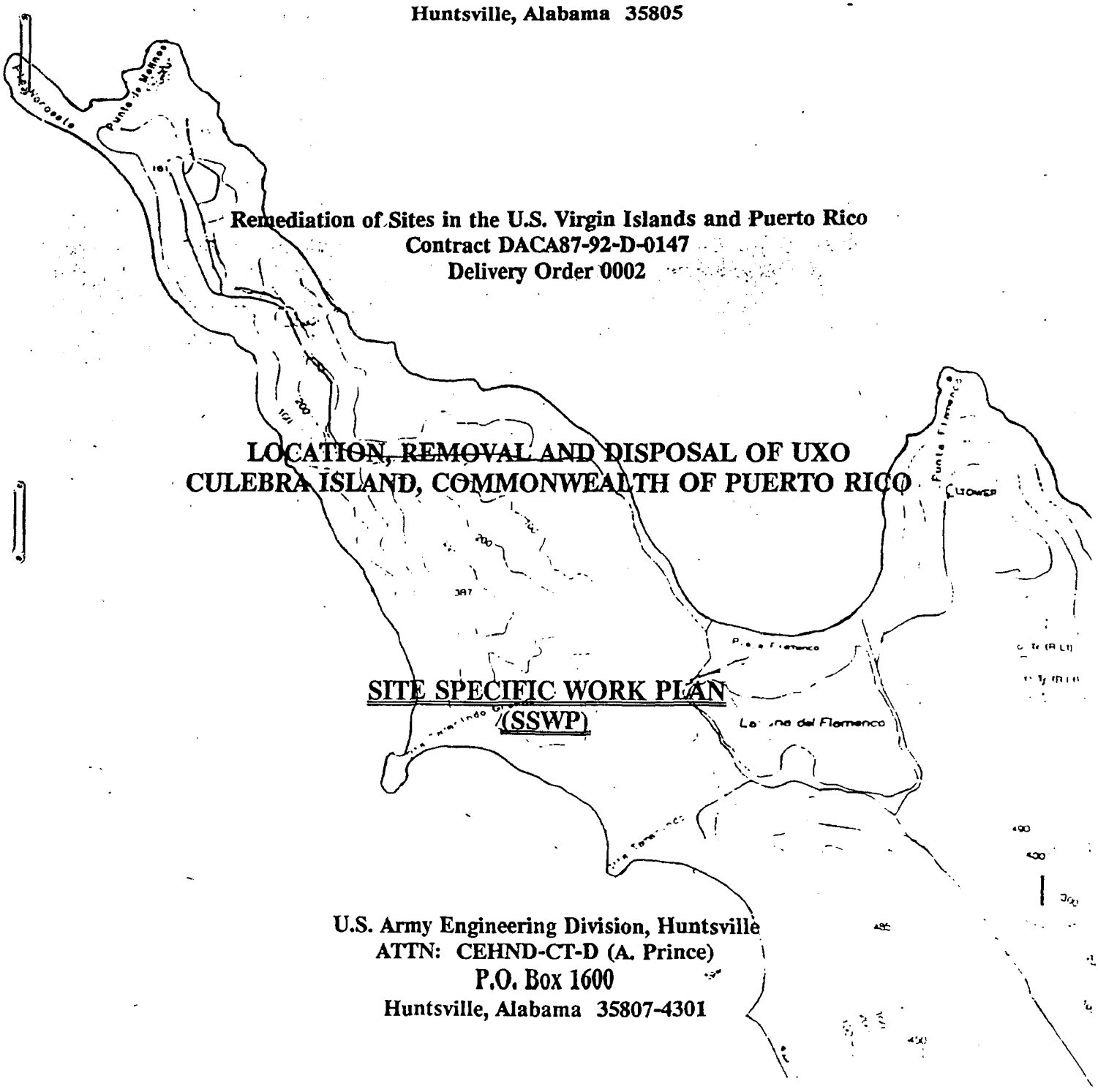
MTA, Inc.
2225 Drake Avenue, Suite 8
Huntsville, Alabama 35805



Remediation of Sites in the U.S. Virgin Islands and Puerto Rico
Contract DACA87-92-D-0147
Delivery Order 0002

LOCATION, REMOVAL AND DISPOSAL OF UXO CULEBRA ISLAND, COMMONWEALTH OF PUERTO RICO

SITE SPECIFIC WORK PLAN (SSWP)

U.S. Army Engineering Division, Huntsville
ATTN: CEHND-CT-D (A. Prince)
P.O. Box 1600
Huntsville, Alabama 35807-4301

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LOCATION, REMOVAL AND DISPOSAL OF UXO CULEBRA ISLAND, COMMONWEALTH OF PUERTO RICO

BASIC WORK PLAN
SITE SPECIFIC WORK PLAN
(SSWP)

U.S. Army Engineering Division, Huntsville
ATTN: CEHND-CT-D (A. Prince)
P.O. Box 1600
Huntsville, Alabama 35807-4301

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LOCATION, REMOVAL AND DISPOSAL OF UXO
CULEBRA ISLAND, COMMONWEALTH OF PUERTO RICO
BASIC WORKPLAN

1.0. References.

1.1. AR 385-40. Accident Reporting and Records, April 1987, with USACE Supplement.

1.2. EM 385-1-1. Safety and Health Requirements Manual, October 1992.

1.3. TM 9-1300-206. Ammunition and Explosives Standards.

1.4. CEHND UXO Guidance. Corps of Engineers - Huntsville Division, Safety Concepts and Basic Considerations for Unexploded Ordnance (UXO).

1.5. CEHND Accident Prevention Guidance. CEHND Accident Prevention Plan Guidelines For Ordnance Projects.

1.6. DOD 4160-21.M. Defense Utilization and Disposal Manual

1.7. Disposal Feasibility Report. MTA letter report, Disposal Alternatives Feasibility and Recommendations, 19 April 1993.

2.0 Introduction.

2.1. Scope. MTA, Incorporated will perform Interim Removal (IR) of Unexploded Ordnance (UXO) and will install warning signs/devices within designated areas of Culebra Island, Commonwealth of Puerto Rico (PR) under provisions of The Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and Section 300.400 of the National Contingency Plan. This site specific work plan SSWP delineates the methods of accomplishing all field tasks required to perform IR and warning device installation at the designated areas on and surrounding Culebra Island.

Sufficient detail is provided to describe all field activities central to the remediation operation. Peripheral activities, contingencies, and emergencies are addressed in more detail in annexes to this plan.

A copy of the contractual Scope of Work for delivery order 0002 of contract DACA87-92-D-0147 is included at the end of this basic work plan.

2.2. Responsibilities and Qualifications. All UXO personnel will be graduates of the U.S. Naval EOD School, Indian Head, Maryland. Resumes of all UXO personnel will be

submitted to the U.S. Army Corps of Engineers Contracting Officer for approval. UXO personnel shall have never been removed from an EOD position because of personal reliability reasons. Resumes for UXO personnel to be employed for this contract are provided in Annex G.

2.2.1. Senior UXO Supervisor. The Senior UXO Supervisor has direct responsibility for all UXO operations on the site. He shall have prior experience supervising multiple-team operations and range clearance operations. He shall have at least 15 years active duty military EOD experience. Three years of civilian contractor UXO experience may be substituted for three years of active duty military EOD experience. Twelve years of active duty military EOD experience is not waiverable for this position.

2.2.2. UXO Supervisors. UXO Supervisors are responsible for the on-site activities of UXO and non-UXO personnel directly assigned. In addition, UXO Supervisors may be temporarily assigned to perform the Senior UXO Supervisor's tasks when the Senior UXO Supervisor is not physically on site. UXO Supervisors shall be experienced in range clearance operations. Each supervisor shall have at least seven years active military EOD and contractor UXO experience. Three years active military duty EOD experience is not waiverable for these positions.

2.2.3. UXO Specialists. UXO Specialists perform specific tasks as directed by UXO Supervisors and/or the Senior UXO Supervisor. UXO Specialists may not be tasked with supervisory duties. UXO Specialists shall have more than three years active military EOD experience. A UXO Assistant with at least five years combined military EOD and contractor UXO experience may be assigned as a UXO Specialist. Three years of active duty military EOD experience, however, is not waiverable for these positions.

2.2.4. Quality Control Specialist. The Quality Control Specialist serves as an independent evaluation tool for the corporate QA/QC program. The Quality Control Specialist shall have the same qualifications as the UXO Supervisor.

2.2.5. Site Safety Officer. The Senior UXO Supervisor shall serve as the Site Safety Officer in the execution of this delivery order.

2.2.6. First Aid/CPR Attendant. At least two personnel at each land based work site will be certified in first aid/CPR. These individuals will serve in the additional capacity of First Aid/CPR Attendants. First Aid/CPR Attendants shall be qualified for First Aid/CPR positions through documented completion of first aid/CPR courses.

2.3. Assumptions. The following assumptions were made in the development of this work plan and its annexes:

a. The public meeting will be scheduled prior to commencement of removal activities.

b. The Property Management Plan incorporated in Annex C has been accepted for use throughout the contract and requires no modification for this delivery order.

2.4. Points of Contact.

2.4.1. Contractual Point of Contact. MTA's point of contact for contractual matters of this project is Ms. Yvonne Sanders, (205) 883-4451.

2.4.2. Technical Point of Contact. MTA's point of contact for technical matters of this project is Mr. Jack Thomas, (205) 883-4451.

3.0. Project Overview.

3.1. Objectives. The MTA, Incorporated Task organization (herein after referred to as the Team) will accomplish the following:

3.1.1. Interim Removal of OEW. Location, removal and disposal of Ordnance and Explosive Waste (OEW) within the designated area (approximately three acres) located on the section of Culebra's northwestern peninsula which is controlled by the Puerto Rico Department of Natural Resources (DNR). OEW removal activities will be conducted in accordance with the provisions of reference 1.4.

NOT IN CONTRACT

3.1.2. Installation of Warning Signs/Devices. Placement of buoyed or post mounted UXO warning signs around surrounding cayos of Culebra Island, including Cayo de Aqua; Cayo Lobo; Cayo Alcarraza; Los Gemelos; Culebrita Island; Cayo Tiburon; Cayo Geniqui; and Cayo Botella.

DELETE

3.1.3. Assist in the Conduct of Community Relations. Assist in conducting public meetings; develop and maintain written records of public meetings; coordinate press releases and other media events with the CEHND Project Manager and Public Affairs Office.

3.2. Area. Annex H provides an overview of the history, topography and climate of the subject areas of operations.

3.3. Participating Organizations. The following organizations/firms compose the Team:

3.3.1. MTA, Incorporated. MTA Inc., as the prime contractor for this project, is responsible for:

a. Insuring completion of all tasks assigned in the basic contract and subsequent delivery orders.

b. Providing technical direction and allocating resources to subcontractors.

c. Performing actual disposal and other tasks as required in IR and warning device installation efforts.

3.3.2. Wyle Laboratories, Incorporated. Wyle Laboratories have been subcontracted to provide support services associated with this contract. Wyle will provide the following:

a. Development/review of work plans as directed by the prime contractor.

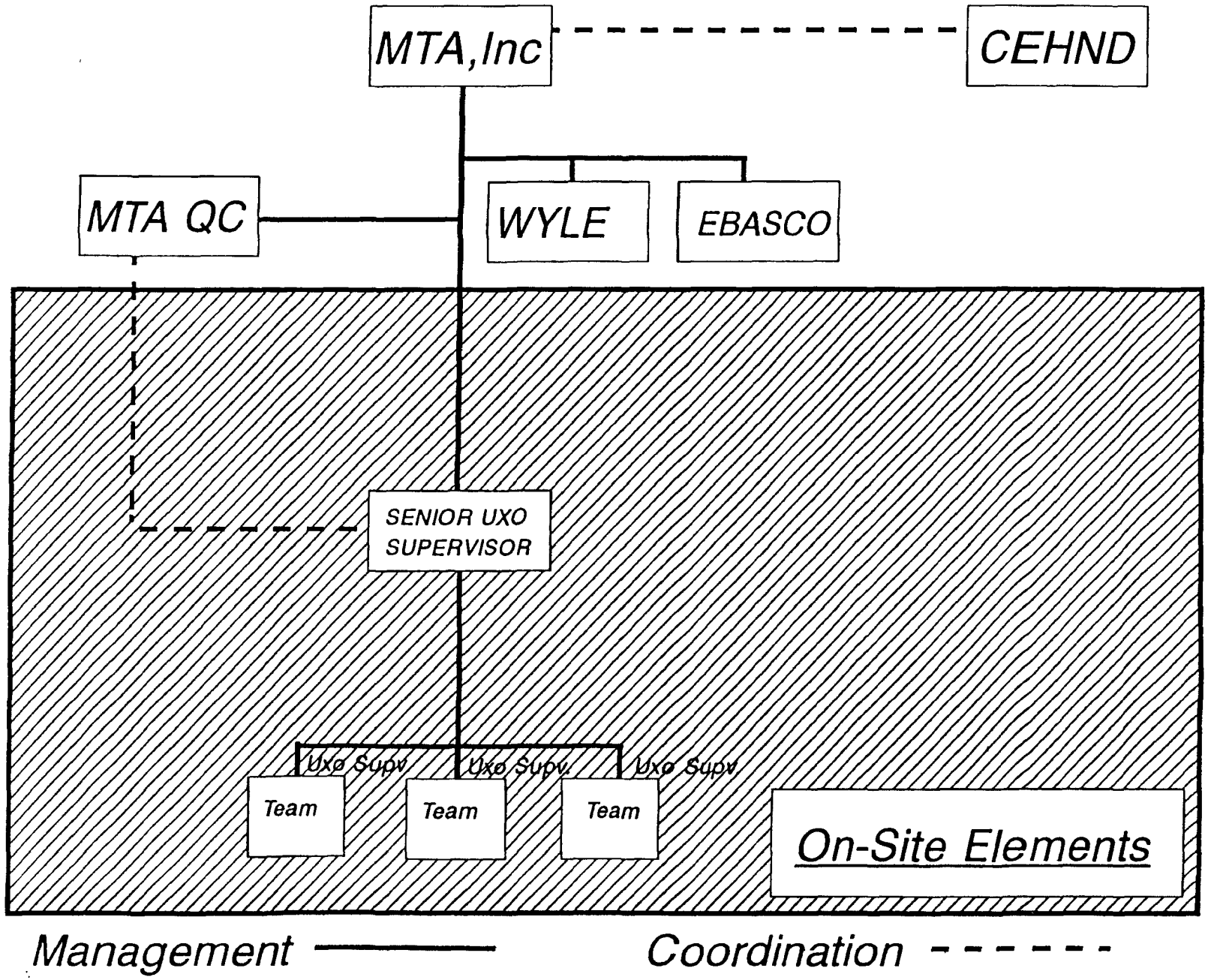
b. Location, removal and disposal of OEW as directed by the prime contractor.

Wyle management is responsible for insuring that their employees comply with safety programs/guidance and contractually established resource allocations.

3.3.3. EBASCO. EBASCO has been subcontracted to provide health, safety and environmental plans development and review services, as required. EBASCO performs these tasks per task orders from the prime contractor.

3.4. Task Organization. Figure 2.4 shows the task organization for this project.

TASK ORGANIZATION



4.0. Operations.

4.1. Mobilization.

4.1.1. Personnel.

4.1.1.1. Preparation and Movement of UXO Personnel.

4.1.1.1.1 Preparation. MTA will insure that all personnel subject to deployment under this delivery order:

a. Have all required immunizations.

b. Meet initial qualifications for assigned positions.

c. Have been accepted by CEHND to participate in the project.

4.1.1.1.2. Movement. MTA will schedule and obtain airline tickets for all MTA personnel deploying to Culebra. MTA will coordinate with subcontractors to provide guidance and resources for travel of subcontractor personnel. Personal clothing and equipment will accompany individuals during travel, but additional personal clothing and equipment (up to 200 pounds) may be shipped to Culebra with other project tools and equipment.

4.1.1.2. Accommodations for Deployed Personnel. Personnel will be lodged in local rental facilities on Culebra. In most cases these will be private residences capable of housing more than one individual. Kitchen facilities will be made available whenever possible to provide personnel with the option of preparing their own meals. The presence or absence of these facilities will not effect per diem rates for on-site personnel.

4.1.1.3. Local Labor. The Senior UXO Supervisor will interview and evaluate potential local laborers early in mobilization. The Senior UXO Supervisor will notify MTA corporate headquarters of those personnel selected for hire, and MTA will process employment documents as required. Local labor will be MTA employees.

4.1.1.4. Training. Deploying personnel will receive initial training in the following during mobilization and on-site operations:

a. Equipment training. Provided as needed, and conducted in accordance with operators manuals provided with equipment.

b. Vehicle operations training. Provided to familiarize vehicle operators with local laws/practices; provide guidance for explosive carriers; and to indicate operator proficiency to supervisors.

c. Environmental protection training. Provided to familiarize personnel with knowledge of species, habitats and protective measures associated with the project.

d. Safety training. Safety training throughout the project is addressed in Section B-6 of Annex B, (APP).

4.1.2. Tools, Equipment, Supplies and Vehicles.

4.1.2.1. Acquisition. Tools, equipment and vehicles will be obtained to the maximum extent from CEHND as government furnished equipment (GFE). Purchase of items required for the project will be done in accordance with Annex C, Property and Equipment Plan.

4.1.2.2. Movement. Tools, equipment, supplies, vehicles and additional personal baggage will be consolidated as much as possible at point of acquisition (e.g., Huntsville and Puerto Rico) for containerization and shipment to Culebra. Individuals will be permitted to ship a maximum of 200 pounds of personal clothing/equipment (see paragraph 4.1.1.1.2.). Commercial shipping firms will be contracted to move equipment to Culebra. MTA will designate the individual responsible for coordinating these shipments.

4.1.2.3. Staging. The Senior UXO Supervisor will direct the receipt, inspection, acceptance and storage of all initial project material arriving in Culebra. Material will be placed in secured storage after initial inspection, which includes operational testing of electrical and mechanical tools and equipment. Storage facilities are described in paragraph 3.1.4.3.

4.1.2.4. Explosives Storage. Binary explosives will be used as primary explosives, and do not require conventional explosive storage measures. Binary explosives components will, however, be stored separately and secured from pilferage. Blasting caps will be stored in accordance with the provisions in Annex B, Accident Prevention Program. If possible, explosives will be stored with local facilities/agencies storing explosives for other projects.

4.1.2.5. Security and Accountability. The Senior UXO Supervisor will ensure that tools, equipment, supplies and vehicles are stored and secured in accordance with Annex C, Property Equipment Plan (PEP).

4.1.3. Business Permits. Local business permits are not required in conjunction with this project.

4.1.4. Site Layout/Facilities Establishment.

4.1.4.1. On-site Command Post (CP). One portable office trailer will be used as the on-site CP. This facility will be used to perform administrative tasks, control access to the work area, prepare reports, and conduct briefings. The trailer will be located at the

entrance to the work area, across the dirt road from the DNR guard shack. By locating the trailer here, the on-site personnel may oversee on-going work and control access to the work site. Electrical service is already at the site and a line can be run to the trailer. Sanitary facilities are also available. The Senior UXO Supervisor will establish the on-site CP at a location which:

a. Is a safe distance from disposal sites.

b. Permits control of the main avenue of vehicular and pedestrian traffic into the area.

c. Adequately services electrical, communications and security concerns with the project.

4.1.4.2. Survey and Marking. The Civil Engineer will be responsible for surveying the work area(s), establishing markers and mapping boundaries. The Civil Engineer will consult with the Senior UXO Supervisor and the CEHND on-site representative to insure correct delineation of the operational area(s). Markers and boundaries will be annotated on and operational map of the site. UXO qualified personnel will accompany the Civil Engineer during surveying activities. UXO personnel and/or local laborers may assist in the process at the direction of the Civil Engineer.

4.1.4.3. Storage Facilities. One portable storage trailer will be used to secure all equipment and materials (except explosives) on site. The trailer will be located in a location which is accessable to the main road to the east of the guardhouse and entry gate.

4.1.4.4. Pre-Remediation Site Inspection. The Senior UXO Supervisor and the CEHND on-site representative will perform a joint inspection of the site prior to commencement of the project. The inspection and deficiencies will be noted in the site log book. Deficiencies will be corrected prior to commencement of UXO operations.

4.1.5. Public Affairs.

4.1.5.1. Public Meeting. The contractor will assist in the conduct of a public meeting as specified in the scope of work. The CEHND Project Manager will designate the time and location of the meeting. The Senior UXO Supervisor will obtain the services of a local secretary to record conversations and events at the meeting. Secretarial hours have been programmed for this purpose.

4.1.5.2. Media Inquiries. Media inquiries received at any point in the project will be referred to CEHND representatives.

4.1.5.3. Hazards Assessment. An assessment of possible future hazards at the work site will be included in the final removal report. This assessment will synopsize the actions performed at the site and will alert the USAEDH Project Manager to the possibility

that UXO/OEW may still be present. In addition, it will describe points of contact and procedures to take for UXO/OEW discoveries. This assessment will not be released to the public by MTA or any subcontractors.

4.2. UXO Operations. See ANNEX A, UXO Subplan

4.3. Demobilization.

4.3.1. Removing Contractor Facilities. Trailers and all other temporary structures will be removed from the area as soon as possible after CEHND Project Manager approval of all work performed.

4.3.2. Restoring Effected Areas. See Annex E, Environmental Protection Plan (EPP).

4.3.3. Demobilization of Personnel/Equipment. Personnel will be demobilized from the work site as soon as possible after completion of work in order to control project costs, but not before receiving authorization from the CEHND Project Manager. No tools or equipment will be removed from the site until CEHND Project Manager's acceptance of the work effort. At this point, all tools and equipment will be redeployed to MTA, their original owner, or follow-on work sites.

4.3.4. Final Check of Area. The Senior UXO Supervisor and a corporate QC representative will conduct a joint final inspection of the area at the conclusion of all work activities. See Annex E, Environmental Protection Plan, for more details.

