STATE OF NEW JERSEY  
DEPARTMENT OF THE TREASURY  
AGENCY REQUEST FOR PROPOSAL  

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<th>ITEM NO.</th>
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PRICES ARE FIRM UNTIL THE FOLLOWING DATE:  

CASH DISCOUNT  
DATE OF DELIVERY  
VENDOR'S FEDERAL I.D. NUMBER  
VENDOR'S TELEPHONE NO.  

VENDOR'S SIGNATURE (Must be Signed):  
PRINT OR TYPE NAME BELOW:  
DATE:
1 GENERAL

A. Thirty (30) vibracores will be collected for this contract.

B. All work shall be performed in the Atlantic Ocean, within twelve (12) nautical miles of the New Jersey coastline, Delaware and/or Raritan Bay, and the Delaware and/or Hudson Rivers. Water depths in the survey area can extend to 100 feet Mean Low Low Water (MLLW); and

C. The Vendor {Contractor} shall be knowledgeable regarding potential hazards and/or restrictions in the coring areas. These potential hazards/restrictions include, but are not limited to, submarine cables, potential unexploded ordnance, and the location of major shipping channels. The Vendor {Contractor} shall immediately bring any potential conflicts with vibracoring as a result of such hazards/restrictions to the attention of the State Contract Manager (SCM) verbally.

D. Acquisition needs to be completed by September 15, 2022.

2 LOCATION OF VIBRACORING SITES/AREA OF INVESTIGATION

Attachment 1 shows the locations offshore New Jersey where vibracore acquisition will occur. It is anticipated that twenty (20) cores will be collected off Southern Ocean County (Area 1) and ten (10) will be collected off Monmouth County (Area 2), so this additional mobilization should be factored into final price. However, we may collect all 30 off Southern Ocean County depending on the needs of our partners.

Area 1 is approximately 350 square miles and Area 2 is approximately 150 square miles. The distance between Southern Ocean County (Area 1) and Monmouth County (Area 2) is approximately twenty-five (25) nautical miles.

Since this work is primarily reconnaissance level each vibracore location may be several miles apart or more and the area of investigation should be expected to be large. Because of this, no expectation should be made that the vibracores will be closely grouped together.

3 PROVIDING LOCATIONS OF VIBRACORES TO VENDOR

Exact vibracore locations will be provided in Latitude/Longitude Coordinates (ddmm.mmm) at least thirty (30) business days before the first day of vibracore operations. Any changes to the locations of the vibracore sites must have NJDEP approval prior to the acquisition of vibracore. NJDEP will provide a map showing areas of coring with the coring locations provided in Latitude/Longitude Coordinates.

4 MOBILIZATION AND DEMOBILIZATION
The Vendor {Contractor} shall mobilize at the project site. Mobilization shall consist of the delivery to the project site of all equipment, materials, and supplies to be furnished by the Vendor {Contractor}; the complete assembly in satisfactory working order of all such equipment on the job; and the satisfactory storage at the project site of all materials and supplies. Subsequently, the Vendor {Contractor} shall demobilize at the project site after completion of the work. Demobilization shall consist of the removal from the project site of all equipment, materials, and supplies furnished by the Vendor {Contractor} after completion of the work.

5 ORDER OF WORK

The order in which the vibracore are drilled shall be at the Vendor’s {Contractor’s} discretion, unless otherwise stated by the SCM.

6 SEDIMENT SAMPLE COLLECTION SPECIFICATIONS

A. Positioning

1. The vibracores shall be collected from locations furnished by the SCM. These locations will be designated by Latitude/Longitude Coordinates (ddmm.mmm);

2. The positioning of the vessel relative to the sample site locations shall meet standards outlined in Chapter 7 of the Corps of Engineers Hydrographic Surveying Manual, EM 1110-2-1003, dated 30 November 2013 for class 1 surveys (https://www.publications.usace.army.mil/Portals/76/Publications/EngineerManuals/EM_1110-2-1003.pdf?ver=gDGVUj.0XR2sXHiIpQZv2Q%3d%3d);

3. The Vendor {Contractor} shall establish vertical control by accessing tide gauge data from National Oceanic and Atmospheric Administration (NOAA) (Reference: www.tidesandcurrents.noaa.gov).

