

		Date Bids Due: June 10, 2015	Time of Bid Opening: 1:00 P.M.	Bid Opening Location: 800 Lincoln Way, Ames, IA	
Proposal Number: 14436	Description: Remote Hydrographic Survey Boat				
Contract to Begin: N/A	Date of Completion: N/A	Proposal Guaranty Amount: N/A	Performance Bond (Y/N) N	Liquidated Damages: N/A	
Purchasing Agent: Zachary Gillen		E-mail Address: Zachary.gillen@dot.iowa.gov	Phone: 515-239-1347	Fax: 515-239-1538	
Company Name:				Federal Tax ID:	
Street Address:		City:	State:	Zip Code:	
Supplier Contact (type or print)	E-mail Address:		Phone:	Fax:	
Supplier agrees to sell items/services at the same prices, terms and conditions to any other state agency. Regent or Political Subdivision upon request. Please check Yes or No. <input type="checkbox"/> Yes <input type="checkbox"/> No			Are you an Iowa Targeted Small Business? <input type="checkbox"/> Yes <input type="checkbox"/> No		

GENERAL INFORMATION

This bid proposal includes the Bid Response cover page, Schedule of Prices, Standard Terms and Conditions, Supplemental terms (if any), specifications, mailing label and all other information needed to prepare a bid response. Information in the "Bid Response" above must be typed or completed in ink, signed, and returned in a flat style envelope along with any other information required in the bid proposal prior to the bid opening date and time. Please use the furnished mailing label, or label the bid response as "Iowa Department of Transportation, proposal number & letting date" on the outside of the return envelope. Bidders may personally deliver, mail, or select a carrier that ensures timely delivery. **Faxed or e-mail bids will not be accepted.**

If required, each bid response must be accompanied by a proposal guaranty in an accepted form, in the sum indicated above. Refer to the Standard Terms and Conditions for the accepted forms in which the proposal guaranty requirement may be fulfilled. **Bids lacking a required proposal guaranty will not be considered for award.** If the intended awarded bidder fails to enter into a formal contract within fifteen (15) days after award is made for any reason on their part, the proposal guaranty may be retained by the State.

PROPOSAL STATEMENT

The entire contents of this Proposal, Addendums to the Proposal, Specifications, Supplemental Terms and Conditions, Standard Terms and Conditions, and Schedule of Prices shall become part of the contract.

We promise to furnish all materials, equipment and/or services specified, in the manner and the time prescribed, at prices hereinafter set out.

We certify that we have not, either directly or indirectly, entered into any agreement or participated in any collusion or otherwise taken any action in restraint of free competition; that no attempt has been made to induce any other person or firm to submit or not to submit a bid; that this bid has been independently arrived at without collusion with any other bidder, competitor, or potential competitor; and that this bid has not been knowingly disclosed prior to the opening of bids to any other bidder or competitor.

We certify that all materials, equipment and/or services proposed meet or exceed the specifications and will be supplied in accordance with the entire contents of this proposal.

We promise to complete the contract within the contract period, or pay any liquidated damages, if stipulated, for each calendar day as set forth in the bid documents.

Signed _____ Date _____



Schedule Of Prices

Number	14436
Date Required	06/10/2015 1:00 PM

Title Remote Hydrographic Survey Boat
Delivery Location AMES, IA 50010
Shipping Terms FOB Destination/Freight Prepaid

Vendor
PA Name Zachary Gillen
Phone 515-239-1347
E-Mail zachary.gillen@dot.iowa.gov

Description

Product Availability Days: _____

Item	Qty	Unit	Description	Part #	Unit Price	Total Price
1	1	EACH	Remote Hydrographic Survey Boat Cost of system should include training. See Supplemental Terms & Conditions for more detail.			

Comments: _____

I HEREBY CERTIFY THAT THIS PROPOSAL MEETS OR EXCEEDS THE MINIMUM REQUIREMENT INCLUDING SPECIFICATIONS AND ADDENDUMS.

Signature: _____ Date: _____



**Iowa Department of Transportation
Standard Terms and Conditions For
Bid Proposals/Contracts
-FORMAL-**

Formal is the procurement process required by Iowa law when the estimated, aggregate amount of the purchase equals or exceeds \$50,000.