4.3.5. Debriefing. A debrief of the entire operation will be performed and will cover the following areas:

a. Equipment usage/malfunctions.

b. Problem areas.

c. Communications.

d. Lessons learned.

e. Overall methodology.

f. Safety

4.4. Recording Remediation Activities. Videotape footage will be made of the following project elements:

a. Site conditions prior to operations.

b. Minimum two examples of brush clearance activity.

c. Minimum two examples of magnetometer sweeps.

d. Minimum two examples of UXO/OEW transport to disposal area.

e. Minimum two examples of UXO/OEW disposal operations.

f. Segregated scrap and categorized UXO/OEW debris.

g. Post operation site conditions.

5.0. Medical Support. See Annex B, Accident Prevention Plan (APP).

6.0. Communications.

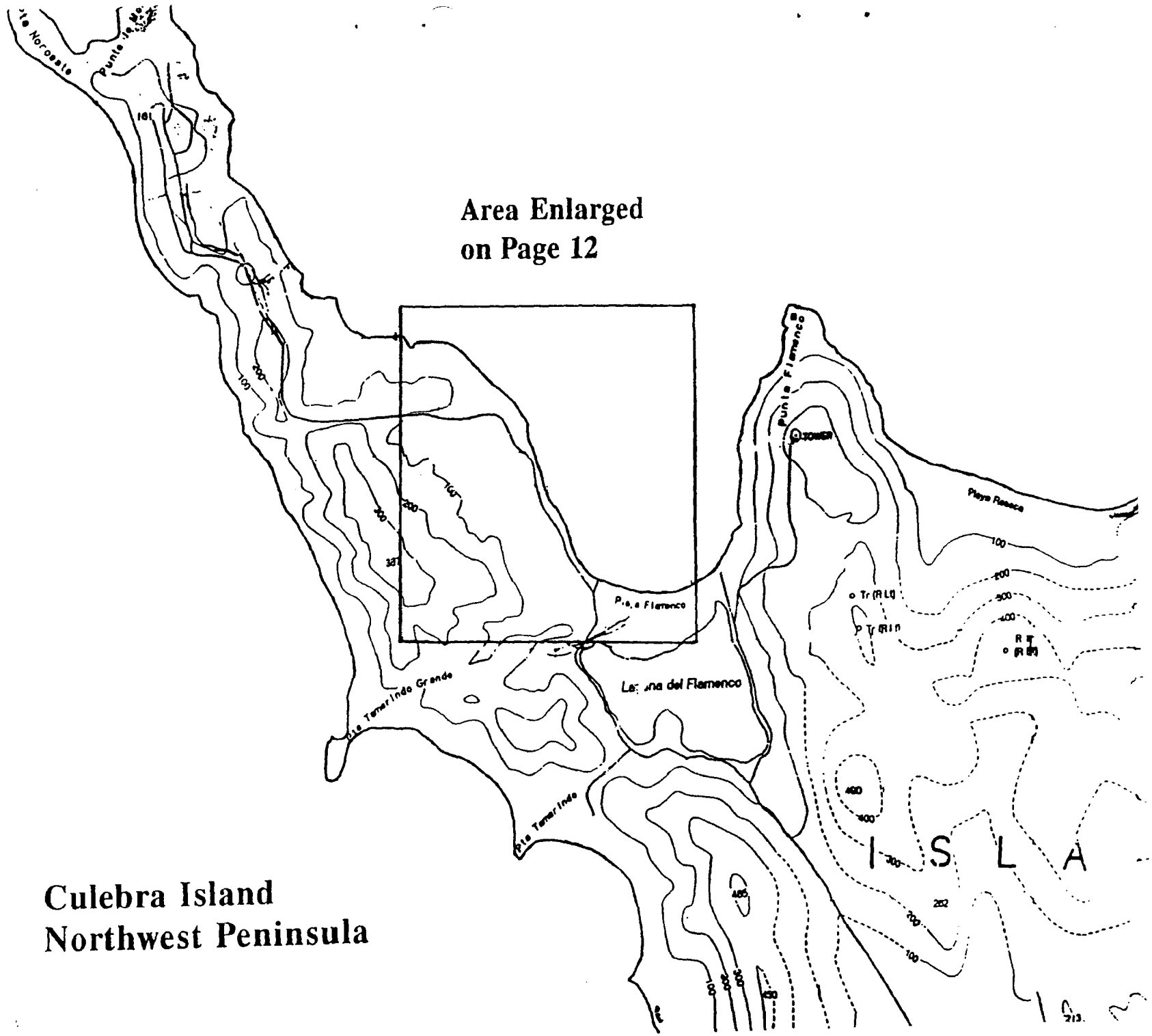
6.1. Internal. Primary site communications will be by Motorola Model MT 1000 portable FM radios. The Senior UXO Supervisor and each UXO Supervisor will have radios. The Senior UXO Supervisor will also have a portable cellular telephone for emergency use.

6.2. External. Standard telephone service, with answering machine and FAX capabilities, will be established in Culebra. These services will be used for communications between on-site project management, corporate entities, and government agencies. These facilities will be at the disposal of CEHND personnel and others as authorized by the CEHND Project Manager. The Senior UXO Supervisor may establish non-emergency external communications at the on-site command post or at the temporary lodging facilities being used by the work crews. Location should be determined after considering operations costs (including set-up) and security requirements.

7.0. Safety Program. See ANNEX B, Accident Prevention Plan (APP).

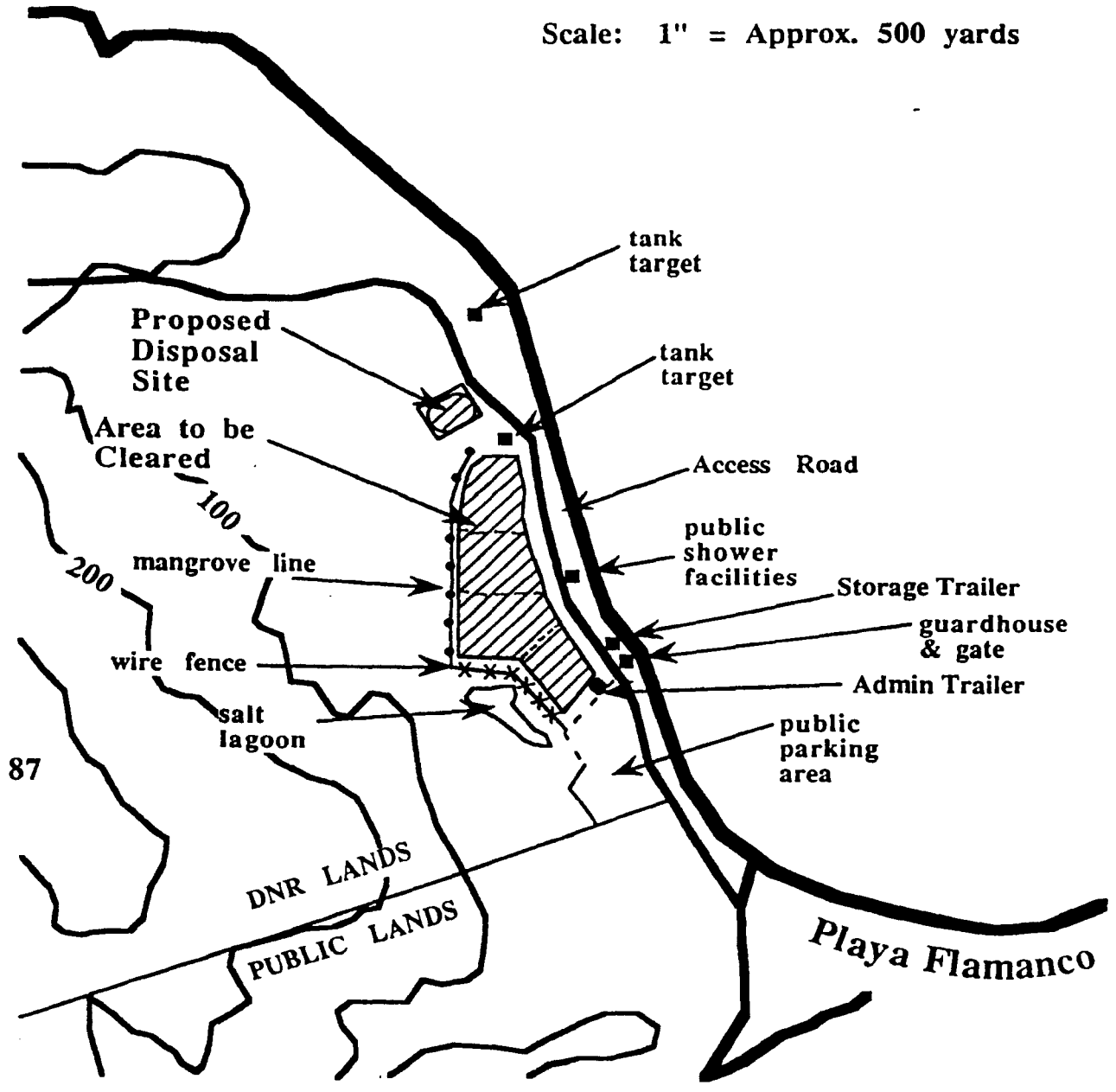
8.0. Environmental Protection. See ANNEX E, Environmental Protection Plan (EPP).

9.0. Quality Control. See ANNEX F, Quality Control (QC) Plan.



Culebra Island
Northwest Peninsula

MTA, Inc., July 8, 1993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tank target
Proposed Disposal Site
Area to be Cleared
Access Road
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200
mangrove line
public shower facilities
Storage Trailer
guardhouse & gate
wire fence
Admin Trailer
salt lagoon
public parking area
87
DNR LANDS
PUBLIC LANDS
Playa Flamanco

Attachment 1

Scope of Work
Delivery Order 0002
Contact DACA87-92-D-0147

SCOPE OF WORK
Interim Remedial Action
Culebra Island National Wildlife Refuge
and Adjacent Cayos, P.R.

1.0 BACKGROUND AND GENERAL STATEMENT OF WORK.

1.1 The work required under this Scope of Work (SOW) falls under the Defense Environmental Restoration Program (DERP). Ordnance and explosive wastes (OEW) may exist on property that was formerly owned by Department of Defense (DOD). This SOW addresses the OEW that may exist on the property listed below.

1.1.1 The OEW is a safety hazard and constitutes an imminent and substantial endangerment to site personnel and the local populace. During this Interim Remedial Action, it is the Government's intent to destroy, by detonation, on site, all UXO encountered. This action will be performed in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Section 104, and the Final Contingency Plan (NCP), Section 300.400; therefore, permits for this action are not required.

1.1.2 These OEW clearances do not fall under the Resource Conservation and Recovery Act hazardous waste management requirements.

1.2 GENERAL DESCRIPTION.

1.2.1 The War Department's use of Culebra Island National Wildlife Refuge area and the adjacent cayos began in 1940 with the transfer of portions of Culebra Island from the Department of the Interior to the Navy for use as a bombing and gunnery training range. These areas were deactivated in 1975 and transferred back to the Department of Interior, U.S. Fish and Wildlife Service (USFWS), the Department of Natural Resources, the Puerto Rico Port Authority, the municipality of Culebra, and the Department of Housing, Commonwealth of P.R.

1.2.1.1 These areas were part of the U.S. Naval Station, Roosevelt Roads, Culebra Island and were utilized by the Navy as a coaling station, training area, auxiliary airport, weapons range, and bombing and gunnery range. Parts of the property were utilized by others by virtue of outgrants from the Navy, prior to the Navy declaring the property as excess. The remainder of the property was under DOD control during the period of DOD ownership.

1.2.2 This SOW covers the following individually described areas:

1.2.2.1 Culebra Island, Northwest Peninsula: Area was primarily used for shore bombardment centered on white-washed

rocks along the shoreline, simulated gun emplacements, Sherman tanks, and fuel drums. Mid-peninsula was used for napalm and aircraft delivery of inert bombs and rockets. A wire "cyclone" fence and fire break delineated the southeast boundary of the bombardment area. From the entrance to the tip of the peninsula the Navy bombed the area from 1941 to 1975, with some areas having greater concentration than others. The north part of the peninsula is used presently by the U.S. Fish and Wildlife Service Culebra National Wildlife Refuge (USFWS) with the southern part of the peninsula used by the Department of Natural Resources for camping, hunting, scuba diving, fishing, and walking.

1.2.2.2 Cayo de Aqua or Aqua Cay: This island was used for offshore and aerial bombardment and has one of the greatest densities of observable ordnance. Most are heavily exposed, and it is not known what percentage is live. This island was used extensively for night fire.

1.2.2.3 Cayo Lobo or Cross Cay: Cayo Lobo has two bunker observation posts and a series of tire targets presumably used for air-to-ground small arms fire or strafing. No large munitions are commonly found on the island.

1.2.2.4 Cayo Alcarraza or Fungy Bowl: This island also has a high density of ordnance. It is a very steep island and is difficult and dangerous to work on. The island was used for all types of conventional ordnance. High- and low-level radar bombing and searchlight target bombing was used here.

1.2.2.5 Los Gemelos or Twin Rocks: Was used for dive-bombing and air-to-ground missiles, loft and over-the-shoulder weapons delivery. Targets here received air-to-ground missiles with practice ordnance.

1.2.2.6 Culebrita Island: Culebrita provided strafing targets on and offshore on the western end of the island at Botella Beach, with live and dummy-warhead torpedoes fired at a sheer cliff face on the northwest side of the island (Marc Point).

1.2.2.7 Cayo Tiburon or Shark Key: Was used for heavy conventional ordnance, live and inert.

1.2.2.8 Cayo Geniqui or Palada Cays: Geniqui was also used for heavy conventional ordnance.

1.2.2.9 Cayo Botella or Cayo Ladron: A flat, vegetated key near Culebrita which was also used for Navy bombardment.

2.0 OBJECTIVE.

2.1 Eliminate the immediate threat to human health and safety by safely locating, identifying, and disposing of all OEW located within the Department of Natural Resources (DNR) area on Culebra's Northwest Peninsula where DNR is constructing a Nature Trail.

NOT IN CONTRACT DELETE

2.2 Safely locate and emplace bilingual explosive ordnance warning signs at the above sites in a manner which will identify the UXO hazard at these sites.

3.0 DESCRIPTION OF SERVICES.

3.1 TASK (ONE): SITE VISIT AND WORK PLAN (WP).

3.1.1. Prior to preparation of the WP, a site visit, not to exceed 5 days, is authorized. The contractor shall coordinate the number of days and any site visit travel plans with the CEHND Project Manager. The site visit team shall not exceed three persons, one of whom shall be a Senior UXO Supervisor. The site visit shall include coordination with the USFWS Culebra National Wildlife Refuge, Department of Natural Resources, local emergency management personnel, local Environmental and Land Management offices, Fire Department, law enforcement agencies, local Army and Navy Explosive Ordnance Detachment, on- and off-post medical facilities, med-evac procedures, the nearest installation Defense Reutilization & Marketing Office (DRMO), and local airports to determine FAA restrictions over sites. During the site visit, environmental concerns and endangered species in the clearance and sign posting areas shall be identified.

3.1.2. Disposal Alternatives. Based on the site visit, the contractor shall describe feasible alternatives for disposal and recommend the safest and most cost effective method of treatment and disposal of the explosive ordnance, inert ordnance, explosives, and debris. This letter proposal shall be forwarded to the contracting officer (CO). The method of treatment will be selected and approved by the CO after which the contractor will then proceed with preparation of the WP.

3.1.3. The contractor shall prepare and submit a site specific WP to the Government for approval prior to beginning any OEW-related activities at the site. The WP shall outline the contractor's proposed method of accomplishing the objectives and the following tasks. The WP shall include site-specific training, equipment, storage facilities, demolition materials, security and accountability system, personal protective equipment (PPE), responsibilities and qualifications of personnel, organizational structure to include subcontractor(s) if applicable, internal and external communications, project office facilities, on-site and off-site emergency medical arrangements to include transportation, and the completion of ENG Form 3394 in the event of an accident. The WP shall include, as a minimum, the following sub-plans:

3.1.3.1. UXO Operational Plan.

3.1.3.2. Accident Prevention Plan. The WP shall include a comprehensive Accident Prevention Plan (APP) as outlined by references 5.2 and 5.5. The APP shall be prepared for this delivery order in lieu of the SHERP described in Section C paragraph 3.2.1.3 of the contract.

3.1.3.3. Property Equipment Plan (PEP). The contractor shall prepare and submit a detailed PEP describing the equipment to be employed to perform all necessary operations. The PEP shall describe and quantify both field equipment (such as site trailer, track hoes, back hoes, trucks, bulldozers, front-end loaders, chain saws, magnetometers, etc.) and office equipment (such as computer/printer, Telefax, copier, 2-way radios, camcorder, telephones, etc.) and consumable supplies (both office and field) intended to be used. The contractor shall describe in the PEP the source and rental/acquisition costs for all field and office equipment and consumable supplies. Three quotes must be obtained and provided in the PEP for each piece of field and office equipment, and the PEP must indicate that the vendor with the lowest price quote was used for the rental/acquisition. The contractor shall indicate in the PEP when rental cost exceed acquisition costs for a particular piece of equipment over the life of the project. In these instances, the CO may direct the contractor to purchase that equipment. After CO approval of the work plans/Property Equipment Plan, additional field/office equipment, and consumable supplies in excess of $200 may not be rented/acquired without CO approval.

3.1.3.4 Work, Data, and Cost Management Plan (WDCMP). The contractor shall prepare and submit a WDCMP which describes how the work is to be managed and accomplished. The WDCMP shall contain a schedule for the accomplishment of the tasks. The schedule shall contain milestones for delivery of all deliverables and associated costs, show the task components in their relative chronological positions, and state the intervals between milestones in terms of working days following the previous events. More detailed informations in the WDCMP may be required on an area by area basis. The WDCMP shall also consist of the organization structure, the assignment of functions, duties and responsibilities, and functional relationships among organizational elements that will participate in the accomplishment of the tasks.

3.1.3.5 Quality Control Plan.

3.1.3.6 Site Specific Environmental Protection Plan.

3.1.3.7 Other Sub-plans. Other sub-plans identified in Section C, Subsection 3.2.1 of the basic contract are not required for this delivery order.

3.1.4. The contractor shall submit a draft WP for review and a final WP for approval in accordance with paragraph 4.1, this SOW.

3.1.5 The contractor shall notify the CEHND Project Manager, identified in paragraph 4.0, this SOW, at least 10 calendar days in advance of mobilization.

3.2 (TASK TWO) PERFORM COMMUNITY RELATIONS.

3.2.1 The contractor shall assist in arranging a local public meeting to inform the public of the purpose of this clearance, the procedures to be followed, and the cooperation requested.

3.2.1.1 A written record of the public meeting attendees, questions, and answers shall be provided as part of the Final Report.

3.2.1.2 All press releases and media appearances shall be coordinated with and approved by the CEHND Public Affairs Office.

3.3 (TASK THREE) LOCATION SURVEY AND MAPPING.

3.3.1 All surveying or mapping crew(s) shall be escorted by an UXO Supervisor. A magnetometer shall be used to survey the location for the establishment of any required monuments or markers.

3.3.2 As needed, the contractor shall survey and establish the boundaries of areas stated under subsection 1.2 of this SOW. The contractor shall mark the corners and outer edges of the designated areas with stakes or other visible temporary markers.

3.3.3 Items and data to be submitted to CEHND as part of this task are as follows:

3.3.3.1 A tabulated list of all control points showing the adjusted coordinates established and/or used for this survey.

3.3.3.2 A "Report of Establishment of Survey Mark" (Description Card) on each control point established and/or used for surveying. The Description Cards shall be 5" x 8" [12.7x20.3cm]) with one description per card. In addition to the name or ID number of the control points, the cards should show the adjusted coordinates, a written description for locating the control points, and a sketch showing how to locate the control points.

3.3.3.3 Drawings. All maps shall be drawn at a scale no smaller than 1 inch = 200 feet (1:2400) on reproducible (mylar) drawings. One original and two blue line prints of each final drawing shall be delivered to CEHND.

3.3.4 Schedule. All work and services under this task shall be completed and submitted to CEHND no later than the submission of the draft Removal Report.

3.4 TASK (FOUR): VEGETATION REMOVAL AND RESEEDING.

3.4.1 The contractor shall furnish all personnel and equipment necessary to mow grass/weeds and remove all bushes and trees, excluding trees larger than 3 inches (7.62cm) in diameter measured 6 inches (15.24cm) from grade, within the areas specified by the CEHND Safety Representative.

3.4.2 Upon conclusion of work in each area listed in subsection 1.2, the contractor shall restore locations disturbed by his operations. Excavated and trafficked areas shall be returned to natural grade and indigenous vegetation re-established by seeding.

3.5 (TASK FIVE) PERFORM UNEXPLODED ORDNANCE REMOVAL.

3.5.1 The contractor shall furnish all necessary personnel and equipment to perform a surface and subsurface clearance of the project sites and to detonate all UXO encountered.

3.5.2 All UXO operations shall comply with the U.S. Army Corps of Engineers, Huntsville Division, Safety Concepts and Basic Considerations for Unexploded Explosive Ordnance (UXO). Only approved UXO personnel shall perform UXO-related tasks. UXO procedures include, but are not limited to, gaining access (manual excavation) to subsurface UXO, identification, transportation, storage, and disposal of UXO.

3.5.2.1 A planned, systematic approach shall be utilized to search and clear the project sites. The proposed methodology shall be outlined in the WP.

3.5.2.2 During subsurface operations, the contractor shall utilize a magnetometer capable of detecting a 20mm projectile at a depth of 2 feet (0.61m). The contractor shall excavate to a maximum depth of 2 feet (0.61m) to determine the identification of a magnetometer reading. Any deeper excavation shall require the prior approval of the CEHND Safety representative. All access holes and detonation pits shall be filled when the project is completed.

3.5.2.3 Magnetometers shall be field tested daily to ensure they are operating properly. This shall be accomplished by planting a magnetic item/inert UXO at a set depth and determining the standard indication. If a magnetometer does not meet the standard, it shall be removed from service until calibrated/repaired.

