"Minority business enterprises are encouraged to respond to this solicitation notice."

PROJECT MANUAL

Utility and Site Work
Cedarville State Forest, Manning Hatchery
10201 Bee Oak Road
Brandywine, Prince George's County, MARYLAND 20613

PROJECT # P-009-211-010
BPM0289200

MAINTENANCE CONTRACT

STATE OF MARYLAND
DEPARTMENT OF NATURAL RESOURCES
ENGINEERING & CONSTRUCTION

DATE: January 19, 2022

DATE BIDS DUE: **May 12th, 2022,** TIME: **2:00 P.M.**

BID FOR THIS SOLICITATION ARE BEING ACCEPTED SOLELY ONLINE THROUGH
https://emma.maryland.gov

NOTE: You are strongly urged to attend the pre-bid site visit in order to understand the scope of work. Those attending shall meet on **May 3rd, 2022, at 10:00 a.m., Cedarville State Forest, Manning Hatchery, 10201 Bee Oak Road, Brandywine, Prince George's County, Maryland 20613.** If you cannot attend or need directions to the pre-bid visit or for clarification of the specifications, please contact:

PROJECT MANAGER: Koren Lynch **410-270-7180**

Name and address of Procurement Officer:

Perry Otwell
Dept. of Natural Resources
Tawes State Office Building, D-3
Annapolis, Maryland 21401

IV DETAILED SPECIFICATION

A. SCOPE:

1. This project consists of the Contractor providing all labor, equipment, materials, supplies, insurance, etc. necessary to preform utility and site work at Manning Hatchery located at 10201 Bee Oak Road, Cedarville State Forest, Brandywine, Prince George's County, MD 20613.

2. The project shall consist of the following:

   a. Replacing of sliding gate valve gaskets/seals at pond #3 gate valve.

   b. Clean and prepare pipe to accept and install a cure in place pipe lining at existing hatchery pond drainpipe.

   c. Remove and replace concrete apron around discharge box. Approximately thirty (30) SF being careful not to damage concrete discharge box.

   d. Cap and remove a Murdock hydrant.

   e. Clean up and dispose all construction materials off State property.

NOTE: It is the Contractor's to determine the exact dimensions and quantities prior to submitting a bid.

B. QUALIFICATIONS OF THE CONTRACTOR:

1. The Contractor shall be licensed in the State of Maryland as a General Contractor to perform work associated with this project.

2. Contractor shall have a minimum three (3) years' experience performing construction work of a similar nature.

3. Upon request, the Contractor shall supply to the DNR Project Manager a list of similar projects, which have been successfully completed by the contractor.

C. SITE INSPECTION:

1. It is suggested the Contractor visit the job site are encouraged to attend the pre-bid conference meeting and familiarize themselves with all requirements for the project. Failure to attend the meeting, or visit the site, will not relieve the successful bidder from complying with the requirements of these specifications at no additional cost to the State.

2. No allowance will be made for errors on the Contractor's part for failure to take into account any conditions or circumstances existing at the site that might affect the specified work.

3. Please coordinate any unscheduled site visits with the facility by calling; Maryland Joseph Manning Fisheries, Park manager: Sean Knowles (410)-271-0749

D. SCHEDULE OF WORK

1. All work shall be coordinated with the Facility Manager and DNR Project Manager during the work initiation meeting.

2. Work shall be accomplished during the normal working hours of 8:00 a.m. to 4:30 p.m., Monday through Friday, unless permission is given in writing by the Facility Manager to do otherwise.

3. The Contractor shall notify the Project Manager seven (7) days prior to his start of work. The Site is an active work environment and needs to always remain open to Maryland Joseph Manning Fisheries workers.

4. All work shall be completed within **60** calendar days of the notice to proceed.

E. STANDARDS AND CODES:

1. All work shall be performed in a top-quality workmanship manner in accordance with the standard of the trade.

2. Prior to ordering any materials, the Contractor shall submit to the DNR Project Manager for approval all Manufacturers installation booklets and product data sheets.

3. Any materials that have not been specifically mentioned, but are necessary for the complete, safe, and satisfactory completion of the project shall be provided by the Contractor as if specified herein.

4. The Contractor shall comply with OSHA (Occupational Safety and Health Administration) and MOSHA (Maryland Occupational Safety and Health Administration) regulations regarding construction safety and health standards throughout the duration of this project.

5. All work shall be performed in accordance with applicable code requirements and standards as defined by the Maryland Code Administration "Maryland Building Performance Standards" (MBPS), and the latest editions of the:

- International Building Code (IBC)
- International Residential Code (IRC)
- International Plumbing Code (IPC)
- International Mechanical Code (IMC)
- National Electric Code (NEC)
- International Energy Conservation Code (IECC)
- National Fire Protection Association 101 Life Safety Code (NFPA)
- Maryland Department of Transportation- State Highway Administration's (SHA) Standards and Specifications for Construction and Materials

And any local amendments or modifications to the Standards made by the local jurisdiction which may be applicable to the work.