4. Positioning shall be determined immediately prior to the start of the vibracore boring at each location;

5. Before each core is taken, the exact position (latitude and longitude, easting and northing) and the water depth (raw and MLLW) at that point shall be recorded;

6. All elevations and depths shall be referenced to North American Vertical Datum of 1988 (NAVD 88); and

7. Differential Global Positioning System (GPS) positioning shall be used to locate the boat to within a 50 foot radius of the coring location designated by the SCM.

B. Vibracore Borings:

1. Vibracores comprising the surface of the bottom and sub-bottom and penetrating to a minimum depth of 20 feet shall be obtained by pneumatic or hydraulically
activated boring, having a minimum diameter of three (3) inches, and shall be representative of the relative position of the bottom and sub-bottom strata;

2. A transparent plastic rigid sampling tube of appropriate size that permits visual inspection of the cored material shall be placed inside the coring tool prior to operation:
   i. The Vendor {Contractor} shall remove the same tube from the coring tool when the operation at a site has been completed;
   ii. The plastic tube with the sample shall be cut into five (5) foot length segments starting at the top of the vibracore and justified from zero (0) foot depth for ease of handling and appropriately marked as to the sequence of segments and sample location;
   iii. In the case that the final segment cannot be cut into a five (5) foot length, the Vendor {Contractor} shall cut the core to the leftover length leaving no void space;
   iv. Both ends of the segments shall be sealed with plastic caps and plastic pressure sensitive tape;
   v. The Vendor {Contractor} shall identify and label the plastic segments as the top and bottom of the core sample;
   vi. The depth of the top and bottom shall be printed on the top and bottom of each five (5) foot segment;
   vii. The core identification number and the sample designation shall be recorded on each five (5) foot segment with waterproof marking ink; and
   viii. Cores that are missing sections or are mislabeled will negate completion (and corresponding payment) of that core and any cores that are brought into question.

3. The Vendor {Contractor} shall make every reasonable effort to reach the 20 foot required drilling depth or penetration refusal. Penetration refusal is defined as a drop in the penetration rate to greater than (> 60 seconds per foot of penetration, for a duration of 60 seconds. This is specified to prevent inflation of the core sample in the sampling sleeve where core recovery exceeds penetration depth:
   i. The Vendor {Contractor} shall determine penetration with the use of a Penetrometer and chart recorder (see Attachment 2 of this Bid Solicitation {RFP});
   ii. The depth of penetration shall be determined by measuring the depth to the vibrating core head and comparing it to the depth to the sediment surface; and
iii. The calculation of penetration depth by the Penetrometer shall be to within 0.1 foot of actual penetration.

4. The objective depth of penetration is 20 feet. It is recognized, however, that maximum penetration may not be achieved at all sample locations.
   i. The penetration refusal is met at less than 20 feet, the Vendor {Contractor} shall remove the sampled portion from the pipe, and a new liner will be inserted into the core pipe. A jet pump hose shall be attached to the tip of the core pipe just below the vibrator. The rig shall be lowered to the bottom and jetted down to the depth where the first part met refusal. The jet will then be turned off and the vibrator turned on, taking the additional part of the core;
   ii. Retries shall occur until penetration has reached 20 feet or until, at the discretion of the SCM, or two (2) retries have been attempted; and
   iii. The coring device shall recover a minimum of 90 percent of the unconsolidated material through which it has penetrated. The percent recovery shall be measured by placing a tape measure, with a weighted end, down the top of the retrieved core to measure the distance to the top of the sediment in the core. This value shall be compared to the measured depth of penetration to calculate percent recovery.