3.5.3 All UXO related inert scrap shall be collected and transported to the closest DRMO by the contractor. The contractor shall furnish the necessary equipment, personnel, and documentation to accomplish proper turn in of these items as described under Task Six.

3.5.4 The contractor shall maintain a detailed accounting of all UXO and UXO components encountered on the project sites. This accounting shall include the amounts of UXO, their identification, condition, disposition, and location/mapping. This accounting shall be a part of the Final Report.

3.5.5 An accountability system shall be utilized that accounts for all explosive materiels received and expended in the disposal of UXO.

3.5.6 If a UXO is encountered, where it is determined that it cannot be moved and the situation precludes detonating the UXO in-place, the on-site CEHND representative will request EOD support.

3.5.7 The contractor shall provide on-site communication equipment.

3.5.8 If suspected toxic chemical UXO is encountered, operations shall cease immediately within 500 meters of the site, the item secured by two UXO Specialists, and CEHND-ED-SY notified who will in turn request EOD support.

3.5.9 Activities of this task shall be video-taped in color using "Hi-grade" VHS video tape. A total of 45 to 60 minutes of footage, with an oral background describing the activities, shall be submitted on a single tape cassette.

3.6 (TASK SIX) TURN IN OF RECOVERED INERT UXO AND RELATED SCRAP.

3.6.1 The contractor shall furnish all necessary personnel and equipment to turn in all recovered inert UXO related scrap, non UXO-related scrap into the nearest DRMO. The methodology to accomplish this task shall be proposed in the WP. The contractor shall coordinate with the DRMO during the site visit in Task One.

3.6.2 Inert UXO-related scrap shall be segregated from other types of scrap. Inert ordnance items shall be vented in accordance with Safety Concepts and Basic Considerations prior to turn in.

3.6.3 The contractor shall complete a DD Form 1348-1a as turn-in documentation. Instructions for completing this form are contained in the Defense Utilization and Disposal Manual, DOD 4160-21.M. The contractor shall prepare and the Senior UXO Supervisor shall sign a certificate as follows:

"I certify that the property listed hereon has been inspected by me, and, to the best of my knowledge and belief, contains no items of a dangerous nature."

3.6.4 DRMO turn-in documentation receipts shall be submitted as a component of the Final Report.

3.7 (TASK SEVEN) PERFORM QUALITY CONTROL.

3.7.1 The contractor shall furnish the necessary personnel and equipment to administer a Quality Control (QC) Program to manage, control, and document contractor and subcontractor activities. The methodology to accomplish this task shall be proposed in the WP. The QC activities shall be documented and included in the Final Report.

3.7.2 The individual performing the UXO QC shall have at least the same training and experience as an UXO Supervisor.

3.7.3 The execution of this task shall conform to the approved WP.

3.8 (TASK EIGHT) PREPARE AND SUBMIT FINAL REPORT. At the conclusion of all field activities, the contractor shall submit the Final Report which consist of the following:

3.8.1 All original surveying and mapping data from paragraphs 3.3.3.1 and 3.3.3.2.

3.8.2 Detailed accounting by listed area of all UXO and UXO-related materials located and disposed of.

3.8.3 A system of daily journals of all activities associated with this SOW:

3.8.3.1 A daily journal for each area listed in subsection 1.2 shall be opened with the start of and closed with the completion of each area. Activities endemic to the specific listed area shall be recorded on a daily basis.

3.8.3.2 A daily journal for the site shall be opened upon first arrival for field operations and closed after contractor demobilization at the project site. It shall maintain a daily record of which listed areas are active and of all other activities on site not endemic to any specific area.

3.8.4 A recapitulation of exposure data. This shall include total number of man-hours worked on-site, total motor vehicle mileage, total number of flying hours, and number of flights.

3.8.5 QC documentation.

3.8.6 All DRMO turn-in documentation.

3.8.7 A minimum of 20 4" x 6" (10 x 15cm) color photographs shall be included in the report depicting major action items and UXO discoveries. The original, Final Report furnished to CEHND shall include original photographic prints. Photographs contained in draft submissions and copies of final submissions shall be color reproductions.

3.8.8 Public meeting written record.

3.8.9 A financial breakdown by area and task of all costs and labor hours used to perform this SOW.

3.8.10 The video tape (furnished only to CEHND-PM-OT in one copy).

3.8.11 The contractor will provide a planimetric map (at a scale no smaller than 1 inch = 200 feet [1:2400]). Upon this the contractor

shall show location of search patterns and significant findings with respect to all surface features within the project area..

3.9 CONTRACTOR QUALIFICATIONS. The contractor shall furnish a staff that is qualified through education, training, and experience to accomplish the objective and tasks of this SOW. Employees of the Federal Government, whether military or civilian, shall not be employed by the contractor in the performance of any work under the contract; e.g., during off-duty hours, regular hours, or while on annual leave. Resumes documenting qualifications of UXO and other personnel shall be included in the WP for approval. If UXO personnel are substituted at the project site, their resumes shall be approved by the local CEHND representative prior to their admittance onto the site.

3.9.1. Safety and health training and medical surveillance identified in contract Section C paragraphs 4.6 and 4.9 are NOT required for this project.

3.9.2 UXO personnel and equipment operators shall meet the qualifications outlined in Section C of the basic contract.

4.0 SUBMITTALS. The contractor shall furnish copies of the plans, maps, and reports as identified in paragraph 4.1 to each addressee listed below in the quantities indicated. The contractor shall use overnight delivery services for delivering these plans and reports. Following each submission, comments generated as a result of their review shall be incorporated.

ADDRESSEE	COPIES
US ARMY ENGINEER DIVISION, HUNTSVILLE ATTN: CEHND-PM-OT (MR. FITZPATRICK) 106 WYNN DRIVE HUNTSVILLE, AL 35805-1957	5
US ARMY ENGINEER DIVISION, SOUTH ATLANTIC ATTN: CESAD-PM (MR. S. ERNST) 77 FORSYTH ST, S.W. ATLANTA, GA 30335-6801	1
US ARMY ENGINEER DISTRICT, JACKSONVILLE ATTN: CESAJ-DP-I (MR. BRIDGERS) 400 WEST BAY STREET JACKSONVILLE, FL 32232-0019	1
US ARMY ENGINEERS ANTILLES AREA OFFICE ATTN: CESAJ-DS (~~MR. E. COLON~~) CPT. THIBAULT 400 FERNANDEZ JUNCOS AVENUE SAN JUAN, PUERTO RICO 00901-3299	1

U.S. FISH AND WILDLIFE SERVICE 1
(ADDRESS TO BE PROVIDED)

DEPARTMENT OF NATURAL RESOURCE 1
(ADDRESS TO BE PROVIDED)

COMMANDER 1
547 ORD DET-EODCC
FORT GILLEM, GA 30050-5000

COMMANDER 1
EODGRU TWO DET ROOSEVELT ROADS
USNAVSTA BOX 3635
FPO MAIMI, FL 34051-8701

4.1 Submittals and Due Dates.

DATA ITEM	SUBMITTAL	DUE DATE (Calendar days after award)
	Disposal Report	30 Days
A001	Draft WP	60 Days
A001	Final WP	90 Days
A004	Progress/Meeting Report	120 Days
A002	Draft Removal Report	200 Days
A002	Final Removal Report	230 Days

4.2 Data item A005, Status Report and data item A006, Telephone/Conversation Report are due monthly. The original of each of these reports shall be sent within 10 working days of the end of the reporting period by normal mail to:

US ARMY ENGINEER DIVISION, HUNTSVILLE
ATTN: CEHND-PM-OT (MR. FITZPATRICK)
PO BOX 1600
HUNTSVILLE, AL 35807-4301

with a copy furnished to:

AOD.
U.S. ARMY DIST. JAX
ATTN: ROBERT BRIDGERS
CESAJ-DP-I

US ARMY ENGINEER DIVISION, HUNTSVILLE
ATTN: CEHND-CT-D (MS. ANITA PRINCE)
PO BOX 1600
HUNTSVILLE, AL 35807-4301

US ARMY ENGINEERS
ANTILLES AREA OFFICE
ATTN: CESAJ-DS ~~(MR E. COLON)~~ (LTC S. Benton)
400 FERNANDEZ JUNCOS AVENUE
SAN JUAN, PUERTO RICO 00901-3299

4.3 Project Manager. The designated CEHND Project Manager for this delivery order referred to in Task One is Mr. Roger A.

Fitzpatrick, Ordnance & Technical Programs Division, Directorate of Programs & Project Management; telephone 205-955-1297; fax 205-955-5125.

5.0 REFERENCES.

5.1 AR 385-40 with USACE Supplement.

5.2 EM 385-1-1, CE Safety and Health Requirements Manual.

5.3 TM 9-1300-206, Ammunition and Explosive Standards.

5.4 CEHND Safety Concepts and Basic Considerations for UXO.

5.5 CEHND Accident Prevention Plan Guideline for Ordnance Projects.

5.6 DOD 4160-21.M, Defense Utilization and Disposal Manual.

6.0 GOVERNMENT-FURNISHED.

6.1 Right-of-entry.

7.0 SPECIAL INSTRUCTIONS. The 29 CFR 1926.1009(a) requires personnel to wear protective helmets in areas where there is a possible danger of head injury from impact, or from falling or flying objects, or from electrical shock or burns. During field activities on ordnance projects, hard-hats need not be worn unless a head injury threat is present.

MTA, Inc.
2225 Drake Avenue, Suite 8
Huntsville, Alabama 35805

Remediation of Sites in the U.S. Virgin Islands and Puerto Rico
Contract DACA87-92-D-0147
Delivery Order 0002

LOCATION, REMOVAL AND DISPOSAL OF UXO CULEBRA ISLAND, COMMONWEALTH OF PUERTO RICO

ANNEX A
UXO SUBPLAN
TO
SITE SPECIFIC WORK PLAN
(SSWP)

U.S. Army Engineering Division, Huntsville
ATTN: CEHND-CT-D (A. Prince)
P.O. Box 1600
Huntsville, Alabama 35807-4301

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ANNEX A
UXO SUBPLAN
CULEBRAS ISLAND
(CONTRACT DACA87-92-D-0147, DELIVERY ORDER 0002)

A-1. REFERENCES.

A-1.1. AR 385-40. Accident Reporting and Records, April 1987, with USACE Supplement.

A-1.2. EM 385-1-1. Safety and Health Requirements Manual, October 1992.

A-1.3. TM 9-1300-206. Ammunition and Explosives Standards.

A-1.4. CEHND UXO Guidance. Corps of Engineers - Huntsville Division, Safety Concepts and Basic Considerations for Unexploded Ordnance (UXO).

A-1.5. CEHND Accident Prevention Guidance. CEHND Accident Prevention Plan Guidelines For Ordnance Projects.

A-1.6. DOD 4160-21.M. Defense Utilization and Disposal Manual

A-1.7. Disposal Feasibility Report. MTA letter report, Disposal Alternatives Feasibility and Recommendations, 19 April 1993.

A-1.8. FM 5-250. U.S. Army Field Manual 5-250, Explosives and Demolitions , 15 June 1992.

A-2. INTRODUCTION.

A-2.1. General. There is no safe procedure for dealing with UXO, only procedures which are considered least dangerous. However, maximum safety in any UXO operation can be achieved by adhering to applicable safety precautions and a preplanned approach. All personnel engaged in UXO operations will be thoroughly trained in explosive/ordnance safety and be capable of recognizing explosive and ordnance hazards. Safety must become a firmly established habit when working with UXO.

A-2.2. Purpose. The purpose of this annex is to describe the following:

a. The Senior UXO Supervisor's pre-sweep check of area.

b. The pre-sweep safety and operations briefing.

c. Selective vegetation removal.

d. Marking of sweep lanes.

e. Performance of surface and subsurface sweeps.

f. Identifying and marking of UXO/OEW.

g. Handling of inert items and scrap.

h. Movement and disposal of UXO/OEW.

i. Placement of warning signs/buoys around the surrounding cayos.

A-3. SWEEP PROCEDURES.

A-3.1. Selective Vegetation Removal. Prior to commencing UXO sweeps, vegetation in the area will be removed. Vegetation will be cut as low as possible, but vegetation removal equipment will be set to a height so as to not impact any UXO which may be laying on the surface. UXO personnel will monitor cutting operations to detect actual and possible UXO/OEW locations. UXO discovered during vegetation removal will be marked for disposition with ordnance found during subsequent sweeps.

A-3.2. Marking Sectors and Sweep Lanes. After vegetation has been removed from the area, the area will be divided into four sectors. UXO personnel will mark individual sweep lanes within each sector. Lanes will be five (5) feet wide and will be clearly marked with stakes and engineer tape. The length of the lanes will vary depending on the terrain. Sectors and lanes will be marked on the map prior to commencement of sweeps. Lanes will remain intact until completion of surface and subsurface sweep activities.

A-3.3. Senior UXO Supervisor Check of Area. The Senior UXO Supervisor will conduct a physical check of the area to be cleared prior to sweep operations. One other UXO qualified individual will accompany the Senior UXO Supervisor.

A-3.4. Pre-Sweep Safety and Operations Briefing. Prior to commencing any sweep operation, the Senior UXO Supervisor will brief all sweep team personnel on:

a. Description of the area to be cleared.

b. Known/suspected ordnance present .

c. Communication procedures.

d. Safety precautions associated with the area.

e. Accident procedures.

f. Climatic precautions.

g. Other situation specific instructions.

A-3.5. Equipment Check. UXO personnel will perform equipment checks on subsurface sweep equipment immediately after the safety briefing. Equipment operability and support requirements (e.g., spare batteries) will be inspected in the process. Operational condition of each instrument will be annotated in the log book. The following detection equipment will be used for this project:

A-3.5.1. Schonstedt GA-52B/72B. The Schonstedt GA-52B/72B Heli-Flux Magnetometer is capable of locating a 105-mm projectile at a depth of five (5) feet and will be the primary instrument used by the team members to locate subsurface UXO/OEW. The Model GA-52/72B detects the magnetic field of a ferromagnetic object and responds to this difference in the magnetic field between two sensors spaced 20 inches apart. The response consists of a change in the frequency signal that is emitted by a loudspeaker.

A-3.5.2. The Whites Seismic/Acoustic Detector. The Whites Seismic/Acoustic Detector is a portable microprocessor metal detector with a LCD display and a key pad user interface, which also emits an audio signal. The Whites can be used to detect metallic and non-metallic objects (depending on size) within approximately two feet of the surface. It will be used in conjunction with the visual surface search and subsurface clearance activities.

A-3.6. Performing UXO Sweeps. Sweep teams shall consist of a UXO Supervisor, a UXO Specialist and a UXO Assistant. Teams will be assigned to sweep lanes which are separated by one lane minimum (more at the discretion of the Senior UXO Supervisor). Two members of each team will proceed down each lane, simultaneously conducting visual and magnetometer sweeps and marking ordnance locations. The UXO Specialist and the UXO assistant of each team will alternate as the magnetometer operator and "flagman" on each team. UXO Supervisors are responsible for recording ordnance and magnetometer detections, maintaining safe intervals between teams, and confirming OEW identifications when necessary. UXO Supervisors will also insure 100% coverage of the lanes assigned. UXO Supervisors will remain several meters behind other team members, but may rotate magnetometer and "flagman" duties with other team members in the interest of health/safety. Sweep lanes will stop and start individually. Stopping, starting, and breaks will be controlled by UXO Supervisors. Subsurface sweeps will be conducted to a depth of two feet, per delivery order specifications.

A-3.6.1. Identifying and Marking UXO/OEW. UXO/OEW will be identified by at least two UXO technicians. Identification will include nomenclature, location and condition (e.g., armed, unfired, damaged, burnt, etc.). Nomenclature and location will posted on site maps; other information will be recorded on the daily summary/inventory forms being used on site. Suspected UXO items which cannot be identified will be photographed and the photos sent to CEHND. UXO/OEW will be marked with bicycle flags. Flags will be offset

far enough from UXO/OEW so that they will not come in contact with the UXO if knocked over.

A-3.6.2. Marking Subsurface Anomalies. Magnetometer detected anomalies will be marked with bicycle flags in the same manner as UXO/OEW was marked during surface sweeps. Location of subsurface items will be recorded in the log book and marked as accurately as possible on a map of the site.

A-3.6.3. Identifying and Handling Inert Items and OEW Related Scrap. Inert items and scrap will be examined by at least two UXO qualified personnel, classified as OEW or non-OEW scrap and the absence of explosives verified. See Annex I (DRMO Turn-in Plan).

A-3.6.3.1. Handling Inert Items. Location and nomenclature of inert items will be recorded in the site log book. Inert items will then be moved to the inert segregation point near the disposal area. Items requiring venting will be separated form items not requiring venting.

A-3.6.3.2. Handling OEW Related Scrap. Scrap that can be moved without the use of heavy equipment will be consolidated near established site access routes to aid in later collection efforts. Only UXO qualified personnel will handle OEW related scrap. Scrap which is too large or heavy, or cannot otherwise be moved will be marked and recorded for post sweep removal.

A-3.6.4. Non-OEW Scrap. Non-OEW related scrap will be collected at a site approved by the CEHND on-site representative for turn-in to local authorities. Scrap that can be moved without the use of heavy equipment will be consolidated near established site access routes to aid in later collection efforts. Non-OEW related scrap areas will be located far enough from OEW related scrap areas to prevent confusion and mixing of material. Non-UXO qualified personnel may handle OEW related scrap. Scrap which is too large or heavy, or cannot otherwise be moved will be marked and recorded for post sweep removal.

A-3.7. Surface UXO/OEW Removal. Movable surface UXO/OEW found during sweeps will be moved after safely removing all possible inert and scrap items, but before conducting further excavation activities. UXO/OEW will be removed to the disposal site by contractor personnel or by military EOD personnel at the request of the CEHND on-site representative. UXO/OEW which is moved to the disposal site will be segregated from other categories of OEW items.

A-4. EXCAVATION AND IDENTIFICATION OF SUBSURFACE ANOMALIES. Excavation and identification of subsurface anomalies will not begin until all lanes in a sector have been swept. At this point, one team will remain in the sector to perform excavation, identification and removal. The remaining teams will commence sweeps in a non-adjacent sector. All excavation will be accomplished with hand tools (e.g., shovels, knives).

A-4.1. Identification of Subsurface Anomalies. Initial excavation will be accomplished to identify subsurface anomalies. Items and associated hazards will be identified for each item prior to removal. UXO/OEW will be identified by at least two UXO technicians. Identification will include nomenclature, location and condition (e.g., armed, unfired, damaged, burnt, etc.), if possible. Nomenclature and other information will be recorded in the site log book. Suspected UXO items which cannot be identified will be photographed and the photos sent to CEHND.

A-4.2. Excavation of Subsurface Anomalies.

A-4.2.1. Excavation and Handling of Inert Items. Inert items will be removed only after positive identification by at least two UXO qualified individuals. Inert items will be hand removed and moved to the inert segregation point near the disposal area. Items requiring venting will be separated form items not requiring venting.

A-4.2.2. Excavation and Handling of Scrap. Scrap that can be moved without the use of heavy equipment will be consolidated near established site access routes to aid in later collection efforts. Non-UXO personnel may be used for this purpose if supervised by UXO personnel. Scrap which is too large or heavy, or cannot otherwise be moved will be marked and recorded for post sweep removal.

A-4.2.3. Excavation and Handling of UXO/OEW. UXO/OEW found during subsurface sweeps will be removed only after positive identification by at least two UXO qualified personnel. Initial movement, and if possible, removal of UXO/OEW will be accomplished remotely. Once excavated, UXO/OEW will be removed by movement to the disposal site. UXO/OEW items which cannot be removed or which represent significantly greater hazards to personnel performing excavation will be detonated in place or referred to the CEHND on-site representative for further action.

A-4.3. Staging of UXO/OEW, Inert Items and Scrap. The secure staging areas for UXO/OEW, inert items and scrap will be established near the demolition site. Inert items and scrap will be segregated near the road to facilitate future movement. Vented inert items will be further segregated from non-vented inert items. Live UXO/OEW will be removed to the demo area and detonated, per paragraph A-5. This area shall be clearly marked as containing explosive materials.

A-4.4. On-site Work Check. UXO Supervisors will conduct on-site work checks after completion of all sweep, excavation and removal operations in each sector. This check will specifically evaluate:

a. Effectiveness of sweep. UXO Supervisors will conduct magnetometer sweeps of random areas.

b. Adequacy of removal activities. Standards established in the QC Plan (Annex F) will be used for the work check.

c. Completeness of records.

d. Overall impact off operations on the surrounding environment.

UXO Supervisors will log work checks and findings for each of the items listed above in the site log book prior to continuation of remediation activities. Locations where work check magnetometer sweeps were conducted will be marked as accurately as possible on the site map.

A-5. UXO/OEW DISPOSAL. UXO/OEW will be disposed of by detonation at the prepared disposal area or by detonation in place, per reference A-1.3. Decisions regarding disposal options will be approved by the CEHND on-site representative. Items which cannot be moved or detonated in place will be referred to the CEHND on-site representative for disposition.

A-5.1. Detonation at the Prepared Disposal Area. Detonation in the prepared disposal area will be the primary method employed for disposal of UXO/OEW. Items will be moved to the disposal site and consolidated as much as possible to reduce the frequency of demolition operations. The Senior UXO Supervisor will determine the size (explosive limits) and frequency of demolition operations based on:

a. Proximity of personnel and facilities to demolition operations.

b. Amount of UXO to be disposed of

c. Prospective effects on the local environment.

Demolition shots will be tamped with locally available material (i.e., sand or earth) to reduce fragmentation and noise. Standard electrical demolition procedures outlined in reference A-1.3 or appropriate 60 series (EOD) publications.

A-5.2. Detonation In-place. Detonation in place will be used in instances which restrict movement of UXO/OEW but permit local disposal operations. Detonation in place will only be used for single UXO items. The Senior UXO Supervisor is responsible for evaluating and recommending detonation in place to the on-site CEHND safety representative on a case-by-case basis. The on-site CEHND safety representative will approve/disapprove actual conduct of detonation in place. If detonation in place by the contractor is not deemed feasible, the Senior UXO Supervisor will recommend military EOD assistance to the on-site CEHND safety representative.