F. MATERIALS AND SUPPLIES:

1. General:

a. All materials shall be as specified or approved equal by the DNR Project Manager. In the event the Contractor chooses to substitute materials other than those specified, the Contractor shall submit to the Project Manager all pertinent data to determine the "or-equal" rating, at least ten (10) days prior to the bid opening. The Project Engineer will make his decision and notify the Contractor within five (5) days of receipt of this information as to the "as-equal" status.

b. All materials shall be new and delivered to the job site in their original unopened containers with labels intact and legible.

c. The Contractor shall be responsible for the coordination, off-loading and proper storage of all materials and supplies up until the time of the final inspection.

d. Materials shall be stored in a safe area, out of the way of traffic. Storage site location shall be approved by the Facility Manager prior to the storage of any materials on site. All materials and supplies shall be stored up, off the ground surface and protected from weather with a waterproof covering. Any Special storage instructions required by the material manufacturer shall be performed by the Contractor as if specified herein.

e. Any materials not specifically mentioned that are necessary for the complete, safe, satisfactory completion of the project shall be provided by the Contractor as if specified herein.

f. The contractor shall perform any special storage instruction required by

the material manufacturer as if specified herein.

2. Specific:

a. Cast in place pipe liner shall be: FLOW-LINER Systems LTD or approved equal. Flow-Lier PVC Standard for in-line structures with the cure in place methods and flex tube expansion to a round shape, shall be performed by methods unique to the lining manufacturer's installation process. The pipe lining shall be a continuous length free from splices or joints, 5mm thickness using resins approved by manufactures installation process. Having a minimal limit of shrinkage of 1-2% when curing. A robotic cutting device to be used to reinstate the branch line from connected pond lines.

b. Side and top seals: Shall be Golden Harvest Inc, or equal. Frame mounted neoprene ASTM D-2000 or EDPM. Seals shall be J-bulb type with a slotted stainless steel retainer bar. All seals shall be mechanical and fully adjustable in the field.

c. Flush bottom seal: Shall be Golden Harvest resilient neoprene seal Neoprene ASTM D2000 or equal. To be mounted to bottom of disc and seal against the invert portion of the frame. Frame mounted invert seals will not be considered.

d. Invert seal: Shall be Golden Harvest Inc, or equal. Resilient neoprene seal Neoprene ASTM D2000 or EDPM.

e. Concrete pad: Approximately three (3') foot by ten (10 ') foot area, four inches (4") thick. Reinforced with WWF to prevent cracking.

i. Shall be mix #3, rated at 3,500 psi; and, as specified in Section 918.06 of the latest edition of the State Highway Administration Standard Specifications for Construction Materials.

ii. WWF: 6x6- W2.1xW2.1 galvanized steel wire.

iii. Gravel Base: Shall be SHA approved #57 crushed aggregate.

f. Fill Dirt: Shall be Compactable "backfill": Shall be material free of wood, stumps, large stones, or other materials which may interfere with proper compaction.

g. Stone: Shall be AASHTO #57 stone gravel.

h. Topsoil: Shall be SHA screened topsoil free of rocks, roots, limbs, etc.

i. Grass seed: Shall be MDE mix 1,3, &5

j. Mulch: Shall be wheat or rye straw free of noxious weeds, seeds, etc.

G. METHOD OF WORK:

1. General:

a. All work shall be performed as called for in these written Specifications.

b. The Contractor shall coordinate all work with the various trades and material suppliers in order to complete the project expeditiously within the time limits of the Contract.

c. All work shall be performed in the best and most professional manner by mechanics skilled in their respective trade.

d. All work shall be performed to minimize disruption to facility operations. It is understood that the Contractor shall maintain accessibility for vehicular and pedestrian traffic throughout the project.

e. The Contractor shall provide and install adequate barricades, signs, etc., necessary to ensure public safety as approved by the Facility Manager.

f. Throughout the duration of the project, the Contractor shall take steps to ensure area security and adequate protection for State property.

g. The Contractor shall be responsible for the removal and disposal of all debris throughout the duration of the project.

h. Upon completion of the project, the Contractor shall legally dispose of all excess materials and debris, leaving the site in an acceptable condition.

i. Any work that has not been specifically mentioned but is reasonably implied and is necessary for the safe and satisfactory completion of the project, shall be performed by the Contractor as if specified herein.

j. The Contractor shall adhere to OSHA-MOSHA regulations throughout the project to ensure the safety of his/her employees, state employees, and the public.