5. Core samples must be properly labeled to identify excised core sections. Improperly labeled core will negate completion (and corresponding payment) of that core and any cores that are brought into question.

C. UXO (Unexploded Ordnance) Screening Specifications:

D. The Vendor {Contractor} shall follow the screening protocol as detailed in the New Jersey Geological and Water Survey Technical Memorandum: Geophysical Prove-out for UXO Detection in Marine Vibracore (See Attachment 3 of this Bid Solicitation {RFP}):  
   1. The protocol shall be reviewed and accepted by the Vendor {Contractor} and the SCM no less than 20 days prior to mobilization;
   2. If NJDEP personnel are on the vessel, Section 1 of Attachment 3: UXO Screening Aboard Vibracore Acquisition Vessel is to be followed; and
   3. In the event that NJDEP personnel are not on the vessel during acquisition, Section 1 of Attachment 3 may be followed at the discretion of the Vendor {Contractor}.

E. Equipment Specifications:

F. The Vendor {Contractor} must meet the following equipment specifications:
   1. Minimum vibracore tool specifications:
      i. Pneumatic
a Air compressor, 250 Cubic Feet Per Minute (CFM) at 120 Pounds Per Square Inch (PSI) minimum; and
b Winch or crane with ten (5) ton minimum line pull and three-quarter (3/4)” wire rope.

ii. Electric
a 230 VAC, 3 phase, 30 amp service; and
b Winch or crane with ten (5) ton minimum line pull and three-quarter (3/4)” wire rope.

2. Minimum real-time logging system specifications:
   i. Real-time Penetrometer, consisting of the following or equivalent:
      a Vibration-resistant digital encoder for measuring down core distance;
      b Digital counter, capable of working in feet, connected to the encoder via an abrasion and water-resistant cable; and
      c Core-log software.
   ii. The Penetrometer records must post real-time penetration rate (feet/minute);
   iii. The Penetrometer must be in continuous operation during Vibracoring;
   iv. The Penetrometer records must be available/visible to the SCM in real time to confirm penetration depth and penetration rate measurements;
   v. Computer processing of the data to provide penetration graphs for each core, including penetration depth as a function of time (see Attachment 2 of the Bid Solicitation {RFP} for a sample penetration graph); and
   vi. Capability to furnish a copy of the penetration graph for each core at the time of drilling to NJDEP scientists in real time for on-board evaluation and drilling decisions.

7 LICENSED BOAT CAPTAIN/VEssel REGISTRATION

The Vendor {Contractor} shall supply one (1) boat captain with the vessel for twelve (12) hour days, with availability seven (7) days per week. The captain must have a current United States Coast Guard (USCG) Captain’s National Operator of Uninspected Passenger Vessel (6-pack) License and a New Jersey Boating Safety Education certificate during the contract term. The Vendor {Contractor} must have the vessel properly registered.

8 PROJECT MANAGEMENT
The Vendor {Contractor} shall designate a Project Manager. The Vendor {Contractor} may designate the boat captain as its Project Manager. The SCM will communicate with the Project Manager for all work and project matters unless otherwise notified.

Project management services will include ensuring adherence to the documentation/deliverable requirements stated in Bid Solicitation Section 13. The Vendor’s {Contractor’s} Project Manager shall oversee required sample analysis.

9  DOCKAGE FEES AND LOCATION

Dockage fees shall be paid by the Vendor {Contractor} and are included in the Blanket P.O {Contract} pricing.

NJDEP requests the Vendor {Contractor} make every effort to dock and park in the vicinity of the vibracoring location for logistical and safety reasons. NJ DEP’s intention is to maximize the amount of data collected in as few days as possible under the best sea conditions. In NJDEP’s past experience, regardless of the vessel’s capabilities, sea conditions have prevented them from returning to a location or have limited the areas available to survey.