The entire contents of this bid proposal shall become a part of a contract or purchase order. In case of a discrepancy between the contents of the bid documents, the following items listed by descending order shall prevail:

- Addendums to the bid proposal
- Bid Proposal-
- Schedule of Prices
- Specifications
- Plans and Drawings
- Supplemental Terms and Conditions
- Standard Terms and Conditions

(Example - if a statement in the specifications contradicts a statement in the Standard Terms and Conditions, the statement in the specifications shall apply)

Preparation of Bid Response: All bid responses must address all aspects of the proposal including clearly answering all questions within the proposal. Bid responses must be typed or completed in ink and submitted on the forms supplied by the Iowa DOT.

Bid responses must be signed and received prior to the bid opening date and time as indicated on the Bid Response cover page or bid opportunity. The signed, submitted quotation or bidder's proposal shall become the official bid response to be considered for award.

No email, fax or web link bid responses will be accepted. Bid Responses must be signed, sealed and delivered in person or by a mail courier that ensures timely delivery.

A. Bid Proposal

1. **Bid Opening:** Bid openings are made public and conducted at the Iowa DOT, Ames complex unless otherwise specified. Bid responses received after the time of the bid opening will be returned unopened and considered non-compliant.
2. **Communications:** Questions concerning this proposal should be directed to the purchasing agent listed on the bid proposal. Inquiries can be written, phoned, or faxed. In all cases, written communication will take precedence over verbal communication
3. **Proposal Guarantee:** If required, the bid response page will indicate the amount required to be included in the bid response. A Proposal Guarantee can be supplied in one of the following ways: **(1)** Certified check or credit union certified share draft, cashier's check, or bank draft, drawn on a solvent bank or credit union. Certified checks and certified share drafts shall be drawn and endorsed in the amount indicated. Checks or drafts shall be made payable either to the Iowa Department of Transportation (Iowa DOT) or to the bidder. If payable to the bidder, the check or draft shall be endorsed without qualifications to the Iowa DOT by the bidder or an authorized agent. **(2)** An insurance or surety company may be retained to provide a bond in fulfillment of the proposal guarantee requirement. A properly completed and signed copy of the Proposal Guarantee (*Form 131084*) must accompany the bid. **The Iowa DOT's Proposal Guarantee form must be used; no other forms or formats will be accepted.**
4. **Pricing and Discount:** Unit prices shown on the bid/response shall be quoted as the price per unit (e.g., gal., case, each, etc.) as stated in the bid proposal. If there is a discrepancy between the unit bid prices, extension, or total amount of bid, the unit prices shall prevail. Unless otherwise indicated, prices shall be firm for the duration of the contract or purchase. Discounts for early payment are allowed, but not considered in award of the contract.

5. **Acceptance/Rejection:** The Iowa DOT reserves the right to accept or reject any or all bids and to waive irregularities or technicalities, provided such waiver does not substantially change the offer or provide a competitive advantage to any supplier(s). The Iowa DOT also reserves the right to accept that bid which is deemed to be in the best interests of the state. Any unauthorized changes, additions, or conditional bids including any ties to another bid or proposal or any reservations about accepting an award or entering into a contract, may result in rejection of the bid. Bids must remain available for award for thirty (30) days from date of bid opening.
6. **Bid Results & Disclosure:** Bid tabulations will be posted on the DOT website at www.iowadot.gov/purchasing under the *Bid Award* link referencing the proposal number with an award recommendation indicated. At the conclusion of the selection process, the contents of all received bid responses will be placed in the public domain and be open to inspection by interested parties, according to state law. Trade secrets or proprietary information that are recognized as such and are protected by law may be withheld if clearly identified as such in the proposal.
7. **Quality:** All material shall be new and of first quality. Items which are used, demonstrators, refurbished, obsolete, seconds, or which have been discontinued are unacceptable without prior written approval by the Iowa DOT.
8. **Recycled Content:** The Iowa Code encourages purchase of products and materials with recycled content, including but not limited to paper products, oils, plastic products, compost materials, aggregate, solvents, and rubber products. Recycled items or alternatives must be noted in the bid response, if known.
9. **Shipping Terms:** Deliveries shall be F.O.B. Destination unless otherwise specified. All deliveries shall be accompanied by a packing slip indicating the Supplier, quantities shipped, and the purchase order number(s). All delivery charges shall be included in the bid price and paid by the Supplier. No collect C.O.D. deliveries shall be accepted. When entering into a contract, the Supplier shall notify the freight company that all freight and delivery charges are to be prepaid by the Supplier. Goods delivered to the Iowa DOT Distribution Center at 800 Lincoln Way, Ames, IA shall be received between the hours of 7:30 a.m. and 3:30 p.m. on any day except Saturday, Sunday, or a holiday. For deliveries to other Iowa DOT locations, the Supplier may contact the destination location for available times to deliver as not all Iowa DOT locations have the same business hours. The Iowa DOT will not be liable for any freight claims or unpaid freight bills arising from contract or purchase order issues.