The Senior UXO Supervisor will recommend detonation in place after consideration of personnel hazards and environmental impacts of localized detonation. Standard electrical demolition procedures outlined in reference A-1.3 or appropriate 60 series (EOD) publications will be used in disposal operations.

A-5.3. Explosives Operations.

A-5.3.1. Demolition Operations. Demolition oerations will be conducted in accordance with the appropriate paragraphs of Reference A-1.8.

A-5.3.2. Misfire Procedures. The individual responsible for placing the charges will investigate and correct misfires. Other personnel will not be placed in proximity of misfired setups, except in highly unusual circumstances and with the joint concurrence of the Senior UXO Supervisor and the CEHND On-site Rpresentative. Misfires will be handled as follows:

a. Misfires of Electrical Demolition Setups.

1. Make another attempt to fire the setup.

2. Check the wire connections and the blasting machine or power source connections. If found loose, tighten and make another attempt to fire the setup.

3. Disconnect the blasting machine or power source and test the blasting circuit. Check the continuity of the firing wire with a circuit tester.

4. Use another blasting machine or power source and attempt to fire the setup again.

5. Change operators and try to fire the setup again.

6. Disconnect the blasting machine, shunt the wires, and investigate immediately. Inspect the entire circuit for wire breaks and short circuits.

7. If you suspect a blasting cap problem, do not attempt to remove the cap or otherwise handle it. Place a primed, 1 pound charge next to the misfired charge and detonate the new charge.

b. Misfires of Non-electrical Demolition.

1. Delay any investigation of non-electric demolition setups for 30 minutes after the last attempt to initiate.

2. Place a primed, 1 pound charge next to the misfired charge and detonate it. Each misfired or separated charge that contains a blasting cap requires a 1 pound charge for detonation. All charges containing blasting caps will be detonated in place.

A-6. SAFETY AND QUALITY CONTROL. An Accident Prevention Plan (APP) and a Quality Control (QC) Plan have been developed specifically for the Culebra Island job site. All safety and quality control procedures described in these plans will be strictly adhered to. It is the responsibility of each individual assigned to this project to know, understand and follow the requirements of the Accident Prevention Plan and Quality Control Plan.

MTA, Inc.
2225 Drake Avenue, Suite 8
Huntsville, Alabama 35805

Remediation of Sites in the U.S. Virgin Islands and Puerto Rico
Contract DACA87-92-D-0147
Delivery Order 0002

LOCATION, REMOVAL AND DISPOSAL OF UXO CULEBRA ISLAND, COMMONWEALTH OF PUERTO RICO

ANNEX B
ACCIDENT PREVENTION PLAN (APP)
TO
SITE SPECIFIC WORK PLAN
(SSWP)

U.S. Army Engineering Division, Huntsville
ATTN: CEHND-CT-D (A. Prince)
P.O. Box 1600
Huntsville, Alabama 35807-4301

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ANNEX B
ACCIDENT PREVENTION PLAN
CULEBRAS ISLAND
(CONTRACT DACA87-92-D-0147, DELIVERY ORDER 0002)

B-1. REFERENCES.

B-1.1. AR 385-40. Accident Reporting and Records, April 1987, with USACE Supplement.

B-1.2. EM 385-1-1. Safety and Health Requirements Manual, October 1992.

B-1.3. TM 9-1300-206. Ammunition and Explosives Standards.

B-1.4. CEHND UXO Guidance. Corps of Engineers - Huntsville Division, Safety Concepts and Basic Considerations for Unexploded Ordnance (UXO).

B-1.5. CEHND Accident Prevention Guidance. CEHND Accident Prevention Plan Guidelines For Ordnance Projects.

B-1.6. DOD 4160-21.M. Defense Utilization and Disposal Manual

B-1.7. Disposal Feasibility Report. MTA letter report, Disposal Alternatives Feasibility and Recommendations, 19 April 1993.

B-1.8. FM 5-250. U.S. Army Field Manual 5-250, Explosives and Demolitions , 15 June 1992.

B-2. RESPONSIBILITIES. MTA, Inc. as the prime contractor is responsible for: development, modification, revision and enforcement of this Accident Prevention Plan; providing the equipment, facilities and training listed herein for implementation of site safety activities; and taking those actions dictated by safety personnel and the CEHND Project Manager to insure safe conduct of operations required by the appropriate delivery order and contract. All subcontractors and their respective employees are responsible for adherence to these provisions and for the safe conduct of individual actions.

The following responsibilities apply specifically to the provisions of this plan:

B-2.1. The Senior UXO Supervisor. The Senior UXO Supervisor has direct responsibility for all UXO operations on-site. As such, the Senior UXO Supervisor is responsible for insuring the safe conduct of all contractor activities required at the site; monitoring safety training and inspections; insuring program compliance and correction of site safety problems: performing counseling, correction and punitive actions necessary to insure safety program compliance; and keeping CEHND and MTA corporate leadership

appraised of project safety program status. The Senior UXO Supervisor may and is encouraged to delegate administrative authority to first line supervisors (UXO Supervisors) in the interest of program implementation.

B-2.2. The Site Safety Officer (SSO). The SSO is responsible for implementing the project safety and health program per guidance provided by the PM. The SSO is the primary author of the Accident Prevention Plan, site specific training, safety inspection reports, and status documents. The SSO is also responsible for preparing recommended revisions and additions to this APP (including the Activities Hazards Analysis section). For this delivery order, the functions and duties of the Site Safety Officer will be performed by the Senior UXO Supervisor. References to SSO duties are interpreted as belonging to the Senior UXO Supervisor.

B-2.3. UXO Supervisors. UXO Supervisors are responsible for insuring the safe conduct of their specified operations; observing individual activities of subordinate workers; preventing unsafe acts in the course of site operations; on-site correction of subordinates; recommending disciplinary actions to the Senior UXO Supervisor as required; reporting accidents and unsafe activities to the SSO and PM; and recommending changes and improvements to the safety program and this document as required.

B-2.4. The Quality Control (QC) Personnel. QC personnel, when present, function independently of the on-site work crew and report directly to the corporate QC element. QC personnel insure that all tasks are accomplished in compliance with schedules and plans, to include this APP. QC personnel have the same qualifications as UXO Supervisor(s).

B-2.5. All Employees. All MTA and subcontractor employees are responsible for conducting their specific duties in a safe manner; for being knowledgeable of general and job specific safety requirements; for knowing where safety documentation can be found; for reporting unsafe acts observed in the course of their work; for reporting injuries and occupationally related illnesses to supervisors; and for responding to corrective actions implemented by supervisory personnel. All on-site personnel have the authority and responsibility to temporarily stop operations to prevent unsafe acts.

B-3. LOCAL REQUIREMENTS.

B-3.1. Environmental Protection. Efforts to minimize the effects of contractor operations on the environment will be stressed during this project. If situations arise where environmental and safety concerns are in conflict, personnel safety will be given priority in deciding courses of action.

B-3.2. Noise Abatement.

B-3.2.1. General. Supervisors will enforce noise abatement procedures in the conduct of all site operations. These measures will include limiting areas and periods of heavy equipment use; and tamping demolition set-ups.

B-3.2.2. Noise Protection for On-Site Personnel. Equipment operators will use appropriate hearing protection devices during operation of the equipment. These devices may consist of hearing protectors, ear plugs (fitted by a qualified medical authority), or a combination of both. Hearing protection provisions and limits of Ref B-1.1 will be enforced.

B-4. CONTROL AND COORDINATION OF SUBCONTRACTORS. All on-site personnel employed by MTA or any of its subcontractors fall under the direct and formal authority of the MTA Project Manager (PM). All tasks and directives will be issued by the PM, or by other supervisors as delegated by the PM.

The PM and supervisors will remain aware of working conditions and employee status through the various briefings and status reports required in the conduct of site objectives. The PM has full authority to dismiss employees for violations of published safety provisions and/or demonstrated safety negligence. The Senior UXO Supervisor has the authority to temporarily suspend on-site employees and recommend punitive and/or corrective actions to the PM. The PM will, in turn, address further actions with MTA corporate management.

B-5. TEMPORARY FACILITIES. Trailers used for operations and storage will be anchored per requirements of paragraph 04.A.03, ref B-1.1.

B-6. EDUCATION AND TRAINING.

B-6.1. Initial Indoctrination and Training. All full time on-site personnel will have completed training as specified in reference B.1.2. Site specific safety training will be conducted during mobilization to:

a. Fulfill the requirements of paragraph 01.B of reference B-1.2.

b. Familiarize personnel with corporate Alcohol and Drug Abuse policies.

c. Provide other site specific hazards, restricted practices, and equipment-specific training as required.

B-6.2. Continued Education.

B-6.2.1. Tailgate Meetings. Daily safety briefings will be conducted by the Senior UXO Supervisor prior to commencement of site operations. During these briefings supervisory personnel will explain the activity and processes to be used in the days activities; provide tentative timelines for the daily tasks; review "lessons learned" from recent activities

with related safety concerns; locations and procedures for obtaining emergency medical and fire support; procedures for reporting accidents; and evacuation/reconvening procedures. The SSO will record the date, time, attendees and general briefing contents of these meetings in the Field Logbook.

B-6.2.2. New Situations. Training will be conducted on newly discovered conditions and phenomena as they are encountered. Written safety procedures will be developed by the SSO and PM and approved by CEHND as needed.

B-6.2.3. Safety Documents. The SSO will insure that multiple copies of safety documents and policies are updated and available for general review by all on-site personnel. Locations of documents will be included in safety briefings and displayed on posters at common locations around the worksite.

B-6.2.4. Open Door Policy. The PM and SSO will implement an "open-door" policy where the SSO will be available at specified "non-duty" periods for discussion of safety issues with any personnel associated with the project.

B-6.3. Contractor/Subcontractor Personnel Training.

B-6.3.1. Weekly Supervisor Meetings. Supervisors will conduct a safety meeting at least once a week during field operations. Supervisors will record the date and time, the name(s) of the individual(s) providing the training or leading discussions and the subjects discussed. These meetings will be documented in the Field logbook. This information will also be maintained by the PM in status reports and QC documentation.

B-6.3.2. New Personnel. Supervisors are responsible for insuring that new employees are provided indoctrination training and are aware of the locations of safety equipment and documents prior to beginning work on-site. Supervisors will certify in writing that new employees have received indoctrination training, and these records will be retained by the PM.

B-7. TRAFFIC CONTROL AND HAZARDS MARKING.

B-7.1. Traffic Control.

B-7.1.1. Vehicle Control. Minimum vehicle traffic will be permitted in the area of operations, for both safety and environmental protection concerns. Vehicles will be generally restricted to existing roads designed for vehicular traffic. Use of vehicles on non-developed roads or in "off-road" areas will be evaluated on a case by case basis by the SSO and PM.

B-7.1.2. Roads. No vehicular or equipment traffic will be permitted on roads deemed as unsuitable for traffic by the SSO and/or PM. Roads may also be restricted to certain categories of traffic by the SSO.

B-7.1.3. Temporary Trafficways. No temporary trafficways will be developed under this delivery order.

B-7.1.4. Dust Control. Dust control methods and practices will be employed in all areas subject to vehicular and equipment traffic where dust is a problem.

B-7.2. Hazards Marking. Structures, utility conduits and restricted areas will be identified by conspicuous markers. The locations and associated hazards of these facilities will be briefed as part of the indoctrination and tailgate briefings.

B-8. WORKSITE HYGIENE AND MAINTENANCE.

B-8.1. Job Cleanup. Job cleanup consists of the general housekeeping functions required for safe work sites. Supervisors will monitor the following job cleanup elements during regular inspections of work areas. Inspections will be conducted daily as a minimum, and may be conducted more frequently at the descretion of the Senior UXO Supervisor.

B-8.1.1. Obstructions. Work areas will be kept free of obstructions such as excess tools, extension cords, building materials, and personal belongings.

B-8.1.2. Securing of Tools and Materials. Tools and materials shall be secured on work sites to prevent injuries and/or damage from dropping or being projected at personnel or property.

B-8.1.3. Operational Waste and Debris Removal. Common waste and debris (e.g., non-contaminated waste, building material scrap, food/drink containers) will be removed from work sites daily as a minimum, and more frequently if deemed necessary by supervisors. This does not apply to pre-existing waste and debris encountered in the course of RI tasks.

B-8.1.4. Combustible Materials. Combustible materials will be introduced to worksites only when needed, and returned promptly to storage after use. Combustible materials will be segregated and stored in accordance with CEHND directives. See paragraph H.1.b through g for more details.

B-8.2. Sanitation.

B-8.2.1. Water. Drinking water will be available at specified containers, marked "DRINKING WATER ONLY". The location of these containers will be included

in the daily operations briefings. Disposable cups will be available. Non-potable water will be conspicuously marked and segregated from potable water.

B-8.2.2. Toilets. Existing facilities will be used if available, If required, portable toilet facilities will be made available on worksites at a ratio of 1 per 20 employees. Construction and servicing of toilets will be in accordance with Ref B-1.1.

B-8.2.3. Washing Facilities. Hand washing facilities will be located in proximity to toilets.

B-8.2.4. Food Service. No food service facilities will be provided at the work site. Employees will bring lunches and food with them at the beginning of the work day. Tables for eating and a means of temporarily refrigerating food will be provided on site.

B-8.3. Access and Egress.

B-8.3.1. Obstructions. Access means shall be kept free of materials, tools or debris which may obstruct passage or present a tripping hazard.

B-8.3.2. Surfaces. Access means shall be kept clear of mud, grease and other materials that hinder safe passage. Materials for controlling slipping hazards will be retained in proximity to access means as required.

B-8.3.3. Protruding Objects. Objects and projections into accessways and passageways shall be conspicuously marked. Pointed or sharp protrusions will be removed, altered or covered with appropriate cushioning material to prevent cuts and lacerations.

B-9. EMERGENCIES.

B-9.1. Fire Prevention and Protection.

B-9.1.1. Smoking. Smoking will be restricted to specific areas and times as designated by the Senior UXO Supervisor.

B-9.1.2. Storing Flammable and Combustible Materials. Combustible materials will be segregated and stored in lockable metal facilities when not in use. Storage facilities will allow ventilation of stored containers. Reactive and/or noncompatible materials will be stored in separate facilities meeting the same criteria. Flammable materials and liquids will be stored in capped containers designed specifically for the material. Containers will be clearly marked with contents and date that the material is placed into storage. Containers will be limited to 5 gallon capacity.

B-9.1.3. Sources of Ignition. Sources of ignition (e.g., matches and lighters) will be maintained a minimum of 50 feet from combustible materials. Safe, marked

temporary storage containers will be provided near site accesses for personnel to place such material in during operations on site.

B-9.1.4. Building Separation. No temporary buildings will be built in conjunction with this delivery order.

B-9.1.5. Fire Lanes. Fire lanes shall be identified and marked at each work site. These lanes will permit reasonable access to the work area for firefighting personnel and equipment.

B-9.1.6. Personal Clothing. Personnel must change clothing prior to continuing operations when clothing absorbs flammable material to any degree.

B-9.1.7. Fire Extinguisher and Buckets. A minimum of two portable fire extinguisher (NFPA approved) will be on site during operations. The locations of fire extinguisher will be conspicuously marked and briefed during morning briefings. Fire extinguisher will be inspected by the SSO once a month (minimum) for level of charge.

A fire extinguisher will be placed in a position between 20 and 30 feet from the entrance to any flammable storage facilities. This position will be clearly marked, and may service more than flammable storage facility within the cited distance limits.

Fire buckets may be employed in place of fire extinguisher in locations suitable for 2-A-rated extinguisher. Fire buckets must have adequate dispersion provisions and must be inspected daily to ensure they are full and serviceable.

B-9.1.8. Fire Noification Procedure. In case of fire the following actions will occur:

a. On-site personnel will attempt to extinguish the fire using fire extinguishers.

b. The Senior UXO Supervisor or designated individual will notify the following agencies in the order indicated:

(1) Culebra Fire Station: local number 742-3530.

(2) Culebra Police Department: local number 742-3501.

c. Once the above notifications have been made, The Senior UXO Supervisor will position individuals at key access locations to guide emergency vehicles to the fire's location.

B-9.2. First Aid and Medical Support.

B-9.2.1. First Aid/CPR Attendants. At least two personnel at each land based work site will be certified in first aid/CPR. These individuals will serve in the additional capacity of First Aid/CPR Attendants. First Aid/CPR Attendants shall be qualified for First Aid/CPR positions through documented completion of first aid/CPR courses.

B-9.2.2. Evacuation. The clinic on Culebra Island will respond to on-island medical emergencies. Injuries/illnesses that cannot be treated by the clinic will be evacuated to the Roosevelt Roads Naval Station hospital or the hospital in Fajardo. Each location is approximately 15 minutes (airtime) from the Culebra airfield.

Communications and evacuation request procedures will be established with local and military medical facilities. Two functionally different means of communication will be used as primary and backup communications means (e.g., cellular phone and FM radio). A dedicated ground vehicle will be stationed at work sites during operations for transport to local medical facilities.

B-9.2.3. Off-Site Medical Facilities. Further medical treatment (off-site) is available through the following medical organizations:

a. Local medical/evacuation services. Culebra Island hospital. Culebra Island hospital can be reached from the DNR operations area or waterway points of access within ten minutes. Emergency staff at the hospital monitor the local police/civil defense radio networks.

b. Puerto Rican Medical Support. The Culebra Island hospital has a medivac agreement which provides air evacuation service within 30 minutes. Medical staff at Culebra will coordinate destination and support based on specific injuries/illnesses.

B-9.2.4. Equipment. A minimum of two weatherproof first aid kits will be placed at any active worksite. Supervisors are responsible for insuring that these kits are complete (per weekly inventory) and on-site. The locations of first aid kits will be identified in daily briefings.

B-10. INSPECTIONS. The SSO will conduct regular safety inspections of the work site. Frequency of inspections will be at the discretion of the SSO, but will be conducted a minimum of twice a week. The SSO will insure that all facilities, material and equipment on the work site are used, stored and maintained in accordance with the approved APP and Ref B-1.1. Quality Control personnel will conduct a joint safety inspection with the SSO during QC visits to the work site.

B-10.1. Reports. Safety inspections will be annotated in the field logbooks. Discrepancies found will be recorded in the log book and in a formal letter report to MTA corporate headquarters. The letter report will include description of the discrepancies

found; a brief description of corrective actions planned; identification of the party responsible for correcting the discrepancies; and the date/timeframe for follow up inspection of corrective actions.

B-10.2. Corrective Actions. Corrective actions will be jointly determined by the SSO and those personnel directly affected by the safety deficiency. The SSO will make the final determination of what corrective actions will be taken. Corrective actions will be annotated in the letter report referenced in paragraph B-10.1.

B-11. ACCIDENT INVESTIGATION AND REPORTING.

B-11.1. Exposure Data. The SSO shall maintain an on site log of personnel exposure data. Data will include but is not limited to on-site exposure hours of all employees and visitors; occupational injuries and illnesses occurring in the personnel (OSHA Form 200); and specific employee exposures to toxic/hazardous materials.

B-11.2. Accident Reporting. The Senior UXO Supervisor will immediately notify the the USAEHD on-site representative, the USAEHD Project Manager and the USAEHD Contracting Officer of any accident/incident. The Senior UXO Supervisor will complete an Accident Report (ENG Form 3394) in accordance with reference B-1.1 and submit the report to the Contracting Officer within two working days of any reportable accident.

B-11.3. First Aid Reporting. All on-site first aid treatments will be reported to the SSO. The SSO will maintain a log of first aid treatments containing, as a minimum, personnel providing/receiving treatment, date, time, reported condition(s), treatment(s) rendered and recommended follow-up actions.

B-12. POWER AND LIGHTING.

B-12.1. Electrical Power. The SSO will insure that site operations, to include demolition activities, are not conducted in proximity to buried or overhead electrical lines. The SSO will coordinate with local utilities to physically locate and mark power lines, transformers and other electrical equipment/facilities.

B-12.2. Lighting. All operations will be conducted during daylight hours and under favorable climatic conditions; no artificial lighting requirements are anticipated.

B-13. SEVERE WEATHER.

B-13.1. Rain. No sign emplacement, sweep operations or disposal operations will be conducted during periods of rain. Indoor activities (e.g., equipment maintenance and training) may be conducted during these periods. Site operations may recommence when rain stops if conditions are deemed safe enough by the SSO and PM.

B-13.2. Hurricanes and Tropical Storms. Upon notification that a tropical storm or hurricane is approaching, all equipment will be secured and all worksites shut down in ample time to permit evacuation of personnel to local severe weather evacuation sites. The PM and the SSO will monitor weather services during periods of severe weather risk.

B-14. CLIMATE AND ECOLOGY.

B-14.1. Cold Weather. Cold weather requirements are not applicable to this project.

B-14.2. Hot Weather. In hot environments, drinking water will be made available to workers, and workers will be allowed and encouraged to drink small amounts regularly. This water shall be kept cool. The contractor will provide sunscreen in order to provide limited protection from the effects of direct sunlight (i.e., sun screen, baseball caps and neckerchiefs). In addition, employees are responsible for insuring that personal clothing and equipment adequately protects against direct sunlight. Personnel who exhibit disregard for these requirements are subject to dismissal; personnel missing work due to disregard for these requirements may be subject to other administrative and disciplinary actions.

B-14.3. Insects. Employees will be instructed in the identification and avoidance of local bee and wasp species on Culebra. Bee/wasp sting kits will be readily available with each work crew. Individuals receiving stings from bees/wasps will be immediately treated on sight and then transported to the Culebra hospital for further diagnosis and treatment. Individual employees are responsible for taking protective measures against mosquitos, gnats and chiggers.

B-14.4. Wildlife. All reasonable measures will be taken to avoid wildlife in the area during the conduct of operations. Individuals receiving scratches, cuts and abrasions as a result of incidental wildlife encounters will be immediately treated on sight and then transported to the Culebra hospital for further diagnosis and treatment. No poisonous snakes or reptiles are reported to be present on Culebra.