10  VESSEL REQUIREMENTS FOR VIBRACORING

The Vendor {Contractor} shall provide a vessel that meets, at a minimum, the requirements noted below:

A. 45 foot vessel length;
B. Twin screw (two (2) propellers);
C. Engine exhaust ports that will clear fumes from work deck while the vessel is underway at three (3) to five (5) Nautical Miles Per Hour (Nm/h);
D. Depth/bottom recorder;
E. Generator capable of supplying 110 and 220 volts;
F. Radar with a minimum range of 48 nautical miles;
G. United States Coast Guard (USCG) required safety equipment;
H. 100 square feet of clear aft deck space;
I. Enclosed work area;
J. Sufficient floor space in an enclosed work area to accommodate a two (2) by three (3) foot power supply;
K. Heat and air conditioning;
L. Two (2) sleeping bunks for NJDEP staff on board;
M. Privacy head (Note: NJDEP staff can share a bathroom with captain and crew, but there should be some measure of privacy since both men and women may be on board);
N. Auto-pilot;
O. Boat slip with vehicle parking and access in the vicinity of the vibracoring location;
P. Personal floatation devices for each person on board. Up to two (2) NJDEP staff can be expected onboard the vessel at a single point in time.
Q. Cellular phone/satellite phone with twelve (12) mile-offshore reception;
R. Differential GPS with RS 232 Serial Port readily capable to export data in NEMA format;
S. Chart plotter – GPS;
T. Four (4) foot draft or less;
U. Galley; and
V. Meals on board for up to two (2) NJDEP staff if the boat does not dock for the evening.
W. If NJDEP are unable to stay on board, NJDEP will provide its own transit to/from the vessel and dock.

11 DATA COLLECTION/WAVE HEIGHT

Optimal data collection wave height is from zero (0) to three (3) feet; The Vendor {Contractor} shall not collect data when sea conditions exceed four (4) feet. Down time will be determined on a daily basis by the Using Agency.

12 STATE AND FEDERAL CODES AND REGULATIONS

The Vendor {Contractor} shall provide a vessel that meets all applicable State and federal Codes and regulations.

13 RECORDS/DELIVERABLES

The Vendor {Contractor} shall provide the following records and report to the NJDEP within fifteen (15) calendar days (or the first business day thereafter if the day falls on a non-business day) from the completion of the vibracore acquisition. Records shall be delivered electronically and at least one (1) paper copy:

A. The Vendor {Contractor} shall provide the final locations of the vibracores and borings, reported in Latitude/Longitude Coordinates NAVD88 and in feet in the New Jersey State Plane Coordinate System, NAD83;

B. The Vendor shall provide raw water depths and corrected water depths in MLLW;

C. The Vendor {Contractor} shall maintain daily records of the operation which include the date, operating port area, times of departure from the dock, times at which work commences, completed cores that day, weather, state of the sea and remarks. A complete copy of the daily records shall be provided to the SCM;

D. The Vendor {Contractor} shall maintain electronic data sheets that include an entry for each hole drilled on the operation and shall be delivered to the SCM. The sheets shall include the date, location, core number, water depth, elevations of the top and bottom of each core and percent recovered. Final copies of Penetrometer charts showing the rate of penetration, coupled with vibratory energy output, for the entire depth of each core shall be delivered with the data sheets. The Vendor {Contractor} shall also include
visual descriptions for each core, based upon the materials encountered during the cutting of the cores;

E. The Vendor {Contractor} shall properly label the core samples to identify excised core sections (Section 6). Improperly labeled core will negate completion (and corresponding payment) of that core and any cores that are brought into question; and

F. The Vendor {Contractor} shall maintain records of all work performed under this Blanket P.O. {Contract}. The originals shall be furnished to the SCM upon completion of the work;

G. The completed report shall provide at a minimum: Survey vessel specifications, positioning system specifications, navigation data acquisition and logging system, digital echo sounder specifications, vibracore system specifications, personnel on board, field methods.

