimum, 24’ maximum. |
| _____ | _____ | 3. Hull depth 4’ minimum. |
| _____ | _____ | 4. Mean draft (loaded with fuel) 24” maximum. |
| _____ | _____ | 5. All sections must have watertight manhole access. |
| _____ | _____ | 6. Built in ballast tanks. |
| _____ | _____ | 7. Fuel tank(s) 1000 gallon total capacity minimum. |
| _____ | _____ | 8. Two (2) deck cleats per side tank. Any and all side tanks should include two (2) deck cleats. |
| _____ | _____ | 9. Four (4) lifting lugs per section located to allow for balanced lift of sections. |
| _____ | _____ | 10. Four (4) lifting lugs on center hull section located to allow for balanced lift of hull. |
|
 | | |
| HOISTING | | |
| _____ | _____ | 11. Three (3) Spuds 37’ each, square, 12” x 12”. Two (2) spuds to be located in the front and one (1) in the rear. |
| _____ | _____ | 12. Spud winch system: power up/power down configuration. |
| _____ | _____ | 13. Spud length to be commensurate with 20’ digging depth. |
| _____ | _____ | 14. At upright position, spud cannot extend more than 6” below the bottom of the hull. |
| _____ | _____ | 15. Wire rope size: ½”. |
| _____ | _____ | 16. Swing Winches: (2) . |
| _____ | _____ | 17. Line speed: 60 ft/min. |
| _____ | _____ | 18. List the Drum capacity: _____ feet |
| _____ | _____ | 19. Ladder Lift: by means of hydraulic cylinder. |
|
 | | |
| OPERATING CONDITIONS. | | |
| _____ | _____ | 20. Minimum Digging depth: 3’ or lower. Any minimum depth greater than 3’ is not acceptable. |
| _____ | _____ | 21. Maximum Digging depth: 20’ or higher. Any maximum depth less than 20’ is not acceptable. |
| _____ | _____ | 22. Swing Ladder Mode: minimum width – 35’ |
| _____ | _____ | 23. Conventional Mode: minimum width – 100’ |
|
 | | |
| CUTTER SYSTEM | | |
| _____ | _____ | 24. Cutting force: 5,180 lb minimum. |
| _____ | _____ | 25. Operating torque 94,538 in lb. |
| _____ | _____ | 26. Cutting force per linear inch: 258 lb/inch. |
| _____ | _____ | 27. Cutter diameter: 31 ½” ID x 5 blade basket with 3” teeth (measured after holder) |
| _____ | _____ | 28. Cutter system will have replaceable teeth with welded holders. Specify number of teeth: _____ |
| _____ | _____ | 29. Shaft diameter: 3”. |
| _____ | _____ | 30. Cutter rating: 60HP. |
| _____ | _____ | 31. Cutter speed variable 0-40 RPM. |
|
 | | |
| DREDGE PUMP | | |
| _____ | _____ | 32. Suction pipe: 12” I.D. w/3/8” wall thickness. |
| _____ | _____ | 33. Discharge pipe: 12” I.D. w/3/8” wall thickness. |
| _____ | _____ | 34. Pump case: hard iron. |
| _____ | _____ | 35. Approximate particle clearance – 6 inch minimum |
| _____ | _____ | 36. Impeller diameter 32” thread mounted 3 blade (bolt in thread insert not acceptable). |
| _____ | _____ | 37. Dual lip, grease purged shaft seals. |
| _____ | _____ | 38. Packed stuffing box with replaceable stainless steel shaft sleeve. |
| _____ | _____ | 39. In-line marine transmission for single lever throttle/clutch operation. Pump must be engaged and disengaged from lever room. |
| _____ | _____ | 40. Nominal head: 230 feet H2O. |

- YES NO DREDGE PUMP (Cont'd)
- ___ ___ 41. Nominal flow: 4,250 GPM.
 - ___ ___ 42. Dredge pump must be designed and built to insure balanced overall dredge design with commercially available, not proprietary, spare parts.
 - ___ ___ 43. Pump as installed must be self-priming with shaft centerline at or slightly below waterline. Any prime assist valves must be solenoid actuated and operable from lever room.
 - ___ ___ 44. Pump must be direct drive through gear reduction, belt drive not acceptable.
 - ___ ___ 45. Flanged suction cleanout with gasketed cover provided in pump. Lifting mechanism directly about pump clean out cover must be provided. Cover will be constructed of aluminum or acceptable lightweight material. Specify material is aluminum will not be used: _____
 - ___ ___ 46. Pump must be completely serviceable without removing from dredge.
 - ___ ___ 47. Removable access cover panel provided in roof above pump. (Engine/pump room roof panel should be manufactured in two equal pieces which will allow access).
 - ___ ___ 48. Jib boom for pump service located on center hull. Jib boom must be capable of removing roof access panels and impeller.