B. Award

The binding agreement (award) may be issued in the form a purchase order or contract or both depending on the requirements and complexity of the agreement.

1. **Method of Award:** Award shall be made to the lowest responsible, responsive bidder whose bid meets the requirements of the solicitation and is the most advantageous to the Iowa DOT unless otherwise specified. An Iowa bidder will be given preference over an out-of-state bidder when bid responses are equal in all aspects and are tied in price. By virtue of statutory authority preference will be given to products and provisions grown and coal produced within the State of Iowa.
2. **Award Protests:** Protests of award recommendations are to be addressed to the Director of Purchasing, and shall be made in accordance with paragraph 761--20.4(6)"e" of the Iowa Administrative Code.
3. **Contracts:** Successful contractor(s) may be sent either a formal Contract, Notification of Award or purchase order as confirmation of acceptance and award. Any of these binding agreements shall be for the term stated in the bid proposal or on a purchase order and may be renewed for additional period(s) under the same terms and conditions upon mutual agreement as defined. The successful bidder may not assign a contract to another party without written authorization from the Iowa DOT Purchasing Section. A service contract, including all optional renewals, shall not exceed a term of six years unless a state agency obtains a waiver of this provision pursuant to rule 11-11B.16 (8A).
4. **Payment Terms:** The Iowa DOT typically pays properly submitted vendor invoices within thirty (30) days of receipt, providing goods and/or services have been successfully delivered, installed or inspected (if required), and accepted. Invoices presented for payment must be only for quantities received by the Iowa DOT and must reference the purchase order number to be submitted for processing.

5. **Default:** Failure of the Supplier to adhere to specified delivery schedules or to promptly replace rejected materials shall render the Supplier liable for all costs in excess of the bid price when alternate procurement is necessary. This shall not be the exclusive remedy and the Iowa DOT reserves the right to pursue other remedies available to it by law or under the terms of the binding agreement.
6. **Default:** Failure of a Contractor other than a Supplier to meet any specified project completion deadline shall render the Contractor liable for all costs incurred by DOT that were: a) necessary to meet said deadline; or b) necessary to complete said project after said deadline. This shall not be the exclusive remedy and the Iowa DOT reserves the right to pursue other remedies available to it by law or under the terms of the agreement.