B-15. PERSONNEL QUALIFICATIONS. Personnel qualifications are addressed in Section 3 of the Basic Work Plan.

B-16. PERSONAL PROTECTIVE EQUIPMENT (PPE)/SAFETY EQUIPMENT. Employees will be issued sunscreen, baseball hats and neckerchiefs for sun protection. Insect repellent will be available at work sites. Work site dress standards will be dictated by the SSO, but each employee is responsible for ensuring that personal clothing complies with established standards.

Although water will be provided at work sites employees may carry personal canteens, provided the canteens do not interfere with required task performance.

B-17. TOOL USAGE. Hand and power tools will be used, inspected and maintained in accordance with the provisions of Section 13, Ref B-1.1.

B-18. VEHICLE AND HEAVY EQUIPMENT OPERATION.

B-18.1. Vehicle Operation.

B-18.1.1. Operator Qualifications. All vehicle operators shall be licensed for vehicles they are respectively identified to operate. The PM will retain a consolidated listing of vehicle and equipment qualifications held by all personnel.

B-18.1.2. Vehicle Inspections. Operators will perform daily operations checks on vehicles each day to insure proper function of lights, warning devices, safety equipment and general vehicle operating condition. This fulfills the vehicle inspection requirements of paragraph 18.A.02.c of reference B-1.2. In addition, vehicles to be used in the transport of explosives will be inspected immediately prior to use in accordance with paragraph 29.B.11 of reference B-1.2. Operators will indicate these inspections by signature on a document that will remain with the vehicle. These records will inspected by the SSO on periodic and unannounced basis.

B-18.1.3. Ground Guides. Ground guides will be employed when:

a. vehicles greater than 2 tons (unloaded) are backing up

b. any vehicle is backing up in congested or off-road areas

c. other conditions exist which restrict operators' vision or present greater than normal vehicle operation risk.

B-18.1.4. Period of Operation. No individual will operate a vehicle for more than 10 continuous hours. Neither shall any individual operate a vehicle for more than 12 combined hours in a 24 hour period without the benefit of 8 hours (minimum) of rest.

B-18.2. Heavy Equipment Operation. The above rules for vehicle operation apply to the use of heavy equipment (including R.1.d). The following rules apply in addition.

B-18.2.1. Operator Qualifications. Operators of heavy equipment must demonstrate their ability to operate heavy machinery under controlled conditions prior to being assigned operator duties on work sites.

B-18.2.2. Minimum Number of Personnel. Heavy equipment will be operated only by designated qualified personnel.

B-19. EXCAVATION. Excavation will be limited to the minimum required for exposing and identifying magnetometer anomalies. Minimum personnel will be exposed to excavation operations due to possible ordnance hazards which may be present. Procedures in Ref B-1.1 will apply to all excavation.

B-20. EXPLOSIVES TRANSPORT, HANDLING AND OPERATIONS.

B-20.1. General. Exdplosives operations will be conducted in accordance with reference B-1.8 and the procedures listed below. Where information conflicts, reference B-1.8 will take preference.

B-20.2. Supervision. The transport, handling, storage and use of explosives will be supervised by personnel with UXO Supervisor qualifications. Activities will be conducted in accordance with the manufacturer's instructions and the provisions and references of this APP. The Senior UXO Supervisor will personally and singularly direct explosive operations on site.

B-20.3. Signs. Warning signs will be posted at points of access to blasting and explosive storage sites (permanent and temporary).

B-20.4. Electrical Lines. Explosive operations will not be conducted in proximity to overhead or underground power lines.

B-20.5. Weather. Explosive operations will be discontinued and personnel moved out of the area during approach or progress of thunderstorms or other threatening weather. Materials will be immediately secured in adequate storage facilities upon notification of a weather threat.

B-20.6. Blasting Machines. Only CEHND approved blasting machines/devices will be used to conduct explosive operations. These devices will be maintained, tested and operated in accordance with manufacturer instructions. Blasting machines will be tested prior to use and during the SSO's safety inspections. **The individual responsible for set up and initiation of demolition shots will retain positive control of the blasting machine/device during explosive operations. This individual will also be the only individual authorized to connect lead wires to the blasting machine.**

B-20.7. Distance. Sufficient firing line will be provided to permit the individual initiating the shot to be located a safe distance from the blast. The SSO will also insure that no equipment is located too close to the demolition site.

B-20.8. Storage. Storage of explosives shall be in accordance with local laws and CEHND requirements. Inventories of types and amounts of explosives will be maintained by the Senior UXO Supervisor, and will be reported as part of the monthly status report.

B-20.9. Placards. All vehicles transporting explosives will display appropriate U.S. Department of Transportation placards.

B-20.10. Cargo Restrictions. Explosives will not be transported with other cargo. blasting caps and/or other initiating devices will not be transported in the cabs or passenger compartments of vehicles.

B-20.11. Drivers. Each explosive carrying vehicle will have a driver and an assistant. Each will be familiar with the cargo, location and use of on-board firefighting equipment, and emergency/accident procedures and reporting.

B-20.12. Fire Extinguisher. Each vehicle will be equipped with one or more fire extinguisher rated at 10-B:C. Drivers/assistants will be familiar in the use of fire extinguisher, and extinguisher will be checked during the SSO's safety inspections.

B-20.13. Public Exposure. Vehicles carrying explosives will not be parked in public parking lots, communities or congested areas.

B-20.14. Vehicle Inspection. Vehicles to be used for explosives transport will be inspected prior to use. Brakes, warning lights/devices, general electrical wiring and on-board safety equipment will be examined. Inspection dates, times and individuals conducting the inspections will be recorded in the site logs.

B-20.15. Refueling. Vehicles will not be refueled while carrying explosives, except in emergencies as dictated by the SSO.

B-20.16. Fire Safety. Personnel transporting explosives will not smoke or carry on their persons matches, lighters or other flame/spark producing devices while transporting and/or handling explosives. In addition, there will be no smoking or fire of any kind permitted within 50 feet of any area where explosives are being handled.

B-20.17. Vehicle Control. Vehicles carrying explosives will not be left unattended.

B-20.18. Explosive Containers and Packages. Explosives will be removed from containers only as they are required for immediate use. Only the quantity of explosives planned for a specific operation will be taken to the demolition site; no excess unpackaged explosive materials will be permitted in the demolition area. Excess explosives resulting from set up of demolition shots will be stored in their original containers and placed in safe locations prior to connecting lead wires to blasting machines/devices.

B-20.19. Demolition Setups. For purposes of this plan, a demolition setup is defined as the collective assembly of the primary explosive device (e.g., a blasting cap) and the means of detonating the primary device (e.g., time fuse). A demolition setup does not include the main charge (load) of the explosive train.

Demolition setups will be handled in accordance with the procedures establishe for primers in Section 29 of reference B-1.2. Specifically, demolition setups will not be made up in excess of the number needed for the the explosive operation currently being conducted. Demolition setups will not be made up in or near explosive containers and/or storage locations.

B-20.20. Electromagnetic Radiation (EMR). Explosive operations will not be conducted in the vicinity of operating RF transmitters or RF producing devices. Electrical detonators will not be stored in proximity of RF transmitters or RF producing devices.

B-20.21. Blasting Caps.

B-20.21.1 Manufacture. All blasting caps used for a particular site will be from the same manufacturer.

B-20.21.2. Wires. Blasting cap wires will be inspected before use to insure adequacy of insulation.

B-20.21.3. Shunts. The manufacturer's shunt shall not be removed from the cap leg wires until the cap is connected to the firing wire and the firing wire has been confirmed shunted at the opposite end.

B-20.22. Grounding. No lead wire will be connected to a blasting machine/device before being grounded to dissipate any static charge.

B-20.23. Testing. Electric demolition setups will be tested with an approved testing instrument (i.e., blasting galvanometer or blasting ohmmeter) before being combined with the main charge or being connected to the firing line.

B-20.24. Connecting to the Blasting Machine. No firing line will be connected to the blasting machine/device until:

(a) After the line has been tested (see B-20.22), and

(b) Just before the shot is to be fired.

B-20.25. Audible Warning. Prior to firing of demolition shots, all persons in the danger area will be warned of the blast via verbal and/or signal device warning.

B-20.26. Flagpersons. Prior to firing of demolition shots, a competent flagperson will be posted at each access to the site.

B-20.27. Post-Blast Procedures. After detonation, an inspection will be made by the individual initiating the shot to determine if all charges were detonated. Firing wires will

be traced to insure that explosives have been consumed. Other persons will not be permitted in the area until the individual gives the "all clear".

B-20.28. Misfires. Misfires will be handled in accordance with the procedures listed in paragraph A-5.3 of the UXO Subplan. These procedures have been adapted from reference B-1.8.

B-21. BRUSH REMOVAL.

B-21.1. Equipment Usage. Employees will not be permitted to operate power equipment or hand tools until trained in their use. Proficiency in the use of equipment must be demonstrated as part of this requirement.

B-21.2. Personal Protection. Employees involved in brush clearing operations will wear eye protection at all times. Properly fitted clothing and gloves will be worn. Watches/jewelry will not be permitted during brush clearing operations.

B-21.3. UXO and Obstructions. At least one UXO Supervisor will directly supervise brush clearance operations for the purpose of preventing tool/equipment contact with UXO and/or other obstructions.

B-21.4. Housekeeping. Cut brush will not be permitted to accumulate to the point that it obstructs operations. The SSO will insure regular removal of cut brush to meet this objective.

B-22. UNEXPLODED ORDNANCE (UXO) SAFETY. Reference B-1.3 will be adhered to in the conduct of all operations with UXO.

ACTIVITY HAZARD ANALYSIS (AHA) SECTION.

HAZARD ANALYSIS
5102-

ACTIVITY_____ **ANALYZED BY/DATE**_____ **REVIEWED BY/DATE**_____

PRINCIPAL STEPS	POTENTIAL HAZARDS	RECOMMENDED CONTROLS

EQUIPMENT TO BE USED	INSPECTION REQUIREMENTS	TRAINING REQUIREMENTS

ACTIVITY Mobilization ANALYZED BY/DATE Laura Slovak, 30/06/93 REVIEWED BY/DATE Gerald Delaney, 30/06/93

PRINCIPAL STEPS	POTENTIAL HAZARDS	RECOMMENDED CONTROLS
1. Mobilize personnel and Equipment 2. Transfer equipment and personnel to Culebra 3. Establish field office 4. Perform preliminary site inspection 5. Survey site and mark boundaries	1. Traffic 2. Heat stress 3. Boat travel during transfer to island 4. Unexploded ordnance 5. Insect bites 6. Sharp objects 7. Trips and falls	1. Observe traffic laws 2. Follow proper boating rules 3. Follow the procedures of this plan 4. Identify all personnel hypersensitive to insect bites 5. Wear proper PPE 6. Use caution when moving around the site

EQUIPMENT TO BE USED	INSPECTION REQUIREMENTS	TRAINING REQUIREMENTS
1. Electronic Distance Measures	1. Joint inspection by Senior UXO Supervisor and CEHND on-site representative prior to commencement of UXO operations	1. Equipment training, as needed 2. Vehicle operations training, as needed 3. Environmental protection training 4. Site-specific safety training

ACTIVITY Surface Sweeps ANALYZED BY/DATE Laura Slovak, 30/06/93 REVIEWED BY/DATE Gerald Delaney, 30/06/93

PRINCIPAL STEPS	POTENTIAL HAZARDS	RECOMMENDED CONTROLS
1. Pre-sweep check of area 2. Safety and operations briefing 3. Selective vegetation removal 4. Mark sweep lanes 5. Perform surface sweep 6. Identify and mark UXO/OEW 7. Identify inert items and scrap 8. Move inert items to segregation point near disposal area 9. Move scrap to established consolidation point near access routes 10. Move UXO/OEW to the disposal site, segregating categories of OEW items 11. Detonate unmovable UXO/OEW in place 12. Perform Quality Control Check	1. Unexploded ordnance 2. Explosives 3. Insect bites 4. Heat stress 5. Sharp objects 6. Hand and power tools 7. Trips and falls	1. Follow the procedures of this plan 2. Identify all personnel hypersensitive to insect bites 3. Wear proper PPE 4. Observe all operating rules and clearances 5. Use caution when moving around the site

EQUIPMENT TO BE USED	INSPECTION REQUIREMENTS	TRAINING REQUIREMENTS
1. Chain Saw 2. Gasoline powered trimmer 3. Electric Firing Kit 4. M2 crimper set	1. Senior UXO Supervisor check of area prior to sweep operations 2. Safety inspections at least twice a week 3. Visual Quality Control Check by Senior UXO Supervisor after completion of UXO/OEW and scrap removal	1. Graduation from the U.S. Naval EOD School, Indian Head, Maryland 2. First Aid/CPR training for at least one member of each work crew 3. Tailgate health and safety meetings 4. Training in the use of equipment

ACTIVITY Subsurface Sweeps ANALYZED BY/DATE Laura Slovak, 30/06/93 REVIEWED BY/DATE Gerald Delaney, 30/06/93

PRINCIPAL STEPS	POTENTIAL HAZARDS	RECOMMENDED CONTROLS
1. Pre-sweep check of area 2. Safety and operations briefing 3. Check equipment 4. Perform subsurface sweep 5. Mark subsurface anomalies with flags	1. Unexploded ordnance 2. Insect bites 3. Heat stress 4. Sharp objects 5. Hand and power tools 6. Trips and falls	1. Follow the procedures of this plan 2. Identify all personnel hypersensitive to insect bites 3. Observe all operating rules and clearances 4. Wear proper PPE 5. Use caution when moving around the site

EQUIPMENT TO BE USED	INSPECTION REQUIREMENTS	TRAINING REQUIREMENTS
1. Schonstedt GA-52B/72B Heli-Flux Magnetometer 2. Whites Seismic/Acoustic Detector	1. Senior UXO Supervisor check of area prior to sweep operations 2. Equipment check 3. Safety inspections at least twice a week	1. Graduation from the U.S. Naval EOD School, Indian Head, Maryland 2. First Aid/CPR training for at least one member of each work crew 3. Daily tailgate health and safety meetings 4. Training in the use of equipment

ACTIVITY Excavate OEW ANALYZED BY/DATE Laura Slovak, 30/06/93 REVIEWED BY/DATE Gerald Delaney, 30/06/93

PRINCIPAL STEPS	POTENTIAL HAZARDS	RECOMMENDED CONTROLS
1. Remove remaining vegetation 2. Remove soil 3. Identify and mark UXO/OEW 4. Identify inert items and scrap 5. Move inert items to segregation point near disposal area 6. Move scrap to established consolidation point near access routes 7. Move UXO/OEW to the disposal site, segregating categories of OEW items 8. Detonate unmovable UXO/OEW in place 9. Quality Control Check	1. Unexploded ordnance 2. Explosives 3. Heat stress 4. Insect bites 5. Sharp objects 6. Hand and power tools 7. Trips and falls	1. Follow the procedures of this plan 2. Observe all equipment operating rules and clearances 3. Identify all personnel hypersensitive to insect bites 4. Wear proper PPE 5. Use caution when moving around the site

EQUIPMENT TO BE USED	INSPECTION REQUIREMENTS	TRAINING REQUIREMENTS
1. Shovels 2. Knives 3. Electric Firing Kit 4. M2 crimper set 5. Schonstedt GA-52B/72B Heli-Flux Magnetometer	1. Quality Control Check by Senior UXO Supervisor using magnetometer	1. Graduation from the U.S. Naval EOD School, Indian Head, Maryland 2. First Aid/CPR training for at least one member of each work crew 3. Daily tailgate health and safety meetings 4. Training in the use of equipment

ACTIVITY OEW Disposal ANALYZED BY/DATE Laura Slovak, 30/06/93 REVIEWED BY/DATE Gerald Delaney, 30/06/93

PRINCIPAL STEPS	POTENTIAL HAZARDS	RECOMMENDED CONTROLS
1. Detonate unmovable UXO/OEW from surface sweeps in place 2. Detonate unmovable UXO/OEW from subsurface sweeps in place 3. Detonate movable UXO/OEW at prepared disposal area	1. Unexploded ordnance 2. Explosives 3. Heat stress 4. Insect bites 5. Hand and power tools 6. Sharp objects 7. Trips and falls	1. Follow the procedures of this plan 2. Identify all personnel hypersensitive to insect bites 3. Observe all operating rules and clearances 4. Wear proper PPE 5. Use caution when moving around the site

EQUIPMENT TO BE USED	INSPECTION REQUIREMENTS	TRAINING REQUIREMENTS
1. Electric Firing Kit 2. M2 crimper set	1. Safety inspections at least twice a week	1. Graduation from the U.S. Naval EOD School, Indian Head, Maryland 2. First Aid/CPR training for at least one member of each work crew 3. Daily tailgate health and safety meetings 4. Training in the use of equipment

ACTIVITY Install Wng. Devices ANALYZED BY/DATE Laura Slovak, 30/06/93 REVIEWED BY/DATE Gerald Delaney, 30/06/93

PRINCIPAL STEPS	POTENTIAL HAZARDS	RECOMMENDED CONTROLS
1. Obtain all necessary permits 2. Install buoys	1. Boat travel during buoy installation 2. Heat stress 3. Insect bites 4. Hand and power tools 5. Trips and falls	1. Follow proper boating rules 2. Wear life jackets or other flotation devices while in boat 3. Follow the procedures of this plan 4. Identify all personnel hypersensitive to insect bites 5. Follow all operating rules and clearances 6. Wear proper PPE 7. Use caution when moving around the site

EQUIPMENT TO BE USED	INSPECTION REQUIREMENTS	TRAINING REQUIREMENTS
1. boat	1. Documented Inspection of boat by operator.	1. Water Safety training.

ACTIVITY Restore Area ANALYZED BY/DATE Laura Slovak, 30/06/93 REVIEWED BY/DATE Gerald Delaney, 30/06/93

PRINCIPAL STEPS	POTENTIAL HAZARDS	RECOMMENDED CONTROLS
1. Backfill, grade and contour excavated areas with shovels 2. Reseed areas with "pigeon peas" or other tropical shrubbery, as needed 3. Control particulate emissions 4. Burn materials, as needed 5. Waste management 6. Post-remediation clean-up 7. Site close-out	1. Heat stress 2. Insect bites 3. Fire 4. Hand and power tools 5. Trips and falls	1. Follow the procedures of this plan 2. Observe all operating rules and clearances 3. Identify all personnel hypersensitive to insect bites 4. Wear proper PPE 5. Use caution when moving around the site

EQUIPMENT TO BE USED	INSPECTION REQUIREMENTS	TRAINING REQUIREMENTS
1. Shovels	1. Final check of area by Senior UXO Supervisor and CEHND on-site representative at the conclusion of all work activities	

ACTIVITY Demobilization ANALYZED BY/DATE Laura Slovak, 30/06/93 REVIEWED BY/DATE Gerald Delaney, 30/06/93

PRINCIPAL STEPS	POTENTIAL HAZARDS	RECOMMENDED CONTROLS
1. Remove contractor facilities 2. Redeploy personnel and equipment 3. Perform final check of area	1. Traffic 2. Heat Stress 3. Boat travel during transfer from island 4. Insect bites 5. Trips and falls	1. Observe traffic laws 2. Follow proper boating rules 3. Follow the procedures of this plan 4. Identify all personnel hypersensitive to insect bites 5. Wear proper PPE 6. Use caution when moving around the site

EQUIPMENT TO BE USED	INSPECTION REQUIREMENTS	TRAINING REQUIREMENTS
1. Mechanical Handling/Lifting Equip. 2. Vehicles.	1. Inspection/acceptance of site by USAEDH Representative.	1. Equipment training, as needed 2. Vehicle operations training, as needed 3. Environmental protection training 4. Site-specific safety training

MTA, Inc.
2225 Drake Avenue, Suite 8
Huntsville, Alabama 35805

Remediation of Sites in the U.S. Virgin Islands and Puerto Rico
Contract DACA87-92-D-0147
Delivery Order 0002

LOCATION, REMOVAL AND DISPOSAL OF UXO CULEBRA ISLAND, COMMONWEALTH OF PUERTO RICO

ANNEX C
PROPERTY EQUIPMENT PLAN/PROPERTY MANAGEMENT PLAN (PEP/PMP)
TO
SITE SPECIFIC WORK PLAN (SSWP)

U.S. Army Engineering Division, Huntsville
ATTN: CEHND-CT-D (A. Prince)
P.O. Box 1600
Huntsville, Alabama 35807-4301

ANNEX C
PROPERTY EQUIPMENT PLAN/PROPERTY MANAGEMENT PLAN
(PEP/PMP)
CULEBRAS ISLAND
(CONTRACT DACA87-92-D-0147, DELIVERY ORDER 0002)

C-1. GENERAL.

C-1.1. Purpose. This document provides:

a. An initial listing of the equipment and supplies required for performing the on-site tasks for the subject delivery order.

b. The CEHND approved plan for management of these resources.

C-1.2. Format.

C-1.2.1. Property Equipment plan (PEP). Resources in the PEP are identified by category (non-expendable equipment and expendable supplies) and application (field, administrative, marine and demolition).

C-1.2.2. Property Management Plan (PMP). The PMP is a stand-alone document which provides property management guidance for the entire contract effort. Format of the PMP is found in the PMP's table of contents.

C-2. ACQUISITION OF EQUIPMENT AND SUPPLIES.

C-2.1. Equipment Acquisition. Equipment will be obtained at least cost to the government, and only with the approval of the government per requirements of the contract. MTA will use government furnished equipment (GFE) whenever possible to reduce material acquisition costs. Equipment purchases will be conducted in accordance with acquisition provisions of the contract.

C-2.2. Supplies Acquisition. Initial supplies will be obtained from the lowest bidder (minimum of three sources) in accordance with acquisition provisions of the contract. Subsequent purchases of $200 or more will be obtained in the same manner. Supply purchases of less than $200 will be at the discretion of the Project Manager.

C-3. FIELD EQUIPMENT & SUPPLIES.

C-3.1. Field Equipment.