14 VIBRACORE CUSTODY

All vibracores shall be cut into five (5) foot segments and labeled as required in Bid Solicitation Section 6.B.ii. NJDEP will take possession of the cores at the dock area. The Vendor {Contractor} shall conduct an inventory of the core segments at the dock area to guarantee that all sections of drilled cores are transferred to the NJDEP. NJDEP will review the inventory at the transfer.

15 SCHEDULING OF WORK

NJDEP will negotiate with the Vendor {Contractor} the start date of the vibracore acquisition. NJDEP is flexible with the exact start depending on the schedule of the Vendor {Contractor}, however vibracore acquisition must be completed and vibracores delivered to NJDEP by September 15, 2022.

16 PERIOD OF PERFORMANCE

As stated in Section 15, the Vendor {Contractor} shall complete all field work for the vibracore acquisition by September 15, 2022. The Vendor {Contractor} shall complete all office work within fifteen (15) calendar days (or the first business day thereafter if the day falls on a non-business day) from the agreed upon start date as specified in accordance with Bid Solicitation Section 15. In an effort to support scheduling and planning of NJDEP personnel, if the Vendor {Contractor} wishes to start the vibracore acquisition early it shall provide a minimum of seven (7) calendar days’ notice (or the first business day thereafter if the day falls on a non-business day) to the SCM before the new start date. Coring shall be scheduled such that NJDEP personnel can be rotated on board as inspectors.

17 INSPECTION

The Vendor {Contractor} shall conduct all work under the general direction of the SCM. The Blanket P.O. {Contract} work will be subject to inspection by the SCM or another State designated
representative to ensure strict compliance with the terms of the Blanket P.O. {Contract}. The presence of the NJDEP inspector(s) will not relieve the Vendor {Contractor} of responsibility for the proper execution of the work in accordance with the specifications.

18 PERFORMANCE STANDARDS DURING TERM OF CONTRACT

Vendor {Contractor} performance affects the NJDEP’s ability to meet its program needs. Significant or repeated delays, errors, and/or failure to provide the contracted services may be grounds for Blanket P.O. {Contract} termination, at the State’s sole discretion in accordance with New Jersey Standard Terms and Condition (SSTC).

19 INVOICES AND REPORTING

Once the vibracore acquisition and boring is completed, the records/deliverables in Bid Solicitation Section 13 are provided, and the work is reviewed and approved by the SCM, payment will be issued.

If any work has not been performed according to the specifications in the protocols, or if the reports/deliverables do not meet the requirements stated in this Bid Solicitation {RFP}, the Vendor {Contractor} shall repeat the process for the affected vibracores. Once these affected vibracores have been resubmitted and approved, payment for those vibracores will be authorized.

20 HEALTH AND SAFETY

The Vendor {Contractor} shall observe all applicable OSHA standards, including, but not limited to, the use of hearing and eye protection.

The Vendor {Contractor} is responsible for the cost and implementation of all personnel health and safety requirements in accordance with all applicable laws, regulations, policies, and guidelines, etc.
Attachments for Vibracore Acquisition

NJGWS Workplan Map

Attachment 1
Date: 8/20/2005
Start Time: 12:01:52 PM
End Time: 12:08:36 PM
Penetration: 19.30 ft
Recovery: 19.8
W. D. Corrected: 29.6
W. D. Raw: 33.5
Easting: 365421.0
Northing: 16155.8
Coord. System: NJ NAD 83
Lat: 38.52.6109'N
Long: 74 56.7054'W
Datum: WGS-84

Total Penetration 19.3 ft, Last Elapsed Time: 7.75 sec.
Geophysical Prove-out and Protocol for UXO Detection in Marine Vibracore
NJGWS Geophysical Technical Memorandum

Introduction

The New Jersey Geological & Water Survey (NJWGS) collects marine vibracores as a part of its geological mapping project for beach nourishment sand resources. Recent offshore dredging has encountered unexploded ordinance (UXO) from areas not previously identified as an area of munitions and explosives of concern (MEC) or munitions and explosives of concern/munitions constituents (MEC/MC). This occurrence raises the possibility that UXO may unintentionally be collected in a marine vibracore.