C. General

1. **Administrative Rules:** For Additional details on the rules governing the actions of the Iowa DOT Purchasing Section, refer to 761 IAC, Chapter 20, Iowa Administrative Code, entitled "Procurement of Equipment, Materials, Supplies and Services".
2. **Affirmative Action:** The Contractor (and also subcontractor, vendor or supplier) is prohibited from engaging in discriminatory employment practices forbidden by federal and state law, executive orders and rules of the Iowa Department of Management, pertaining to equal employment opportunity and affirmative action. Contractor may be required to have on file a copy of their affirmative action program, containing goal and time specifications. Contractors doing business with Iowa in excess of \$5,000 annually and employing 50 or more full time employees may be required to file with the Iowa Department of Management a copy of their affirmative action plan. Failure to fulfill these non-discrimination requirements may cause the contract to be canceled and the contractor declared ineligible for future state contracts or subject to other sanctions as provided by law or rule.
3. **Applicable Law:** The contract shall be governed under the laws of the State of Iowa. The contractor shall at all times comply with and observe all federal and state laws, local laws, ordinances, and regulations which are in effect during the period of a contract and which in any manner affect the work or its conduct. Any legal action relating to a contract shall only be commenced in the Story County, Iowa, District Court or the United States District Court for the Southern District of Iowa.
4. **Conflict of Interest:** No state or county official or employee, elective or appointive shall be directly or indirectly interested in any contract issued by the Iowa DOT, see Code of Iowa 314.2.
5. **Debarment and Vendor Suspension:** By submitting a proposal, the contractor is certifying that it and its principals and/or subcontractors are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by the State of Iowa or any Federal department or agency.
6. **Equal Opportunity:** Firms submitting bids must be an "Equal Opportunity Employer" as defined in the Civil Rights Act of 1964 and in Iowa Executive Order Number Thirty-four.
7. **Infringement:** Goods shall be delivered free of the rightful claim of any third party by way of infringement. Contractor shall indemnify and save harmless the State of Iowa and the Iowa DOT against all claims for infringement of, and/or royalties claimed under, patents or copyrights on materials and equipment furnished under this bid.
8. **Records Audit:** The contractor agrees that the Auditor of the State of Iowa or any authorized representative of the state, and where federal funds are involved, the Comptroller General of the U.S. Government, shall have access to and the right to examine, audit, excerpt, and transcribe any directly pertinent books, documents, papers, and records of the contractor relating to orders, invoices, or payments of a contract or purchase order.
9. **Targeted Small Businesses:** The Iowa DOT seeks to provide opportunities for women and/or minority small business enterprises. To apply for certification as an Iowa Targeted Small Business, contact the Iowa Department of Inspection and Appeals (515-281-5796). Contractors shall take documented steps to encourage participation from Targeted Small Businesses for the purpose of subcontracting and supplying of good or services or both.
10. **Taxes:** Prices quoted shall not include state or federal taxes from which the state is exempt. Exemption certificates will be furnished upon request.
11. **Termination:**
 - **Termination Due to Lack of Funds or Change in Law**

The Iowa DOT shall have the right to terminate this Contract without penalty by giving thirty (30) days written notice to the vendor as a result of any of the following:

 - Adequate funds are not appropriated or granted to allow the Iowa DOT to operate as required and to fulfill its obligations under contract.
 - Funds are de-appropriated or not allocated or if funds needed by the Iowa DOT, at the

Iowa DOT's sole discretion, are insufficient for any reason.

- The Iowa DOT's authorization to operate is withdrawn or there is a material alteration in the programs administered by the Iowa DOT.
- The Iowa DOT's duties are substantially modified.

Following a 30 day written notice, the Iowa DOT may terminate a binding agreement in whole or in part without the payment of any penalty or incurring any further obligation to the Supplier. Following termination upon notice, the Supplier shall be entitled to compensation upon submission of invoices and proper proof of claim for goods and services under contract up to and including the date of termination.

**Iowa Department of Transportation
SUPPLEMENTAL TERMS & CONDITIONS
For
Remote Hydrographic Survey Boat
Proposal No.: 14436
Letting Date: June 10, 2015**

Contract Award

It is the intent of the Iowa DOT to award the contract to the responsible bidder whose submitted quotation is the most advantageous to the Iowa DOT, cost and other factors considered. Other factors include, but are not limited to: meeting or exceeding mandatory requirements, proposed staffing, and meeting required time schedule.

Purchase Order

One Purchase order will be issued for this bid request.

Warranty

Unit shall be covered under warranty for at least two (2) years. Warranty shall include all parts and labor to correct any material, workmanship or manufacturer defects. If component manufacturer's warranties are for a longer period, they shall apply. Warranty shall begin when machine is delivered to the requesting field location.

Alternatives or Exceptions

Any equipment being offered as an alternative to the specified make/model must be submitted on the enclosed form "Bidder's Request for Alternatives or Exceptions." The form must specifically state the requested alternative and be accompanied by adequate supporting information to evaluate the request.

The "Bidder's Request for Alternatives or Exceptions" form must be received in sufficient time *prior* to the bid opening to evaluate and respond with the appropriate action. It is suggested that any requests for alternatives be submitted either by e-mail or fax immediately upon receipt of the proposal in order to receive full consideration. Fair treatment to all vendors shall be the primary concern in evaluation of requests for of proposed alternates, particularly those submitted just prior to the bid opening. **Do not submit "Bidder's Request for Alternative or Exceptions" with your bid response.**

Separate Bids

A bidder may quote prices on more than one model. Complete a separate Schedule of Prices for each make/model bid.