1	Electronic Distance Measure device
1	Chain Saw, light duty, 14"
2	Trimmers, metal blade, gasoline powered (e.g., Weedeaters)
2	Gas cans, 5 gallon
4	Shovels, round tip
2	Tape measures, 100'
1	Truck, pick-up, 4x4, 3/4 or 1 ton cap. (explosive carrier)
1	Truck, pick-up, 4x4, 3/4 or 1 ton cap. (general carrier)
6	Class 10-BC rated portable fire extinguisher
3	First Aid Kits (1/vehicle, 1 at CP)
1	Eyewash Kit
4	Placards, reflectorized, "Explosive A"
4	Placards, reflectorized, "Flammable"
4	Explosive Signs, 36 x 36 inches, Warning Demolition in Progress
1	Paulin, fire-resistant 8' x 12' (Explosive carrier)
1	Field tool kit
4	Magnetometers SCHONSTEDT, GA- 52B/72B
1	White's Seismic/Acoustic Detector
6	Radios Portable, Motorola MT 1000 or equivalent
2	Trailers, 1- Operations 1- Crew/tools
6	General purpose padlocks (for trailers and containers)

C-3.2. Field Supplies.

1	wooden stakes, 1"x2"x4'
1	Case, Sun screen/protection
1	Case, Insect repellant
12	Field Logbooks
1	Dry erase magnetic board- 3' x 5' (2)
3	Sets, markers, erasers and cleaning fluid for dry-erase board
12	Pair, Safety glasses
12	Hard hats
1	Box, Earplugs (box= 200 pr.)
12	Baseball hats
12	Pair, Work Gloves
12	Neckerchiefs
1	Box, Tape, Monofilament
1	Box, Tape, Electrical
1	Box, Tape, Masking
1	Box, Tape, Engineer

C-4. ADMINISTRATIVE EQUIPMENT & SUPPLIES.

C-4.1. Administrative Equipment.

1	Computer, Laptop (NOTEBOOK), with modem
-	Software programs: WordPerfect 5.1; ProComm; QuattroPro
1	Facsimile Sharp Model UX-100 or equivalent
1	Printer, 24 pin metric or equivalent
1	Cellular Telephone
1	Camera, 35 mm or Polaroid
1	Video Recorder (camcorder)
1	2-drawer file cabinet, lockable
1	VCR
1	19" television, color

C-4.2. Administrative Supplies.

6	Clipboards
2	Boxes, Computer paper
6	Boxes each of pens, pencils, grease pencils, markers
1	Pencil sharpener
1	Box, envelopes
1	Box, fax paper
1	Box, file folders
1	Petty cash Log
2	Staplers
2	Scotch tape w/dispensers
1	Box, paper clips
2	Packages, tablets (minimum 20 per package)
1	Universal punch (2 & 3 hole)
2	Boxes, thumb tacks
2	Packages, Note pads (sticky), various sizes
1	Box, document protectors
1	Staple remover
1	Box. medium binder clips
10	Loose leaf notebooks
1	Surge Suppressor
1	Case, paper towels
1	Case, paper cups
1	Box, trash bags
1	Case. toilet paper
6	VHS cassettes, blank

C-5. MARINE EQUIPMENT & SUPPLIES.

C-5.1. Marine Equipment.

1 30' - 40' work boat w/ lifting equipment (rental)
6 life jackets

C-5.2. Marine Supplies.

30 Can bouys (per description in Annex AA-1, Bouy Placement Procedures)
2000' Steel anchoring cable
60 Precast concrete anchoring blocks

C-6. DEMOLITION EQUIPMENT & SUPPLIES.

C-6.1. Demolition Equipment.

1	Electric Firing kit, including firing wire and reel; crimping tools; blasting multimeter; blasting machine (10 cap)
2	10-cap boxes (Non-electric)
4	M2 crimper sets w/carrying case
4	knife, blasting
2	Tape measure, 10'
1	Portable magazine, DayBox

C-6.2. Demolition Supplies.

2	Cases, C-4 explosive
50	Blasting caps, electric, military or equivalent
18	Blasting Caps, #7 (minimum rating)
1	Can, cord, detonating, 50 grain, 1000 ft
1	Can, safety blasting (time) fuse, (5 rolls/can)
50	Igniters, time fuse
1	Case, Kinepak brand Kinestik K15, (48 - 1 lb. charges per case)

MTA, Inc.
2225 Drake Avenue, Suite 8
Huntsville, Alabama 35805

Remediation of Sites in the U.S. Virgin Islands and Puerto Rico
Contract DACA87-92-D-0147

REMEDIATION OF SITES IN THE U.S. VIRGIN ISLANDS AND PUERTO RICO

PROPERTY MANGEMENT PLAN (PMP)

U.S. Army Engineering Division, Huntsville
ATTN: CEHND-CT-D (A. Prince)
P.O. Box 1600
Huntsville, Alabama 35807-4301

MTA, Inc.
Remediation of Sites in the U.S. Virgin Islands and Puerto Rico
Contract DACA87-92-D-0147

Property Management Plan

Table of Contents

MTA, Inc.
"Remediation of Sites in the U.S. Virgin Islands and Puerto Rico"
Contract DACA87-92-D-0147

Property Management Plan

1.0 PURPOSE. To provide guidelines for administration of MTA leased and Government real and personal property for the "Remediation of Sites in the U.S. Virgin Islands and Puerto Rico."

2.0 REFERENCES.

2.1 Defense Acquisition Regulation (DAR). Appendix B, "Control of Property in Possession of Contractors"

2.2 Federal Acquisition Regulation (FAR). Subpart 45.5, "Management of Government Property in Possession of Contractors"

2.3 Property Manual. "Finance/Property Practice 9-No-Series"

3.0 DEFINITIONS.

3.1 Property Management. The process of maintaining an adequate Property Control System for Government Property. Property management includes acquisition, physical and financial accountability and control, utilization, visibility, maintenance, and disposal.

3.2 Property. Any tangible asset consisting of real property, machinery and equipment, special tooling, or vehicles. The term here includes all property acquired for the purpose of performing the above referenced contract in which MTA and subcontractors exercise accountability and responsibility.

3.3 Contractor Acquired Property. Property acquired or otherwise provided by the contractor for performing a contract and to which the Government has title.

3.4 Government Furnished Property. Property in the possession of or directly acquired by the Government and subsequently made available to the contractor.

3.5 Government Property. All property owned by or leased to the Government or acquired by the Government under the terms of the contract. It includes both Government Furnished Property (GFP) and contractor acquired property.

3.6 Custodial Records. Written memoranda of any kind (i.e. requisitions, issue hand receipts, tool checks, stock records books, etc.) used to control items issued for the purpose of performing the contract.

4.0 POLICY. MTA, Inc. is directly responsible and accountable for all government property in accordance with requirements of the contract. This includes Government property in the possession of a subcontractor. MTA has established specific policies and procedures to maintain, control, protect, and preserve all Government property. It is incumbent for all supervisory personnel to maintain accurate custodial records, provide necessary security, and maintain training required to perform scheduled maintenance of all equipment at each job site.

5.0 ACCOUNTABILITY. All equipment utilized at any location will be accounted for on a Job Site Inventory Record (Appendix A) that denotes each line item and quantity. The original record will be maintained at MTA Huntsville and a copy provided to each site. All Government owned equipment with a dollar value of $200.00 or more will be accounted for on a Government Property Tracking Log (Appendix B). A complete inventory listing will be maintained by MTA Huntsville (Appendix C). Changes in the equipment inventory will be forwarded to MTA Huntsville within one working day after the change.

5.1 Accountability Records. Accountability records are official accountable records maintained by MTA and subcontractors to show status and to control all Government property furnished to or otherwise acquired under the contract in reference.

5.1.1 Automated Systems. Automated accountability records will be established on data base or spreadsheet software (i.e. dBase IV, Quattro Pro, or Lotus 1-2-3). The master disk will be located in MTA Huntsville and each job site (i.e. U.S. Virgin Islands and Puerto Rico) will maintain a duplicate disk. Each time an entry is made using software the disk will be backed-up on a separate disk. Each job site will forward a disk of the previous week's entries to MTA Huntsville on the first workday of each week.

5.1.2 Manual Systems. Manual accountability records will be used to issue equipment from storage facilities to establish audit trails for consumption. Manual forms will be copied and the original forwarded to MTA Huntsville at the calendar end of each month.

5.2 Property Control Records. Property control records are records which conform to the FAR and/or other contractual requirements and are accurately maintained for all Government property at the contractor primary and alternate locations as well as subcontractor locations. A written property control system (automated computer program and manual log book) is established and maintained to control, protect, preserve and maintain all property. Records will be maintained to account for all property and are made available to Government until MTA is relieved of that

responsibility. Property records contain descriptive, historical, accountability, and financial/contractual information sufficient for management control and reporting requirements. Support documentation used for posting entries will provide for complete, current, and auditable data. All transactions including location changes and inventory dates will be promptly posted to the data file. A support documentation file will be established to receive all support documentation.

5.3 Material Records. MTA, through a Deltek network, employs effective record-keeping systems which reflect programs or operational requirements, stock balances, open order positions, receipts, disbursements, and attrition factors. Economic order quantity or contract requirements are established for each purchased item. Material is quantitatively verified upon receipt and routed through the appropriate receiving inspection area for acceptance and test in accordance with acquisition documents. The Project Manager is responsible for verifying compliance of materials in accordance with applicable procurement documents.

5.4 Custodial Records. Custodial records are established for items issued from tool cribs, guard force, personnel protective clothing, and other items issued to individuals for use in their work.

5.5 Consumable Item Records. Consumable items will be signed for to provide a consumption audit trail (Appendix D).

6.0 IDENTIFICATION.

6.1 Marking. All Property acquired under the contract is physically identified to provide distinctive evidence of ownership in accordance with established control levels for functional and accountability purposes.

6.2 Bar Codes. Government machinery and equipment with an original acquisition cost of the Capital Threshold Value (CTV) or over, items requiring scheduled calibration or maintenance, and all capital-type components of Special Test Equipment (STE) which are incorporated in a manner that removal and reutilization are feasible and economical will be physically identified with standard devices bearing bar codes and/or pre-printed numbers and ownership designation.

6.3 Paint. Standard off-the-shelf tools (i.e. shovels, axes, hammers, etc.) will be color coded using red spray paint for Government owned equipment.

7.0 ACQUISITION. Acquisition is the process of acquiring Government property either through transfer from Government sources or through purchase.

7.1 Authority. MTA is required to justify and control the acquisition of Government

Furnished Property (GFP). Authority to acquire GFP, including Agency Peculiar Property (APP), must be in MTA's contract. The Project Manager identifies requirements for GFP, including APP, and provides the information to the MTA Contracts Administrator to ensure that GFP requirements, including itemized lists and delivery schedules, when appropriate, are added in the contract.

7.2 Standard Off-the-Shelf Items. Three quotes are obtained from suppliers for each piece of standard purchased or leased equipment, and all supplies in excess of $200.00. MTA will acquire material from the vendors that offer the best price advantage and value to the Government. In instances where MTA does not use the low bid or uses sole source acquisition, justifications are provided. In instances where rental costs exceed purchase costs for a particular piece of equipment over the life of the project, the Contracting Officer (CO) will be notified prior to entering a rental agreement. The Work, Data, and Cost Management Plan (WDCMP) lists each item of equipment required to support this contract and qualifies all property employed to perform necessary operations under the current contract. It categorizes field equipment, office equipment, and consumable supplies and shows the source and acquisition costs associated with each piece. Upon acceptance and approval of this plan by the CO, additional field and/or office equipment and consumable supplies in excess of $200.00 will not be acquired without the express written approval of the CO.

8.0 RECEIVING. Receiving is the process of Government property initially entering into MTA's custody.

8.1 Process. All receipts of property are promptly processed through MTA's standard established receiving functions. This process includes receiving merchandise from carriers and a visual inspection of its physical specifications and condition, quantity, model, etc. against the purchase order/requisition. Exceptions to this rule are receipts of hazardous materials, fuels, or other property requiring special handling. In instances wherein deliveries bypass Receiving, the recipient is responsible for providing the Project Manager with appropriate documents such as packing sheets, bills of lading and freight bills. (MTA's receiving reports are the last copies of the purchase requisitions.)

8.2 Reports. Receiving Reports are generated to document items and quantities received, condition, shipping data, date received, etc. Items received are reconciled against requisition documents, purchase orders, packing lists, or related documents to ensure accountability for all items, attachments, and accessories. Property is protected while in receiving including limited access into the area by authorized personnel only.

8.3 Quality Control. MTA TEAM personnel perform required inspections to ensure that receipts conform with quality conditions established in procurement documents and with contractual requirements. Deviations from quality requirements are reported to and

coordinated with the Project Manager for determination to accept or reject. Necessary adjustments are negotiated with suppliers and discrepancy reports are submitted to the COR, if applicable.

8.4 Discrepancies Incident to Shipment. Loss, damage, and destruction of property incident to movement of property to MTA which is disclosed at the time of receipt, or in failure to receive, is immediately reported to and coordinated with the Project Manager and the COR if the incident is expected to impact performance. The discrepancy is recorded on the receiving documents and the property is stored in the receiving area pending resolution of the discrepancy. If GFE is involved, MTA will investigate the cause of the discrepancy and initiate the appropriate discrepancy reports for timely submission to the GPA. Misdirected shipments and other discrepant property is adequately segregated and controlled pending finalization of disposition instructions.

9.0 STORAGE. The process of storing all types of Government property.

9.1 Process. MTA is obligated to maintain and administer a program for protection and preservation of property to insure its full availability and usefulness for the performance of this contract. The program will provide for: (1) efficient and effective utilization of storage space, (2) safeguarding property against pilferage, (3) protecting property against file or deteriorating effects of weather, temperature or contamination, (4) an adequate locator system, and (5) prompt declaration of excess. Government property will be segregated and kept physically separate from company property, but may be co-mingled when: The property is clearly identified and recorded as Government special tooling, special test equipment, or plant equipment.

9.2 Storage Area. Inside storage area access is limited to authorized personnel. Property will remain readily available for inspection and inventory without difficulty.

9.3 Outside Storage. Outside storage of property is authorized. The Project Manager is responsible for the selection and proper protection of property not requiring covered storage. Property stored in open areas must be organized in such a manner as to facilitate withdrawal, identification, inspection, and inventory.

9.4 Special storage. Sensitive type items which are subject to pilferage will be provided the maximum protection practicable. Special controls and inspection are provided for items in storage subject to corrosion, humidity, temperature, age controls, etc.

10.0 SECURITY. Security will be provided for all Government and contractor provided equipment. Security guards will provide surveillance during non-duty hours.

10.1 Storage Areas. All storage areas will be locked when not in use. Keys will be

maintained in a key box in the Command Post. Keys will be issued only when required to open a storage area.

10.2 Motorized Equipment. All motorized equipment will be secured when not in use. Keys will be removed from ignitions and a heavy chain and lock will be used to secure the steering wheel. Motorized equipment ignition keys and locks to the chain will be maintained with the equipment log book.

11.0 ISSUE. Documentation will be maintained of all equipment being transferred or placed in subcustody to other job sites or employees. An equipment logbook will be maintained by the Project Manager or designated appointee. The following information will be entered in the logbook for each item on loan: Item Description, Owner, Serial #, Issued To, Date, Initials, and Remarks. A single line will be drawn through each item when it is returned. A new line will be started indicating the actual location of the item. The shipment invoice number and date will be entered for any shipment. Equipment, vehicles, and motorized equipment will be issued only to trained/authorized personnel.

11.1 Equipment. Equipment will be signed for at the beginning of each work day and turned in at the end of each work day.

11.2 Vehicles. Personnel will draw vehicles from the motor park when needed. Operators will dispatch vehicles/motorized equipment using MTA dispatch forms. Fuel and oil amounts will be recorded in ink each time when added to the vehicle/equipment.

11.3 Consumables. A log for consumables will be maintained. Each time an employee draws a consumable item, the employee will write in ink what the item is, intended use, and location of use.

12.0 LOSS/DAMAGE/DESTRUCTION (LDD) OF GOVERNMENT PROPERTY.

12.1 Process. All occurrences in which the amount of LDD to the property is of a nature that will require request for relief of responsibility or authority to expend contract funds for repair or replacement. Included are items of special tooling, special test equipment facilities, and military property which have been accepted by MTA.

12.2 Reporting. LDD of Government property will be reported by any employee having knowledge of the LDD to the immediate supervisor who will in turn report it through the chain to the Project Manager. In instances of theft, vandlism or other LDD of suspected criminal nature, the contractor shall notify local police agencies and request an investigation. Copies of any police reports will be provided to CEHND and will also be included with corporate insurance claims.

12.3 Responsibilities. The Property Administrator (PA), immediately upon notification of the LDD, initiates inquiry into the circumstance surrounding the incident to determine MTA's responsibility, and if the occurrence is reportable to the Government Property Administrator (GPA) under the terms of the contract. Each reportable occurrence is reported as soon as the facts become known. A written final report is submitted within 20 days.

12.4 Corrective Action Plan. MTA prepares and implements a plan of corrective action and furnishes the plan to the GPA promptly after notification of a system deficiency or incident of LDD, where applicable. The PA provides immediate internal protection of Government property in response to identified deficiencies until disposition is directed.

12.5 Relief From Responsibility. A request for relief of responsibility with all necessary data to substantiate the request will be submitted by MTA to the GPA.

13.0 MOVEMENT. The process of moving all types of Government property. It includes movement from one point to another within and between MTA work sites and facilities for any purpose, and protection during movement.

13.1 Material Handling. MTA will insure that only properly trained individuals operate material handling equipment and adequate protection is provided during movement, such as packing, covering, skidding, procedures, techniques, and safety precautions are adhered to. MTA's Property Administrator (PA) will prepare the proper support documentation once it is determined that the property will be moved (or once authority has been granted if required). The support document will be posted to all applicable files as required.

13.2 Shipping. Shipments of property are processed through MTA established shipping functions. Exceptions to this practice are shipments of hazardous materials or extremely bulky items (such as earth moving equipment) wherein it is to the advantage of the shipping function to arrange for in-place packing/crating, marking,
and moving. MTA maintains a single control point for control and distribution of shipping documentation. All GFP that is moved by commercial carrier or the MTA TEAM will be packaged to protect the equipment and data logged for tracking movement and costs (i.e. carrier, bill of lading, invoice number, etc).

14.0 INVENTORIES. The process of physically locating and counting Government property and comparing it to records of such property, including the posting of findings and adjustments and the reporting of both to the GPA, if required.

14.1 Process. Physical inventories are performed in accordance with procedures defined in the FAR and schedules acceptable/approved by the GPA. The type and frequency of physical inventories normally will not vary between contracts being performed by MTA, but

may vary with the type of property being controlled. Personnel who perform the physical inventory will not be the same individual who maintain the property records. Immediately upon completion of this contract, MTA will perform and cause each subcontractor to perform a physical inventory, adequate for disposal purposes, of all Government property applicable to the contract, unless the requirement is waived by the GPA. The maximum interval between the taking of each inventory, by property category, follows:

Property Category	Interval
Material (Identified and Non-identified Government)	30 Days
Government Furnished Property (GFP) (Identified and Non-identified)	30 Days
Special Tooling	15 Days
Special Test Equipment	15 Days
All Identified Equipment and Located with Subcontractors	30 Days

14.2 Emergencies. Wall to wall inventories will be conducted in the event of a job site shutdown (i.e. evacuation for a hurricane) as soon as possible after the job site reopens. Reports will be provided to MTA Huntsville immediately upon completion of the wall to wall inventory.

15.0 REPORTS. The preparation and submission of reports reflecting the status of Government property as required by contract or regulation.

15.1 Accuracy and Completeness. The MTA PA having accountability responsibility for the property is responsible for obtaining from the appropriate property control systems, the necessary information for the proper completion of the DD Form 1662.

15.2 Submission. Fiscal year reports will be submitted to the GPA by 30 October of each year.

16.0 CONSUMPTION. The process of incorporating Government property, of the material or agency peculiar classification, into an end item or otherwise consuming it in performance of this contract.

16.1 Reasonableness. Any material consumption will be analyzed to determine reasonableness and management controls will assure items are consumed only as authorized

by this contract unless otherwise approved by the COR. Issue documentation is properly prepared and authorized, reflecting a clear audit trail that items are properly consumed.

16.2 Identification of Excess. Reporting of excess is promptly initiated for all material excess of the amount needed to complete full performance under the contracts providing it or authorizing its use. Planned management of resources to prevent waste is essential. Through an effective conservation program, excessive consumption rates may be reduced by: (1) prompt return of excesses, (2) reutilization of usable material, (3) issue limited shelf life items on a first-in, first-out basis, and (4) prompt adjustment of on-order quantities upon change in requirements.

17.0 UTILIZATION. The process of using facilities, special tooling, test equipment, and agency-peculiar property for the purpose for which it was acquired or furnished.

17.1 Authorized Use. Government property will be utilized only for those purposes authorized in the contract or, where required, when necessary prior government approvals are obtained. Rental charges will be determined and allocated in accordance with MTA standard practices.

17.2 Identification of Excess. Excess property is any property no longer required by the project manager in the performance of the work for which it was acquired. Excess Government property is processed in accordance with contractual provisions. Unless justified for retention, no more than 150 days will elapse from the date that Government property is received in excess/surplus storage until it is put on an inventory schedule and reported for disposition instructions.

18.0 MAINTENANCE. Maintenance is the process of providing the amount of care necessary to obtain a high quality of production and the most useful service life of Government property. Regular or scheduled maintenance will be performed on all GFP in accordance with the manufacturer's instructions.

18.1 Care, Maintenance, and Use. MTA will be responsible for the preservation, maintenance, and use of Government property in its possession or control from the time of receipt until properly relieved of responsibility, in accordance with sound industrial practice and the terms of the contract. GFP will not be abused via neglect or misuse and any required repairs out of cycle with preventive or scheduled maintenance will be addressed to the Governments On Site Representative. The removal of Government property to storage, or its contemplated transfer, does not relieve MTA of these responsibilities.