2. Specific:

a. Arrange for Miss Utility and an approved independent utility locating service to check and mark the area of work for utilities etc. prior to the start of work.

b. Contact Facilities Manager to make sure pond number three (#3) is empty and ready to have the pipe- lined with the cast in place liner.

c. Preparation and lining of the pipe shall be in accordance with the manufacturer's instructions and specifications for a Thermal Cured-in-Place Pipe (CIPP) liner.

d. Test pipe and provide demonstration to Park Manager and facility staff upon completion of cast in place installation. Provide testing to secure there are no leaks coming from the pipe and that lateral service is reinstated as per manufactures specifications.

e. Isolate and turn off water to existing Murdock hydrant.

f. Remove right side of concrete skirt where the Murdock hydrant is located about approximately thirty (30) SF of concrete pad. Make sure all cuts are clean and square to adjoining skirt areas. Exact location shall be marked with spray paint by the Project Manager.

g. Excavate and remove existing Murdock hydrant and ten (10') feet of associated pipe and appurtenances. Be careful not to damage the existing concrete discharge box.

h. Remove and cap Murdock hydrant and pipe system making sure there are no leaks.

i. Back fill and compact area around discharge box, to include the area around the metal grate at the back side of the discharge box. Ensure remaining base is compacted and secure.

j. Install and compact gravel material in 4" lifts with a mechanical tamper to fill newly dug pit and establish proper concrete bedding.

k. Replace concrete apron around discharge box. Approximately thirty (30) SF of area. By installing 2" x 4" wood form work at prior to concrete pour. To match existing concrete apron.

l. Install a 3'x10'concrete pad. The concrete pad shall be a made of minimum of 4" of the specified concrete and shall rest on a minimum 4"

of compacted #57 gravel. Concrete pad will have a brushed finish.

m. Tie in a new slab by drilling into the edge of the existing slab at least four inches, and grout in short lengths of rebar, which will extend into the new slab.

n. Make sure all needed expansion joints are in the new concrete apron.

o. Replace the neoprene seal, size approximately: width of fourteen inches by ten inches (14" x 10") high. Location of gate valve to be replaced is in pond three (3).

p. The Contractor shall remove the existing seals and clean area so that the new seal will be able to adhere to existing guides and frame on the gate valve.

q. Properly install all side, top and bottom seals to existing gate valves.

r. Test each gate valve for leaks. Leakage: gates shall be watertight under the design head conditions of Golden Harvest Inc Specifications. Under the design specifications the leakage shall not exceed 0.10 US gallons per minute per foot of seating perimeter.

s. Remove and dispose of all trash, waste, and construction debris off State property.

t. Where excavation exists backfill and apply 2" (minimum)of clean topsoil, level to match existing contours. Seed and mulch.

H. WARRANTY AND GUARANTEE:

1. The Contractor shall guarantee in writing his/her work for a period of two (2) years from the date of acceptance.

2. Any defects found within the warranty period shall be repaired or replaced by the Contractor at no additional cost to the State.

3. Upon completion, the Contractor shall submit to the DNR Project Manager the printed warranty and systems used on the project.

4. Acceptance by the DNR Project Manager of any procedures, materials, workmanship, or final product does not relieve the Contractor of his/her contractual requirements.

5. All work is Subject to inspection and approval of the DNR Project Manager and Facility Manager.

I. GENERAL REQUIREMENTS:

1. The Maryland Dept. of Natural Resources "Instructions to Bidders for Construction Projects and General Conditions of Contract between Owners and Contractors", revised August 2013, are hereby made part of these specifications.

2. All work shall be coordinated with the Park Manager and DNR Project Manager during the work initiation meeting.

3. Work shall be accomplished during the normal working hours of 8:00 a.m. to 4:30 p.m., Monday through Friday, unless permission is given in writing by the Facility Manager to do otherwise.

4. The completed project is subject to the inspection and approval of the Park Manager and DNR Project Manager.

5. The requirements stated in the latest edition of the Department of General Services" Instructions to Bidders for Construction Projects- General Conditions" are hereby made a part of these documents.

J. METHOD OF BIDDING

1. All bids shall be submitted online via eMaryland Marketplace Advantage (eMMA) https://emma.maryland.gov **(NO PAPER BIDS!)**

2. On eMaryland Marketplace Advantage opposite "Total Bid", the Contractor shall insert a lump sum bid to complete all work described herein. Bid amount must also coincide on the Bid Form attached and all supporting documents completed to be a full and valid bid.

3. The project will be awarded to the Contractor submitting the lowest Base Bid demonstrating the ability to fulfill the requirement for this project.

4. See Section V "Alternates and Unit Prices" for additional bidding requirements.

K. METHOD OF PAYMENT:

1. After satisfactory completion and acceptance of the work, the Contractor shall submit an invoice to the DNR Project Manager for processing and payment.

2. Payments shall be made in accordance with *General Conditions, Terms and Conditions.*

V. ALTERNATES AND UNIT PRICES

A. ALTERNATES

1. None

B. UNIT PRICES:

1. None