To address UXO in marine vibracore, the NJWGS uses a protocol that is based on the results of an NJGS/New Jersey State Police (NJSP) Arson/Bomb Unit, simulation test called a geophysical prove-out (GPO). The geophysical prove-out follows the guidelines in USACE Engineer Pamphlet EP-75-1-2 [Munitions and Explosives of Concern (MEC) Support during Hazardous, Toxic, and Radioactive Waste (HRTW) and Construction Activities] and Geophysical Prove-Outs for Munitions Response Projects prepared by the Interstate Technology & Regulatory Council, Unexploded Ordnance Team. Of particular note was that the NJGWS/NJSP prove-out addresses the detection of both ferrous and non-ferrous ordinance.

Methods

The NJWGS and NJSP tested several simulations using types of ordinance that may be found in NJ's offshore areas.

Representatives from the NJSP Arson/Bomb Unit and the NJWGS conducted a geophysical prove-out using simulated vibracores on 12/12/2007 and 1/8/08. The NJSP provided several examples of the type of ordinance that may be found in NJ's offshore areas (Figures 4.1, 4.2, and 4.3).

Tests were conducted using simulated cores that mimic actual cores commonly collected in the offshore New Jersey marine environment. A 1 to 2 ft long clear PVC core sleeve was filled with sediment. The core plastic sleeve is 0.15 inches thick with an internal diameter of 3.5 inches. The test cores were filled with medium-grained quartz sand derived from previously sampled offshore vibracores.

Different ordinance types, both ferrous and non-ferrous (fuse type) supplied by the NJSP (Figs 4.1-4.3) were buried within the sediment-filled core tubes and the tubes were capped. Cores were tested first with dry sand and then flooded with salt water to saturation (figures 4.4, 4.5, and 4.6). The saturated cores would indicate if the electrically conductive salt water would prevent ordinance detection. Core tubes were placed on a wooden platform supported by steel sawhorses. The steel sawhorses simulate typical background metallic material found aboard a marine vessel which may interfere with detection.

Three detection units were tested. A Torfino Enterprises Inc, Metal-TEC™, a hand-held (electromagnetic) metal detector (figure 4.4) and a Schonstedt GA 52CX™ magnetic locator (figure 4.5) were evaluated on 12/12/07 and a Garrett SuperScanner™ (electromagnetic)
(figure 4.6) was tested on cores on 1/08/08. The Metal-TEC™ and SuperScanner™ are law enforcement equipment. The Schonstedt GA 52CX™ is primarily used as an underground metal locator.

Results

It is important that non-ferrous UXO fuses can be detected in a screening process since they may pose an equal or greater danger than ferrous ordinance. The results of the test are summarized in table 1.

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<tr>
<th></th>
<th>Ferrous (dry core)</th>
<th>Ferrous (flooded)</th>
<th>Non-ferrous (dry)</th>
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<td>Detected</td>
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<td>Not detected</td>
<td>Not detected</td>
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<tr>
<td>Metal-TEC™</td>
<td>Detected (multiple scans)</td>
<td>Detected (multiple scans)</td>
<td>Detected (multiple scans)</td>
<td>Detected (multiple scans)</td>
</tr>
<tr>
<td>SuperScanner™</td>
<td>Detected</td>
<td>Detected</td>
<td>Detected</td>
<td>Detected</td>
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Table 4.1. Summary of geophysical prove-out for UXO in vibracore

The Schonstedt GA 52CX™, by its design and in practice was not able to detect the non-ferrous ordinance. All units are able to detect the ferrous ordinance; however the Schonstedt GA 52CX™ was also adversely affected by the metal sawhorses that simulated conditions on the boat.