18.2 Preventive Maintenance. Maintenance performed on a regularly scheduled basis to prevent the occurrence of defects and to detect and correct minor defects before they result in serious consequences. Suitable systems and records are employed to properly plan,

schedule, and control maintenance. Effectiveness of the maintenance program is monitored by regular surveillance of activities and review of performance records is performed by supervisory and management personnel.

18.3 Calibration. An calibration program is established as part of MTA's maintenance program for all items requiring calibration (i.e. air monitors, ferrous ordnance locators, radios, etc).

18.4 Unscheduled Maintenance. Unscheduled maintenance requirements are performed in an expeditious manner. Records of maintenance and corrective actions will be maintained for each unscheduled repair.

18.5 Capital-Type Rehabilitation (CTR). The contractors maintenance program shall provide for disclosing and reporting the need for major repair, replacement, and other capital rehabilitation work of Government property in its possession or control. MTA will keep records of maintenance actions performed and any deficiencies in the Government property discovered as a result of inspections. CTR repairs require COR approval prior to beginning the work.

19.0 SUBCONTRACTOR CONTROL. The process of prime contractor control over subcontractors on Government Property.

19.1 Prime Contractor Responsibilities. MTA shall require subcontractors possessing or controlling Government property to adequately care for and maintain that property and assure that it is used only as authorized by the contract. The MTA approved property control system shall include procedures necessary for accomplishing this responsibility. Records maintained by MTA's subcontractors of Government property acquired against MTA's contract may only be utilized as official records only if the subcontractor has a Government approved property control system. Copies of the support documents will be furnished to contractors property management office for inclusion in the data base to meet property surveillance/certification requirements.

19.2 Subcontractor Responsibilities. Subcontractors will ensure all provisions of this plan are followed. Subcontractors will use MTA's property management system for this contract.

20.0 DISPOSITION. The process of disclosing excess, requesting disposition instructions, and affecting disposal of Government property.

20.1 Disclosure of Excess. The contractor is required to promptly report surplus customer/government-owned property immediately upon determination that such property is no longer required for current or future use and to provide complete description on inventory for all items having commercial value to facilitate prompt and effective screening

and disposal.

20.2 Disposal. Unless the contract furnished specific instructions to the contrary all requests for disposition instructions are reported to the Contracting Officer. Items will be disposed of within a reasonable time period after disposal authority is received. Identification tags will be removed from items before disposal, when appropriate. The GPA will assure that disposition documentation is complete and reflects authority, disposal action, date of disposal, and is posted to the property record.

21.0 CONTRACT PROPERTY CLOSE-OUT. The process of properly closing out the property element of a contract.

21.1 Transfer of Property Between Contracts. Prior to transfer of property between contracts, the requesting PA ensures that terms of the receiving contract and, when applicable the releasing contract, provide for the proposed transfer. The releasing PA verifies contractual authorization before releasing the property. Only items that are actually required for receiving in the contract are transferred.

21.2 Relief from Responsibility. Inventory adjustments, liability determinations and other property issues will be resolved before contract close-out.

21.3 Final Contract Review. Upon receipt of the notice of contract completion, the PA will review applicable records to determine the amount and location of property acquired under the contract. With the exception of authorized transfers and surplus processing, no other movement of property is authorized without the written approval of the releasing and receiving PA. For contracts including the Special Tooling clause, a list of special tooling will be provided the Government for disposition. Prescribed reports required for completed contracts are properly submitted and MTA will notify
the GPA promptly when all pending actions on property related matters are completed.

Sample Property Management Forms

MTA Job Site Inventory Record

Job Site: _____ Project Manager: _____

Job Start Date: _____ Page _____ of _____ Pages

Item Description	Quantity On Hand	Condition	Initials	Printed Name	Inventory Date

MTA Government Property Tracking Log

Contractor Name: MTA, Inc.

Contract Number: DACA87-92-D-0147

Location: Various sites in Puerto Rico and the Virgin Islands

Description:

Model Number: Manufacturer:

Serial Number: Date Received:

Unit Price: Property Number:

Remarks:

Expendable Property List

Job Site: _____ Project Manager: _____

Job Start Date: _____ Page _____ of _____ Pages

Item	Manufacturer	U/I	QTY	Location	UI/Cost	Total Cost

Nonexpendable Property List

Job Site: ______________________ Project Manager: ______________________

Job Start Date: ______________________ Page _____ of _____ Pages

CEHND #	Item	Source	P.O #	Mfr/Model	Serial #	U/I	Unit $	QTY	Total $
LOCATION					REMARKS				

Consumable Sign Out Log

Job Site: _____ Project Manager: _____

Item	Quantity	Date	Location	Signature

GOVERNMENT PROPERTY TRACKING LOG

Contract Number:_____ Delivery Order Number:_____ Location:_____
Contractor Property Manager:_____ Site Supervisor:_____ Date:_____

Line No.	Description of Item Nomenclature/Manufacturer	Model Number	Serial Number	P.O. Number	Name of Supplier	Unit Price	Date Rcd On Site	Classification		Remarks
								Exp.	Non-Exp.	

Page ____ of ____

MTA, Inc.
2225 Drake Avenue, Suite 8
Huntsville, Alabama 35805

Remediation of Sites in the U.S. Virgin Islands and Puerto Rico
Contract DACA87-92-D-0147
Delivery Order 0002

LOCATION, REMOVAL AND DISPOSAL OF UXO CULEBRA ISLAND, COMMONWEALTH OF PUERTO RICO

ANNEX D
WORK, DATA AND COST MANAGEMENT PLAN (WDCMP)
TO
SITE SPECIFIC WORK PLAN
(SSWP)

U.S. Army Engineering Division, Huntsville
ATTN: CEHND-CT-D (A. Prince)
P.O. Box 1600
Huntsville, Alabama 35807-4301

D-1. WORK MANAGEMENT.

D-1.1. Organizational Structure.

Project control will be accomplished utilizing a formal chain of command system. Each assigned individual working on the project site will be controlled through a formal reporting line and will be required to obtain approval before undertaking remediation activities. The Project Manager will direct field operations and is empowered to stop all operations if such action is deemed appropriate. The UXO Supervisor and all UXO qualified personnel may stop work to prevent, correct, or overcome unsafe situations. The Project Manager will coordinate with the Senior UXO Supervisor at the beginning and end of each day. Problems and unusual occurrences will be reported at the meeting, as will the work projections for the succeeding day. This control and reporting structure will assure compliance with work plans and will provide a continuous project status review during ongoing operations. The project organization is shown in Figure D-1.1.

D-1.2. Duties and Responsibilities of Key Personnel.

D-1.2.1 Project Manager. The Project Manager will be located at MTA Corporate Headquarters. The Project Manager will exercise control through the formal lines of authority represented in Figure D-1.1 and will be responsible for:

a. Development and submission of management reports to the CEHND Project manager and Contract Manager.

b. Coordination of the total project effort.

c. Participating in independent quality control activities.

d. Providing personnel and logistical support as required to on-site personnel.

D-1.2.2 Senior UXO Supervisor. The Senior UXO Supervisor has direct responsibility for all on-site operations for the project. These responsibilities include:

a. Accomplishment of all work plan objectives and tasks.

b. Recording of all on-site activities.

c. Administration of the on-site safety program and compliance with the Accident Prevention Plan. For this project, the Senior UXO Supervisor is also designated as the Site Safety Officer.

d. Administration of the environmental protection program and compliance with the Environmental Protection Plan.

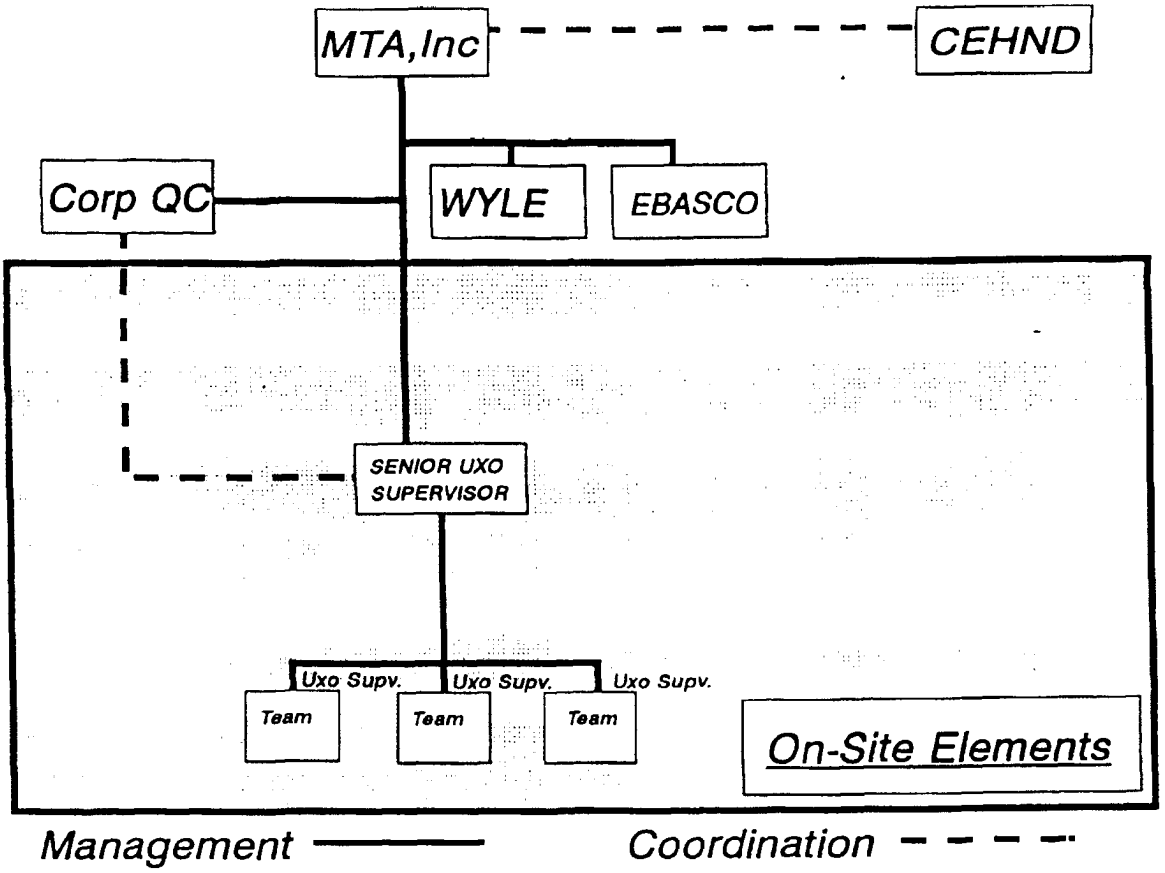


Figure D-1.1
Project Organization

Week 1	Week 2-3	Week 4-7	Week 8
Mobilization Paragraph 3.1, Basic Workplan			
	Brush Clearance Paragraph A.3.3, UXO Subplan (Annex A)		
	Warning Buoy Placement Warning Buoy Placement Plan, UXO Subplan		
		UXO/OEW Removal Paragraphs A-3 through A-7, UXO Subplan (Annex A)	
			Demobilization Paragraph 3.3, Basic Workplan

Figure D-1.3
Tentative Project Schedule

D-1.2.3. UXO Supervisors. UXO Supervisors are responsible for the activities and individuals assigned to their supervision, to include local labor assigned to a particular task.

D-1.2.4. UXO Specialists. UXO Specialists perform specific tasks as directed by UXO Supervisors and/or the Senior UXO Supervisor. UXO Specialists will not be tasked with supervisory duties.

D-1.2.5. UXO Assistants. UXO Assistants will perform tasks as assigned by supervisory personnel. UXO assistants will have no supervisory authority.

D-1.2.6. First Aid/CPR Attendant. At least one member of each work crew will be certified in first aid/CPR, and will by appointed by the Senior UXO Supervisor as the First Aid/CPR Assistant. This will be as additional duty. The First Aid/CPR Attendant shall be certified in First Aid/CPR by satisfactorily completing first aid and CPR courses.

D-1.3. Schedule. The project is divided into three phases, Mobilization, Remediation and Demobilization. Specific event sequences and durations are shown in Figure D-1.3.

D-1.4. Quality Control. See Annex F, Quality Control Plan.

D-2. DATA MANAGEMENT. The Project Manager will be the central point for data management, and will be responsible for collecting and submitting Contract Data Requirements List (CDRL) items. The Project Manager will also develop, staff and submit the final removal report.

The Project Manager will also retain completed log books and quality control documentation. This material will be submitted with the final removal report.

D-3. COST MANAGEMENT.

D-3.1. Programming. All manpower, travel and material costs are programmed through MTA's Allegro financial management system. The Project Manager is responsible for programming resources through the Allegro system.

D-3.2. Accounting and Reporting. Resource status will be tracked through MTA's DELTEK accounting system. The Project Manager is responsible for monitoring the status of program resources and for reporting resource status to the CEHND Project Manager and Contract Manager (Anita Prince) monthly.

MTA, Inc.
2225 Drake Avenue, Suite 8
Huntsville, Alabama 35805

Remediation of Sites in the U.S. Virgin Islands and Puerto Rico
Contract DACA87-92-D-0147
Delivery Order 0002

LOCATION, REMOVAL AND DISPOSAL OF UXO CULEBRA ISLAND, COMMONWEALTH OF PUERTO RICO

ANNEX E
ENVIRONMENTAL PROTECTION PLAN (EPP)
TO
SITE SPECIFIC WORK PLAN
(SSWP)

U.S. Army Engineering Division, Huntsville
ATTN: CEHND-CT-D (A. Prince)
P.O. Box 1600
Huntsville, Alabama 35807-4301

ANNEX F
ENVIRONMENTAL PROTECTION PLAN
CULEBRAS ISLAND
(CONTRACT DACA87-92-D-0147, DELIVERY ORDER 0002)

E-1. INTRODUCTION.

E-1.1. Purpose. The purpose of this Site Specific Environmental Protection Plan is to establish procedures to be implemented during Interim Removal of Unexploded Ordnance (UXO) and installation of warning signs/devices within designated areas of Culebra Island, Commonwealth of Puerto Rico (CPR) under provisions of The Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and Section 300.400 of the National Contingency Plan.

E-1.2. Scope. In this plan, consideration has been given to land, water, soil, and air resources. All of the work area is clear of large, well established trees. The area is covered with a dense layer of ground covering vegetation which has been removed twice in the past year. Initially, vegetation removal will be to a level 6" above the ground surface in order to allow marking of sweep lanes for magnetometer surveys. These surveys will detect metallic anomalies on and below the surface. Additional clearing, grubbing, and excavation will proceed in areas suspected of subsurface ordnance contamination. All excavations will be followed by backfilling and cleanup operations to restore the land. MTA's Project Manager will be responsible for insuring that all site work is performed in accordance with this plan and any applicable local and Federal regulations. The Project Manager will coordinate all abatement activities associated with this plan with the U.S. Army Corps of Engineers' Contracting Officer.

E-2. AREA OF OPERATIONS.

E-2.1. Geographic Description of Area. The area to be cleared is located in the Flamenco Beach area. It is approximately three (3) acres in size and is covered by a thick layer of ground covering vegetation. The growth is about three (3) feet high throughout the area. The area was cleared of vegetation in July 1992 and was left barren so that campers could use the area. The rate of growth is consistent with vegetation growth in the tropics. The area is owned by the Puerto Rican Department of Natural Resources (DRN). The DRN has developed a long range plan for developing the Flamenco Beach area into a Recreation site.

The area is bounded on the south by a line of Mangroves, on the north by a limited access dirt road, on the east by a fence with a gate which separates the developed portion of the DRN recreation area, and to the west by a small rise with a tank target as a landmark. Figure E-1 is a map of Culebra Island showing the remediation site. Figure E-2 is a sketch of the 3 acre remediation site in some detail.

The surrounding cayos are small, rocky and contaminated with unexploded ordnance. These cayos are difficult to approach because of significant coral beds in their surrounding waters. Vegetation on the cayos is similar to that found on the main island, though scarcer.

E-2.2. History and Intended Uses. Annex H (Culebra Island Site Visit After Action Report) describes the history and future plans for the area to be cleared.

E-2.3. Endangered Species.

E-2.3.1. Animal. Endangered animal species on Culebra include: the Leatherneck, Loggerhead, Green, Hawksbill, Kemps Ridley, and the Olive Ridley turtles; the "La Pinta"snake; the St Croix Ground Lizard; the Black Duck; the Sooty Tern, and the Brown Booby. The endangered bird species are located in the U.S.Fish & Wildlife Service refuge on the far western tip of Flamenco Bay and should not be effected by the clearing operations. No indication was given that the "La Pinta" snake or the St Croix Ground Lizard inhabited the area of operations. Some varieties of turtle use the beach area during periods of nesting and hatching.

E-2.3.2. Vegetation. All varieties of cactus found on Culebra are protected. A walk through of the area to be cleared indicated no cacti growth. The Mangroves, though not on the endangered list, are protected because of their importance to the food chain. As a result, every effort will be made to remove any found ordnance to the designated disposal area (This area is located to the west of work area and poses no threat to the Mangroves) where they will be disposed of. These same considerations apply to vegetation found on the cayos.

E-2.3.3. Marine. The coral beds in the waters surrounding the cayos should be considered protected due to the possible impact on the surrounding fish and other water species.

E-2. ENVIRONMENTAL SURVEY. MTA and the CEHND Project Manager will conduct a joint environmental survey of the project site during the mobilization phase. The purpose of this survey is to document pre-work site conditions and to identify potential environmentally sensitive areas and any threatened or endangered species that might be adversely impacted by the project. The boundaries of the work area will be clearly identified during this visit. Photographs and/or video footage of the area will be taken to show conditions at the site prior to the start of field work.

The following items will be displayed on operational maps/diagrams or on a separate environmental site layout, at the discretion of the Environmental Engineer:

a. The boundaries of the work area.

b. Topographic contours.

c. The limits of existing vegetation and the condition and location of any trees, shrubs, and grassy areas immediately adjacent to the work site and support area.

d. Highlight all environmentally sensitive areas including wetlands or other special habitats and threatened or endangered flora or fauna.

e. Indicate the location of access roads: staging, storage, and stockpile areas; administrative facilities; lavatory facilities; and the support zone boundaries.

The layout plan and associated report will be signed by both the contractor (MTA) and the Contracting Officer upon mutual agreement as to its accuracy and completeness and will be included in the Final Removal Report for the project.

E-3. PROTECTION OF LAND AREAS.

E-3.1. Roads and Accessways. With the exception of the demo area, the work site can be sufficiently accessed by the existing dirt road. The demo area, which is to the west of the work site, must be accessed by the preparation of a trail from the existing dirt road. No trees will be affected by this trail; only small ground covering vegetation. Any ruts caused by heavy equipment during this project will be repaired following the completion of site work.

E-3.2. Trees and Vegetation. Brush and undergrowth will be cut and/or removed only to a point which will allow for the uninhibited marking of sweep lanes and the magnetometer survey. If it is determined that excavation is required in an area of the work site, then that area will be cleared of vegetation as necessary for uninhibited excavation. Care will be exercised to minimize damage to trees and shrubs lying outside areas designated for clearing. MTA shall take all actions necessary to protect and prevent damage to all trees, shrubs, and vegetation not identified for removal. No ropes, cables, or guys shall be fastened to or attached to any nearby trees for anchorages. Where, in the opinion of the Contracting Officer, trees may be defaced, bruised, injured, or otherwise damaged by MTA's equipment or operations, the Contracting Officer may direct that MTA provide protection of such trees by placing boards, planks, poles, or fencing around them. Any tree scarred or damaged by negligence shall be restored as nearly as possible to its original condition at MTA's expense. All scars made on trees not designated one plans for removal by the OEW work shall be coated as soon as possible with an approved tree wound dressing.

Areas altered as a result of project activities will be restored as much as practicable to a condition that appears to be natural and does not detract from the overall appearance of the site. The proposed work area has been cleared previously on two occasions. All excavated areas will be backfilled, graded, and contoured immediately following completion of the remediation effort. Due to the prolific nature of tropical vegetation in this area, it is expected that cleared areas will re-vegetate quickly on their own. If it is determined that

erosion may be a problem in certain areas, "pigeon peas" or other tropical shrubbery can be used to reseed the areas to provide a temporary cover until native vegetation is restored.

E-3.3. Soil Erosion and Sedimentation Control. The potential for soil erosion will increase once the brush and undergrowth are removed from the work area. However, since the vegetation will be cut to a height of about six (6) inches above the ground, erosion during the grubbing phase of the operation will be minimized. Where excavation is required, erosion will be checked by minimizing the time in which the surface is bare. This will be accomplished by backfilling the excavations as soon as the area of concern below the surface is investigated. While excavation is in progress, stockpiled soil will be placed in a manner designed to avoid erosion and soil movement into waterways. Silt screens or other sediment control devices will be installed as required to prevent the movement of sediment into existing drainage ways, ponds, and other receiving waters. Backfill material will be compacted by multiple passes of heavy equipment. The disturbed areas will be regraded as closely as possible to its original contour. The area will then be reseeded as directed by the Contracting Officer.

E-4. PROTECTION OF WATER RESOURCES. All project activities will be conducted in a manner to prevent the discharge of pollutants into adjacent waterways. Silt screens or other sediment controls will be installed at excavation sites which are adjacent to natural drainage ways or bodies of water in order to filter runoff from areas with exposed soil. MTA will take all reasonable precautions to prevent runoff from entering areas of the site where the water may be exposed to contaminated soil, water, or waste. Such precautions may include grading, temporary dikes, sandbags, or other actions as directed by the Contracting Officer. Appropriate controls will be put in place to prevent or minimize rainfall from contact with hazardous materials stored on site. This would include actions such as covering piles of excavated material with plastic sheets. Where practical, excavated areas shall be diked and covered to prevent rainfall and runoff from entering. Where runoff is exposed to hazardous material, the runoff shall be contained and collected through the use of diversion ditches and collection ponds. The runoff will be documented to be non-hazardous or it shall be treated and disposed of accordingly.