DREDGE PUMP REDUCTION

- ___ ___ 49. Inline direct drive, marine gear type. Reduction provided with torsional coupling and elastomer coupling.

DIESEL ENGINE

- ___ ___ 50. Engine model: Caterpillar C15 ACERT or equivalent.
- ___ ___ 51. Rated Horsepower: 540 HP minimum.
- ___ ___ 52. Must include all recommended manufacturer system i.e. fuel, air. Coolant filters, 60amp alternator, gauges, etc. Must meet all EPA emissions guidelines for marine engines.
- ___ ___ 53. Must be biodiesel compatible.

CONTROL SYSTEM

- ___ ___ 54. Expandable programmable logic center controller (PLC) to facilitate dredge operation, alarms, logging data and other custom settings. On board diagnostics and set up screens to provide quick trouble shooting and other custom operating parameters.

HYDRAULIC SYSTEM

- ___ ___ 55. Independent electro proportional circuits allowing simultaneous cutter, swing and ladder operation.
- ___ ___ 56. All circuits protected by suction strainer, return filters and relief valves.
- ___ ___ 57. System to include all pumps, hose, fittings, valves, etc.
- ___ ___ 58. Must be compatible with and supplied with biodegradable hydraulic oil. Specify oil brand: _____
- ___ ___ 59. Electric over hydraulic control levers to provide quiet, low heat operation.
- ___ ___ 60. Hydraulic lines within lever room prohibited.
- ___ ___ 61. All fittings must be Tefloned or sealed. No steel line over 36" without union is acceptable.

ELECTRICAL

- ___ ___ 62. All electrical and hydraulic connections are to be outfitted with quick disconnect.
- ___ ___ 63. Minimum 10KVA generated electric AC power capable of providing 15 amps continuous output.
- ___ ___ 64. 24 VDC for starting, lighting, and controls.
- ___ ___ 65. 12 VDC for convenience and user furnished radios and equipment.
- ___ ___ 66. All circuits fused for protection.
- ___ ___ 67. Two (2) 1000 cold cranking amp batteries.
- ___ ___ 68. Two (2) LED floodlights forward and two (2) LED floodlights aft for night operations minimum.
- ___ ___ 69. One dome light mounted in lever room.
- ___ ___ 70. Four lights in pump/engine room minimum.

YES NO

ELECTRICAL (Continued)

- ___ ___ 71. "Dredge pack" monitoring system for each dredge. At a minimum, this system will meet the following requirements;
 - a) DREDGEPACK version 2013 Real Time Dredge Monitoring system, 1 Hardlock key system.
 - b) Differential Positioning and Heading System – The Trimble® SPS461 GPS Heading and Positioning Receiver.
 - c) eTrac Ruggedized Inclinometer Sensor System.
 - d) Rotation Sensor for Swinging Ladder dredge.
 - e) NoteBook Panasonic Semi Rugged Toughbook with 2 port PCMCIA Card, or equivalent. List manufacturer and model number. _____
 - f) 5 days System Calibration, Configuration and Training. All travel expenses should be included in the bid price. No extra travel expenses will be permitted.
 - g) TeamViewer remote control access.

SERVICE WATER SYSTEM

- ___ ___ 72. Centrifugal pump, self-priming, belt driven with anti-friction bearings, and cast iron construction.
- ___ ___ 73. Pump must be of sufficient design and size as to provide a minimum of 15 lbs. psi greater than maximum dredge pump discharge pressure at all engine speeds.
- ___ ___ 74. Sea chest with cleanable strainer and shut off valve to provide for complete draining and winterization, built into hull.
- ___ ___ 75. Water drain valve for service water pressure gauge line, discharge pressure gauge line and service water pump for winterization.
- ___ ___ 76. Deck wash valve-1/2" provided for daily cleaning.

YES NO

CONTROL ROOM

- ___ ___ 77. Control Room must be removable for transport with 4 lifting lugs.
- ___ ___ 78. Must accommodate a minimum of 2 operators and be weather tight, climate controlled (air conditioned and heated) prefer hydraulic driven system versus electric. Climate control system must include remote mounted compressor.
- ___ ___ 79. Tinted, safety glass windows all around with two lockable doors, one port and one starboard.
- ___ ___ 80. Operator command chair with adjustable position and operating button controls. Fold down arm supports.
- ___ ___ 81. Control panel to include all mechanical gauges for dredge pump and systems.
- ___ ___ 82. Dredge pump vacuum gauge.
- ___ ___ 83. Dredge pump discharge gauge.
- ___ ___ 84. Cutter hydraulic pressure gauge.
- ___ ___ 85. Service water pressure gauge.
- ___ ___ 86. Dredge pump engine tachometer.
- ___ ___ 87. Dredge pump engine oil pressure gauge with alarm light.
- ___ ___ 88. Dredge pump engine water temperature gauge with alarm light.
- ___ ___ 89. Dredge pump engine throttle/clutch control.
- ___ ___ 90. Cutter forward-reverse-speed control.
- ___ ___ 91. Bilge pump with alarm control, including audible alarm with exterior light mounted on top of control room cab.
- ___ ___ 92. Hydraulic and day tank level light.