The Metal-TEC™ was able to detect the fuse and ferrous ordinance with multiple passes at different orientations to effectively screen the core volume. The SuperScanner™ was able to detect ferrous and non-ferrous UXO without difficulty in one pass penetrating the entire core thickness. The SuperScanner™ has a larger coil and a lower electromagnetic operating frequency than the Metal-TEC™. The SuperScanner's interference elimination feature was able to further delineate the UXO and minimize cultural noise effects. The SuperScanner™ was the best of all three at resolving the target size of both ferrous and non-ferrous UXO in the vibracore.

Discussion/Conclusions

The likelihood of UXO recovery as a part of the vibracore acquisition process is low, yet it is possible. The use of an electromagnetic instrument for detection was found to be most effective to identify both ferrous and non-ferrous material. Of the three units tested the Garrett SuperScanner™ was best able to detect and resolve sampled UXO in vibracore. The NJGWS and NJSP developed a mutually acceptable protocol using this device for both onboard and dockside screening of UXO. The geophysical prove-out demonstrated that an effective screening procedure could be low-cost and take only a few minutes per core.
Protocol

Section 1: UXO screening aboard vibracore acquisition vessel. This is an addendum to step 6 in Protocol for Vibracore Acquisition (personal communication, Jane Uptegrove, NJGWS, October 2007).

1) The protocol is to be reviewed and accepted by the vibracore contractors, vessel operators and crew prior to coring operations. At the start of the acquisition day, at least two operating Garrett SuperScanners™ (one for scanning and one for backup) must be present on board.

2) Upon removal of the vibracore sleeve from the core barrel, the entire length of core should be placed on a nonmetal stand or support for cutting into lengths (usually 5 ft intervals). The stand must be at least 1 foot away from any metal bulkhead in order to reduce cultural interference effects on the UXO detection unit. The core will be marked and measured.

3) Prior to cutting the core, the vibracore crew will allow the geophysical technician to scan the length of the core with the Garrett SuperScanner™ using the following procedure:
   a. The SuperScanner™ will be tested prior to core scanning using a metal object such as a metal ring or watch for control.
   b. The technician will pass the SuperScanner™ over the core in several passes using a range of orientations of sensor to core. Typically scanning a 20 foot core will take 1-2 minutes.
   c. Any positive detection will be confirmed by multiple passes and use the interference elimination feature of the SuperScanner™.
   d. The length of positive detection limits will be marked.

4) If a positive detection zone is located, the vibracore crew will first excise the core 1 foot on either side of the positive detection zone and dispose of the section overboard. The vibracore technician and NJGWS staff will make note of the detection and record the location of the disposal.

5) The vibracore crew will proceed using the NJGWS vibracore acquisition protocol.

Section 2: UXO screening upon receipt of cut-to-length vibracores. To be used when the NJGWS receives cut-to-length vibrocores that have either not been screened or have been screened using a method that has not been demonstrated (by geophysical prove-out) to detect both ferrous and non-ferrous UXO. This protocol can be used dockside, at a contractor facility, or the NJGWS shop.

1) As soon as possible, the NJGWS should set up a UXO screening station where core can be processed prior to loading on vehicles or placed in storage. The stand must be at least 1 foot away from any metal bulkhead or object in order to reduce cultural interference effects on the UXO detection unit.

2) The geophysical technician will scan the length of the core with the Garrett SuperScanner™ using the following procedure:
   a. The SuperScanner™ will be tested prior to core scanning using a metal object such as a metal ring or watch for control.
   b. The technician will pass the SuperScanner™ over the core in several passes using a range of orientations of sensor to core. Typically scanning a cut 20 foot core will take 1-2 minutes.
   c. Any positive detection will be confirmed by multiple passes and use the interference elimination feature of the SuperScanner™.
d. The length of positive detection limits will be marked.