Training

Bidder shall include in the cost of the Survey System, assembly and training. Awarded Bidder will come to Ames, IA to fully assemble the system and get it up and running. Once the system is assembled, on-site training shall be included for the system. The training should be estimated at 6-8 hours and to be provided to 6-8 people. All expenses including, but not limited to: travel, lodging, food must be included in the overall cost of the system.

Software

The Survey System shall include all software needed to operate the hardware.

Title

Equipment Specifications: Remote Hydrographic Survey System

Introduction

The purpose of this equipment is to collect engineering survey accurate data from a remote controlled (unmanned) platform equipped with a system of advanced survey technologies for hydrographic/bathymetric data collection and specifically bridge scour evaluations. This type of system generates a detailed 3-dimensional electronic map of the "floor" of a body of water, including rivers, streams, and lakes, accurately defining the depths and shapes of underwater terrain.

The remote hydrographic survey system shall incorporate the following integrated field capable (ruggedized) technologies:

- Real Time Kinematic (RTK) Global Navigation Satellite System (GNSS) Receiver: This receiver uses satellite navigation in real time from a system of satellites that provide autonomous geo-spatial positioning with global coverage. This allows the receiver to determine the location (longitude, latitude, and altitude) to high precision using time signals transmitted along a line of sight from satellites.
- GNSS Antenna: The antenna boosts the reception signal to a GNSS receiver.
- Singlebeam Echosounder: An echosounder capable of recording high resolution full water column acoustic envelope which will result in a highly detailed representation of the bottom of a body of water.
- Radio Modem: Real-time data transfer provided by a radio modem with multiple channel wireless communications over long distances allowing instrument data to be logged by computer on shore. Wireless connectivity for linking with external hardware.
- Hydrographic Data Acquisition and Processing Software
- Remote Controlled Boat and Dual Motors

System Component Specifications

All Components

All components must have full interoperability.

Certified to meet or exceed industry vibration and shock standards.

Certified to meet or exceed industry watertight and dustproof enclosure standards.

Operating Temperature 32°F – 105°F

Storage Temperatures -10°F to 130°F

Dust and Water Protection IP65 minimum ([Ingress Protection](#): Meet or exceed industry dust tight standards and meet or exceed industry watertight standards with temporary submersion to 1 meter minimum.)

Shock Rating Meet or exceed industry shock standards with a minimum of being able to withstand a 5 ft drop on a hard surface (IEC 60068-2-27)

Humidity 95% non-condensing

Boat

Physical:

Hull Length (Stability Issue)	Range: 4ft – 6.5ft
Hull Width (Stability Issue)	Range: 1.5ft – 4ft
Access Hatch	Fully water tight
Total Weight (Fully Equipped)	80lbs maximum
Payload	All components (expect antennas) mounted inside the water tight boat
Payload Capacity	40lbs – 65 lbs
Hull Material	UV Resistant

Remote Controls (navigation & power):

Navigation Remote Control Range	3500 ft minimum
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Propulsion Performance:

Motor Type	Electronic (battery operated)
Rechargeable Internal Battery	8 hr operation per charge
Typical Survey Speed	4 ft/sec – 6 ft/sec
Top Speed	15 ft/sec maximum
Battery Endurance	2 hr minimum

Single Beam Echosounder

Examples: [Sonarmite](#) and [CEE HydroSystems CEEPULSE](#)

Power:

Rechargeable Internal Battery	8 hr operation per charge
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Physical:

Connectors	LEMO 1K
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Data Output:

Output Formats	NEMA and ASCII (minimum)
I/O	Bluetooth and Serial

Echosounder:

Mode	Automatic and Manual
Frequency	Range: 190 kHz – 210 kHz
Accuracy	0.01 m +/- 0.1% of depth
Beam Width	4°min to 9° max
Depth Range	1ft – 100 ft
Sound Velocity	1350 – 1750 m/s
Ping Rate	5-20 Hertz

Real Time Kinematic (RTK) Global Navigation Satellite System (GNSS) Receiver:

Examples: [Topcon GB-3](#) and [Hemisphere A325](#)

The GNSS receiver is to be separate from the GNSS antenna so that the receiver can be housed within the sealed boat.