SAFETY EQUIPMENT

- ___ ___ 93. Deck edge safety rail in accordance with all applicable OSHA regulations.
- ___ ___ 94. Inflatable Life vests, three minimum.
- ___ ___ 95. Life rings (two with floating lights).
- ___ ___ 96. Fire extinguishers – two minimum, one mounted in engine/pump room, one mounted in lever room.
- ___ ___ 97. Automatic, with manual override, bilge pump system (24 V. D. C.) for pump room.
- ___ ___ 98. All lines are to be color coded to the industry standard; fuel, oil, water, hydraulic, ect.

ADDITIONAL EQUIPMENT

- ___ ___ 99. One stern jib crane for discharge hose, extending 6 feet passed the rear of the dredge.
- ___ ___ 100. One tool kit including impeller shaft wrench and other specialty tools necessary for routine maintenance.
- ___ ___ 101. One 12" I. D. rubber discharge hose flanged to connect to 12" I. D. plastic discharge pipe X 15' length.
- ___ ___ 102. Safety guards and decals as required with appropriate warnings and colors in accordance with NSC recommendations.
- ___ ___ 103. Identification plated on all instrumentation and controls.

PAINTING

- ___ ___ 104. All wetted surfaces shall be sandblasted to a commercial grade SSPC SP6 and coated with "coal tar epoxy" (or equivalent) at 16 dry mils thick.
- ___ ___ 105. All other exposed surfaces shall be sandblasted to a commercial grade SSPC SP6 and coated with two coats of epoxy primer/paint @ 5 dry mils thick each coat and a third color coat of polyurethane (or equivalent) applied at 2 dry mils thick.
List available colors: _____

YES NO MISCELLANEOUS

- ___ ___ 106. All steel members 8' or less in length, including angles and channels are cut from a single length of new steel with no intermediate welded joints.
- ___ ___ 107. All hydraulic cylinders are tie rod types.
- ___ ___ 108. Engine/pump room must be enclosed with two "hatch type" lockable doors minimum (one port side and one starboard side) and include ventilation panels and two ventilation fans minimum.
- ___ ___ 109. Sufficient paint of all colors must be provided to touch up any surfaces scratched during shipment and final assembly.
- ___ ___ 110. All welding and welding operators shall be qualified prior to performance of any work according to the standards of the American society of Mechanical Engineers (ASME).
- ___ ___ 111. Finished welds shall be of uniform cross section and reasonably smooth. Welds shall be free of cracks, pits , craters, voids, undercutting, overlapping, excessive porosity, pinholes and slag inclusions. All defective welds shall be removed and repaired with sound weld metal. Poorly shaped welds shall be removed and replaced.
- ___ ___ 112. Warranty shall be a minimum of one year, parts, labor and shipping.
List Warranty length: _____
- ___ ___ 113. All components, parts and materials used in the manufacturer shall be new, the latest available model, and free from defects and imperfections.
- ___ ___ 114. The bidder shall submit with his bid, the following data and/or drawings in sufficient detail to demonstrate that the dredge to be furnished will conform to the provisions, requirements and intent of this bid. General arrangement drawing(s) and data showing overall dimensions of the dredge, digging depth, location of machinery, draft, principle hull dimensions (including center hull section and side tanks) and details describing the method of securing the hull sections as an assembly are to be shown.
- ___ ___ 115. Upon completion of hull and side tanks and prior to assembly, the tanks shall be individually tested for water tightness to insure against leakage.
- ___ ___ 116. The dredge shall be operated / tested under full load conditions and not "no" load conditions.
- ___ ___ 117. Inspection and approval prior to shipment by one representative from the State of Ohio at awardees expense.
- ___ ___ 118. The manufacturer shall furnish the following data/support:
Three prints, suitable for reproduction, of the final correct general arrangement or assembly drawings with detailed data showing all changes and revisions.
Three (3) color prints total, one (1) set laminated to be kept on machine , suitable for reproduction, of hydraulic schematic and electrical schematic showing components, plumbing and wiring details respectively.
Three prints of marking and match marking diagrams
Three sets of parts lists (manuals or drawings) identifying parts and components of each system. These listings shall be comprehensive enough to enable the customer to order, by code or number any part or component installed on the dredge.
Three sets of operation manuals listing procedures, limitations and operating instructions for all systems incorporated in the dredge.