3) If a positive detection zone is located, the vibracore crew will mark the location of the positive detection zone, and set the core aside. Promptly contact the New Jersey State Police (NJSP) Bomb Squad Unit for handling and disposal.

![Image of ferrous projectile with non-ferrous brass casing and Metal-TEC detector](image1.png)

Figure 4.1. Ferrous projectile with non-ferrous brass casing (left) and Metal-TEC detector™ (right).

![Image of ferrous projectile with non-ferrous brass casing](image2.png)

Figure 4.2. Ferrous projectile with non-ferrous brass casing.
Figure 4.3. Non-ferrous (brass) fuse.

Figure 4.4. Geophysical prove out using Metal-TEC™ detector.

Figure 4.5. Geophysical prove-out using Schonstedt GA 52CX™ detector.
References


Figure 4.6. Geophysical prove-out using Garrett SuperScanner™ detector.
THE PROPOSAL MUST BE RECEIVED BEFORE 5PM EST ON JUNE 20, 2022
LATE PROPOSALS WILL NOT BE ACCEPTED
RETURN YOUR SIGNED PROPOSAL TO:

MICHAEL GAGLIANO
NJDEP/GEOLICAL AND WATER SURVEY
MAIL CODE: 29-01
PO BOX: 420
TRENTON, NJ 08625-0420
MIKE.GAGLIANO@dep.nj.gov
AGENCY PERSON TO CONTACT: MICHAEL GAGLIANO@
(215) 681-1672

QUESTIONS REGARDING THIS PROPOSAL WILL BE ACCEPTED UNTIL JUNE 9, 2002, VIA THE EMAIL CONTACT ABOVE. ALL RESPONSES WILL BE POSTED BY JUNE 13, 2022.

NOTE: CONTRACT AWARD WILL BE CONTINGENT UPON THE VENDOR COMPLETING THE REQUIRED DPA FORMS AVAILABLE ON TREASURY'S WEBSITE:

VENDORS MUST ALSO BE REGISTERED WITH THE STATE OF NEW JERSEY, DIVISION OF REVENUE AND POSSESS A VALID BUSINESS REGISTRATION CERTIFICATE AT TIME OF CONTRACT WORK. VENDOR MUST ALSO PROVIDE A COPY OF THEIR NEW JERSEY CERTIFICATE OF EMPLOYEE INFORMATION OR A COPY OF THE FEDERAL LETTER OF APPROVAL VERIFYING IT IS OPERATING UNDER A FEDERALLY APPROVED OR SANCTIONED AFFIRMATIVE ACTION PROGRAM. VENDORS MUST ALSO BE REGISTERED ON THE STATE OF NJ PURCHASING SYSTEM NJSTART. PLEASE SEE BELOW LINKS FOR REGISTERING.

AFFIRMATIVE ACTION (AA302) AND AFFIRMATIVE ACTION SUPPLEMENTAL FORM
https://www.state.nj.us/treasury/contract_compliance/
http://www.state.nj.us/treasury/purchase/forms/AA%20Supplement.pdf

TO CHECK PROOF OF BUSINESS REGISTRATION AND PRINT CERTIFICATE
https://www1.state.nj.us/tytr_BRC/jsp/BRCLoginjsp.jsp

VENDORS THAT ARE NOT REGISTERED WITH THE DIVISION OF REVENUE CAN COMPLETE BUSINESS REGISTRATION APPLICATION, FOUND ONLINE AT:
http://www.state.nj.us/treasury/revenue/busregcert.shtml

NOTE: ALL VENDORS MUST REGISTER ON NJSTART (THIS IS WHERE VENDORS WILL SUBMIT W-9 INFORMATION).
https://www.njstart.gov/bso

NJSTART: https://www.njstart.gov/bso/view/login/login.xhtml