The receivers must be able to receive real time network corrections within the Iowa DOT statewide Real Time Network (RTN) or from a GNSS base station to perform real time kinematic survey operations.

Maximum system accuracy requirements:

Static	0.5 cm + 0.5 ppm (Horizontal) 1.0 cm + 1.0 ppm (Vertical)
RTK	1.0 cm + 1.0 ppm (Horizontal) 2.0 cm + 1.0 ppm (Vertical)

Receiver Type: Dual frequency (L1 and L2) Global Navigation Satellite System (GNSS) receiver

Signals Tracked/Received: GPS and GLONASS minimum (Capable of tracking L2c, L5 and Galileo signals)

Data Format: (Capable of receiving data transmitted in these message formats) CMR+, RTCM 3.0, or RTCM 3.1, RTCM SC104, CMR, CMR+, ASCII Output NMEA 0183 version 2.x and 3.0

I/O Communications: USB, Serial and RS 232 (1 each minimum)

Bluetooth Communications: Integrated Class 2

Channels: 72 minimum (capability of tracking at least 24 satellites simultaneously)

Cold Start Time: Maximum time to first measurement of 60 seconds, and less than 5 seconds maximum to subsequent measurements

Variable Position Update Rate: 0.05 seconds to 60 seconds

Position Latency: 0 .03 seconds or less

Cellular Communications:	Capable of receiving corrections from the Iowa Real Time Network or a local base station via cellular modem.
Data Rate (Update & Output):	1Hz – 100 Hz Selectable
Memory:	Removable SD/SDHC Memory Card (32GB min.) 256 MB onboard data logging storage, using either internal memory or removable data card
Rechargeable Internal Battery:	8 hr operation per charge (or 2 sets of 4 hr batteries)

Real Time Kinematic (RTK) Global Navigation Satellite System (GNSS) Antenna:

Examples: [Topcon G3-A1](#), and [Hemisphere A42](#)

Sub-millimeter antenna phase center stability

Built in ground plane

Operating Frequency Range:

L1 GPS/GLONASS	1586.5 ± 25 MHz
L2 GPS/GLONASS	1236 ± 20 MHz
L5 GPS	1176 ± 12 MHz

Radio Modem:

The system is required to have a low wattage radio connection for times when cellular communications are not available.

Fully compatible with the operations of the GPS receivers.

Accepted and certified for operation in the United States.

Maximum 35W RF output radio with an external 50 ohm antenna

Hydrographic Data Acquisition and Processing Software

Example: HYPACK, Inc.

Auxiliary Equipment:

Prism and prism boat mount (required for total station operations)

DC and AC chargers for all equipment

All necessary electronic cables for connecting the various components

Rugged carrying case for each of the system components

2 – extra onboard component batteries per device

110 volt wall charger for all the component batteries

12 volt DC automobile charger for all component batteries

1 – deep cycle marine battery replacement

Manuals or CD's containing the manuals

A 2 year parts and service warranty



Bidders Request for Alternatives or Exceptions (BRAE)

Letting Date: June 10, 2015

Proposal No.: 14436

BRAE form due on or before: May 27, 2015

Item: Remote Hydrographic Survey Boat

Spec. No.: See attached

Request: _____

Bidder Proposes to furnish in lieu of above: _____

NOTE: The determination of acceptance of this BRAE request is only valid for the bid for which it was submitted. BRAE approvals received for this bid do not determine or set a precedent for what is acceptable in any other bid posted by the State of Iowa.

Email/Fax to:

Iowa Department of Transportation
Purchasing Section
Attention: Zachary Gillen
Email: Zachary.gillen@dot.iowa.gov

Fax No.: 515-239-1538

Submitted By _____

Company _____

Address _____

City State Zip

Phone No. _____

Fax No. _____

=====

DOT USE ONLY

Approved _____

Disapproved _____

Reason _____

Signature: _____

Date: _____

Bidder _____

SEALED BID

LETTING DATE: June 10, 2015

PROPOSAL NO: 14436

PROPOSAL DESCRIPTION: Remote Hydrographic Survey Boat

**Iowa Department of Transportation
PURCHASING - SEALED BID PROPOSAL
800 Lincoln Way
Ames, IA 50010**