Waste water from cleaning heavy equipment will be directed across a well vegetated area or it will be filtered through a silt screen. Equipment will not be refueled within 100 feet of any water.

Existing lavatory facilities are available on-site. These facilities are maintained by the DNR, and will be used by project personnel.

E-5. DUST AND AIR POLLUTION CONTROL.

E-5.1. Particulate Emissions Control. MTA will maintain all excavations, embankments, stockpiles, access roads, and all work areas free from excess dust. Dust and air pollution will be controlled by such methods as watering down dry or barren areas.

Excavation piles left overnight will be covered with a tarp or other coverings to prevent wind erosion.

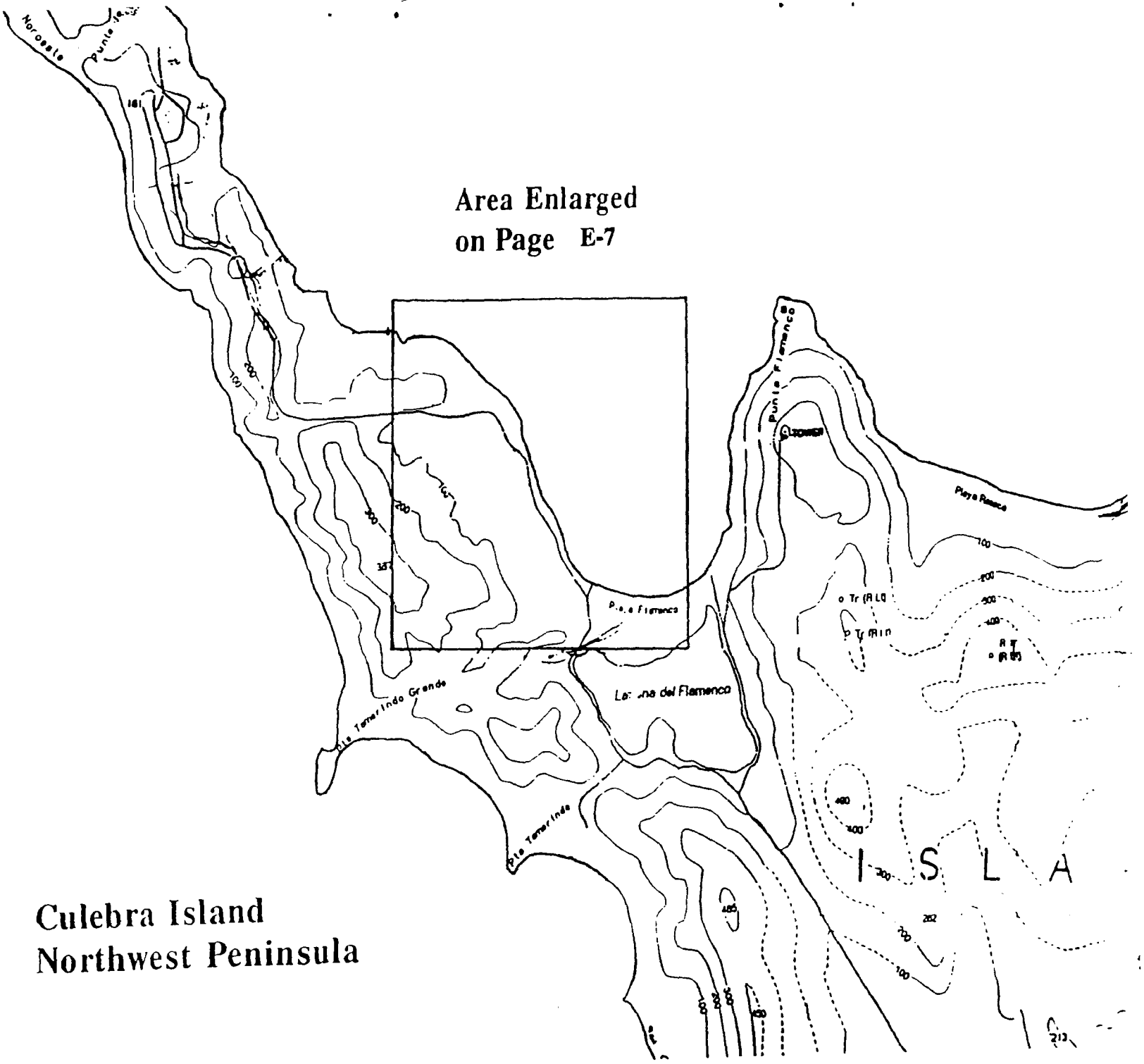
E-5.2. Burning. If it is determined that any materials will be burned at the site, such as timber and brush during post-remediation cleanup, MTA will obtain written approval from the Contracting Officer. All burning activities which may occur will comply with local regulations.

E-6. NOISE ABATEMENT. The proximity of a resort in the Flamenco Beach area will require noise abatement methods. Initial evaluation indicates that tamping of charges and limiting the size of the demolitions will adequately provide the necessary abatement.

E-7. WASTE MANAGEMENT. Food, food containers, and associated waste will be confined to the Administrative Area. All trash and general waste will be collected in trash bags and disposed of daily in an appropriate off-site trash receptacle. Existing lavatory facilities are maintained by the DNR. All hazardous wastes shall be disposed of in accordance with Federal and local laws and regulations.

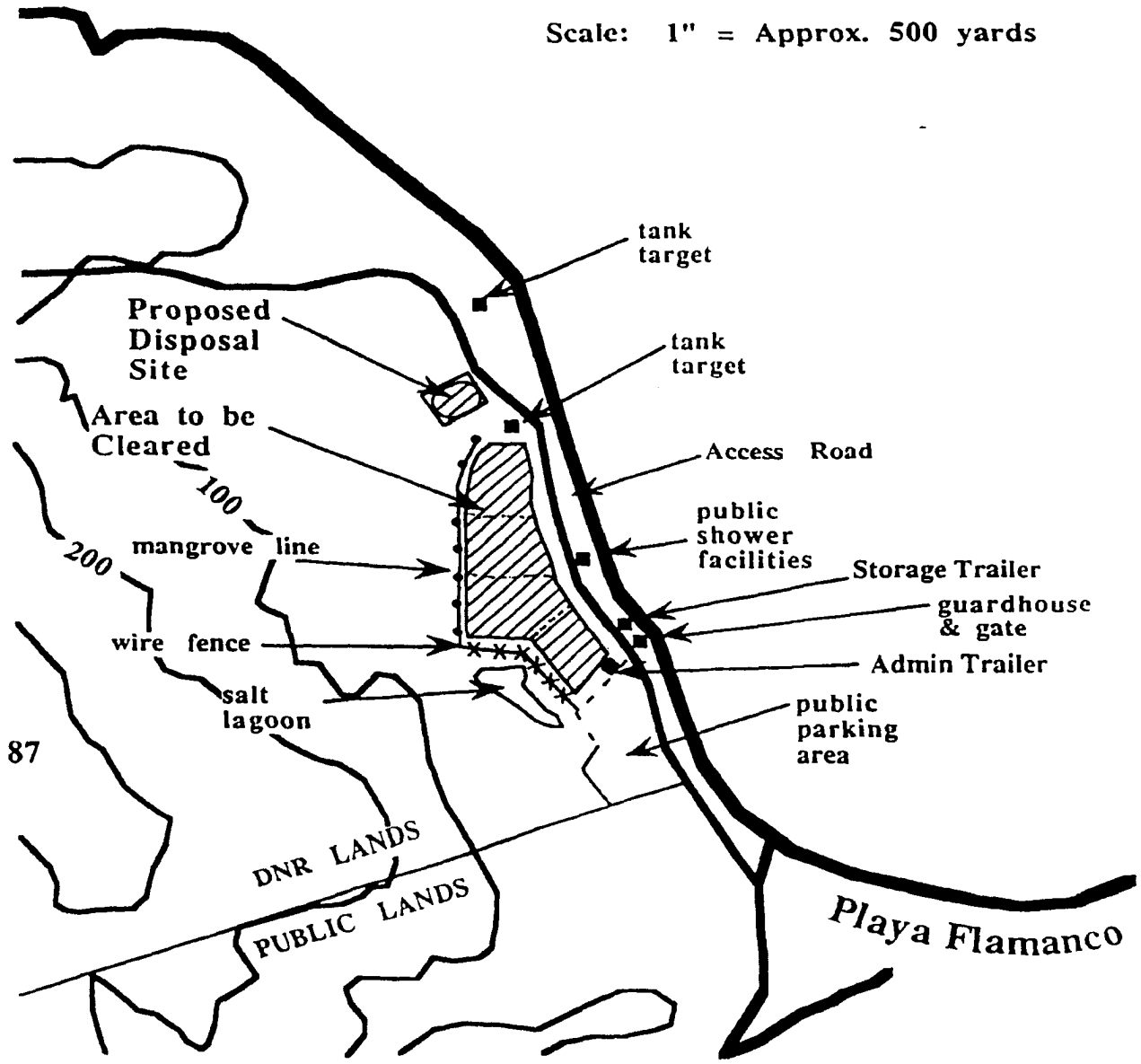
E-8. POST-REMEDIATION CLEANUP. Upon completion of the project, MTA will, unless directed by the Contracting Officer to do otherwise, remove all signs of the temporary facilities, such as haul roads or work areas; construction wastes, such as gasoline, oil containers, rags and all other remnants of the remediation, as well as personal belongings from the site. Debris from clearing and grubbing will be chipped, burned, buried, or winnowed alongside the work site as directed by the Contracting Officer and in accordance with local regulations. All sediment and erosion control devices will be removed unless otherwise directed by the Contracting Officer.

E-9. SITE CLOSE OUT. The final activity at the site will be the joint inspection by MTA and CEHND representatives. The entire work site will be examined and compared to the conditions illustrated on video footage taken prior to on-site activities. Video footage of the area will be taken at this time to provide an archive of pre and post event conditions. On-site activities will be concluded upon acceptance of the site by the CEHND Project Manager.



Culebra Island
Northwest Peninsula

MTA, Inc., July 26, 1993


Scale: 1" = Approx. 500 yards
tank target
tank target
Proposed Disposal Site
Area to be Cleared
Access Road
100
200
mangrove line
public shower facilities
Storage Trailer
guardhouse & gate
wire fence
Admin Trailer
salt lagoon
public parking area
87
DNR LANDS
PUBLIC LANDS
Playa Flamanco

EXAMPLE RECORD OF ENVIRONMENTAL CONSIDERATION (REC)

From:

Project title: Interim Remedial Action, Culebra Island National Wildlife Refuge and Adjacent Cayos (Contract DACA87-92-D-0147, Delivery Order 0002).

Brief Description: This project is an Interim Removal (IR) action to locate and remove Ordnance and Explosive Waste (OEW) from specific recreational areas controlled by the Puerto Rico Department of Natural Resources (DNR). Warning devices (buoys) will also be placed in proximity of specified cayos as part of the project. The work will consist of removal of vegetation in an area regularly cleared of vegetation; surface and subsurface location of OEW and other non-endemic scrap; localized excavation and removal of OEW; and restoration of all work areas to as found condition.

Anticipated Date and Duration of Project: Project is scheduled to commence in the first quarter of FY 94. Project will last approximately eight weeks.

Reason for Using Record of Environmental Consideration: This activity is categorically excluded under the provisions of CX A-7, AR 200-2, Appendix A in that it does not significantly alter land use of the area. This area was returned to non-military use in 1975, and has been used for recreational purposes since that time. This action will remove ordnance which may endanger people using the area, and thus is being conducted in support of current land use practices. There will be no change in the current operation of the property and therefore no significant environmental impact.

Screening Criteria for Categorical Exclusion:

a. This activity meets the criteria established in paragraph 4-1 of AR 200-2 in that it has minimal or no individual or cumulative effect on environmental quality; will generate no environmentally controversial changes to the existing conditions; and is similar to several IR actions previously examined/completed which meet the established criteria.

b. This activity meets the criteria established in paragraph 4-2 and paragraph A-31, Section II, Appendix A of AR 200-2 in that the action is encompassed in CX A-7, AR 200-2, Appendix A. This action is of equal or lesser scope than normally experienced for this type of activity. The potential for degradation of the area through the scheduled activities is extremely minimal. In fact, the area will be improved geographically and functionally as a result of the scheduled activities. This action will not affect prime or unique agricultural lands, wetlands, coastal zones, wilderness areas, aquifers, floodplains, wild and scenic rivers, or other areas of critical environmental concern. The local environment is extremely robust, as documented in trip reports and other assessments. No unproven technologies will be employed for this project. This action effects no endangered/protected species, per consultation with U.S. Fish and Wildlife Service representatives. This action effects no archaeological or historical resources/sites. No hazardous or toxic substances will come in contact with the surrounding environment. The proposed actions will not alter or effect areas of critical concern.

Signed: _____ Date: _____

MTA, Inc.
2225 Drake Avenue, Suite 8
Huntsville, Alabama 35805

Remediation of Sites in the U.S. Virgin Islands and Puerto Rico
Contract DACA87-92-D-0147
Delivery Order 0002

LOCATION, REMOVAL AND DISPOSAL OF UXO CULEBRA ISLAND, COMMONWEALTH OF PUERTO RICO

ANNEX F
QUALITY CONTROL PLAN
TO
SITE SPECIFIC WORK PLAN
(SSWP)

U.S. Army Engineering Division, Huntsville
ATTN: CEHND-CT-D (A. Prince)
P.O. Box 1600
Huntsville, Alabama 35807-4301

ANNEX F
QUALITY CONTROL PLAN
CULEBRAS ISLAND
(CONTRACT DACA87-92-D-0147, DELIVERY ORDER 0002)

F-1. REFERENCES.

F-1.1. EM 385-1-1. Safety and Health Requirements Manual, October 1992.

F-1.2. 29 CFR 1910.120.

F-1.3. CEHND UXO Guidance. Corps of Engineers - Huntsville Division, Safety Concepts and Basic Considerations for Unexploded Ordnance (UXO)

F-2. INTRODUCTION.

F.2.1. Purpose. This Quality Control (QC) plan establishes the processes and standards which will be employed my MTA and its subcontractors in the execution of tasks required under the subject contract and delivery order.

F-2.2. Objectives. The objectives of this plan are to:

a. Establish specific standards of performance for the tasks to be accomplished under the approved scope of work.

b. Provide specific means of measuring compliance with these standards.

c. Define methodologies for providing QC data to the government.

d. Provide guidance on correction of quality encounters which may be encountered in the course of the project.

F-2.3. Scope. The provisions of this plan apply to all MTA and subcontractor personnel and activities associated with the above specified delivery order and contract.

F-3. RESPONSIBILITIES.

F-3.1. Senior UXO Supervisor. The Senior UXO Supervisor is responsible for completion of all on-site tasks required in the subject delivery order. The Senior UXO Supervisor is also responsible for maintaining documentation on:

a. Equipment use, calibration and maintenance.

b. Individual and collective training received on-site.

c. Maintenance of project logbooks.

d. Compliance with the work plan and all cited references therein.

The Senior UXO Supervisor is also responsible for performing the duties of the Site Safety Officer (SSO). As such, he is responsible for administration of the requirements in the Accident Prevention Plan (APP).

F-3.2. UXO Supervisors. UXO Supervisors are responsible for completion of all on-site tasks assigned to them and for the safety of those subordinate to them.

F-3.3. Corporate QC Personnel. Corporate QC Personnel are responsible for:

a. Independent evaluation of the quality and compliance of on-site operations

b. Documenting general conditions and deficiencies of the operation

c. Reporting findings to corporate management

d. Assisting on-site personnel in the correction of deficiencies.

F-3.4. All Personnel. All personnel are responsible for the safe conduct of their specific tasks and for preventing unsafe acts observed during the conduct of the project.

F-4. QUALITY CONTROL OF SITE OPERATIONS.

F-4.1. On-site Quality Control. The Senior UXO Supervisor will observe on-site activities daily and will insure that operations are conducted in accordance with all site specific safety, environmental and operational guidance. Comments on the general quality of the work and on specific issues/problems will be annotated in the site logbooks. These comments will be signed by the Senior UXO Supervisor. The Senior UXO Supervisor will also conduct QC checks of subsurface sweeps using a magnetometer. These checks will be conducted using the same make/model instrument used during actual sweep activities.

F-4.2. Corporate Quality Control. The corporate QC element will conduct a site visit to observe the performance of site tasks and the overall quality of the work being performed. Corporate QC personnel will conduct operational checks from randomly selected sample areas using independent tools and equipment (e.g., magnetometers and geographical measuring means) as part of this visit (see paragraph F-8).

F-4.2.1. Quality Control of Sweep Activities. Corporate QC personnel will first observe site operations to ensure that safety and environmental protective measures are being employed in accordance with approved work plans and references therein. QC personnel will then check random sections within the area swept by the on-site crew. Detection instruments equal in capability and authorized by the Project manager will be

used for these checks, except as stated in paragraph F-8 below. If two or more items of ordnance are found during the quality control check(s), the area will be re-swept by the on-site crew and another quality control check performed.

F-4.2.2. Post Activity Restoration. The Senior UXO Supervisor, corporate QC representative and CEHND representatives will conduct a joint assessment of the area after completion of operations. Post event conditions will be compared to pre-event video footage to determine acceptability of post event restoration activities. See Annex E, Environmental Protection Plan.

F-4.2.3. Quality Control for Buoy Activities. Corporate QC personnel will inspect emplaced signs/buoys to ensure visibility and anchoring of the buoys/signs, and to assess overall safety of placement operations.

F-5. QUALITY CONTROL OF TOOLS & EQUIPMENT.

F-5.1. Calibration. All items of equipment will be operational prior to being assigned to the project. Equipment taken off-site will be rechecked for operational capability prior to reassignment to the project. UXO Supervisors will calibrate electrical devices at the beginning of each day. The Senior UXO Supervisor will observe the calibration. Initial calibration will be annotated in the site logbook and signed by the UXO Supervisor and Senior UXO Supervisor. Calibration checks during operations will be conducted in accordance with manufacturers' specifications. If specific calibration data is not provided the following schedule will apply:

EQUIPMENT	ITEM/FREQUENCY
Schonstedt GA-52B Magnetic Locator	Sensitivity: every 4 hours of use Batteries: every 8 hours of use
Forster MK 26 Ordnance Locator	Sensitivity: every 4 hours of use Batteries: every 4 hours of use
Whites Locator	Sensitivity: every 4 hours of use Batteries: every 8 hours of use

F-5.2. Maintenance. The corporate QC element will conduct a site visit to observe the performance of site tasks and the overall quality of the work being performed. Corporate QC personnel will conduct operational checks and samples using independent tools and equipment (e.g., magnetometers and geographical measuring means) as part of this visit (see paragraph F-8).

F-6. QUALITY CONTROL OF PROJECT DOCUMENTATION.

F-6.1. On-site Quality Control. The Senior UXO Supervisor will record all site activities in the bound and sequentially numbered log books maintained at on site. Log books will be open to inspection by the CEHND on-site representative and other personnel as dictated by the CEHND Project Manager. Original copies of maps, charts, reports and other project documentation will be sent to MTA corporate headquarters for inclusion in progress reports sent to CEHND. Copies will be retained by the Senior UXO Supervisor.

F-6.2. Corporate Quality Control. Completed log books will be sent to MTA corporate headquarters. Corporate QC personnel will review the log books for compliance with work plan directives and other guidance, and will retain the log books for submission with the final report. Log books will not be copied without the express written consent of the CEHND Project Manager. All other documentation will be copied and retained for submission with the Final Removal Report.

F-7. QUALITY CONTROL REPORTING. Quality Control reports and documentation will be submitted to MTA corporate management, and in turn to the CEHND as part of the monthly and final reports. Documentation regarding corrective actions will reference and (when possible) be included with documentation describing specific deficiencies.

F-8. NEW/DEVELOPMENTAL TOOLS AND EQUIPMENT. Use of new/developmental tools and/or equipment in quality control operations under the following guidance.

a. New/developmental tools and/or equipment may be used to augment but not replace CEHND approved equipment.

b. Application of new/developmental and/or equipment must be at no extra cost to the government.

c. Application of new/developmental tools and/or equipment must not interfere with the safe and scheduled completion of the project.

d. Use of new/developmental tools and/or equipment must be approved by the CEHND Project Manager on a case-by-case basis.

When new/developmental tools and/or equipment are used, a narrative description will be written by users. This narrative will describe features, benefits and shortfalls of the equipment, and will be included in the final disposal report.

MTA, Inc.
2225 Drake Avenue, Suite 8
Huntsville, Alabama 35805

Remediation of Sites in the U.S. Virgin Islands and Puerto Rico
Contract DACA87-92-D-0147
Delivery Order 0002

LOCATION, REMOVAL AND DISPOSAL OF UXO CULEBRA ISLAND, COMMONWEALTH OF PUERTO RICO

ANNEX F
QUALITY CONTROL PLAN
TO
SITE SPECIFIC WORK PLAN
(SSWP)

U.S. Army Engineering Division, Huntsville
ATTN: CEHND-CT-D (A. Prince)
P.O. Box 1600
Huntsville, Alabama 35807-4301

ANNEX F
QUALITY CONTROL PLAN
CULEBRAS ISLAND
(CONTRACT DACA87-92-D-0147, DELIVERY ORDER 0002)

F-1. REFERENCES.

F-1.1. EM 385-1-1. Safety and Health Requirements Manual, October 1992.

F-1.2. 29 CFR 1910.120.

F-1.3. CEHND UXO Guidance. Corps of Engineers - Huntsville Division, Safety Concepts and Basic Considerations for Unexploded Ordnance (UXO)

F-2. INTRODUCTION.

F.2.1. Purpose. This Quality Control (QC) plan establishes the processes and standards which will be employed my MTA and its subcontractors in the execution of tasks required under the subject contract and delivery order.

F-2.2. Objectives. The objectives of this plan are to:

a. Establish specific standards of performance for the tasks to be accomplished under the approved scope of work.

b. Provide specific means of measuring compliance with these standards.

c. Define methodologies for providing QC data to the government.

d. Provide guidance on correction of quality encounters which may be encountered in the course of the project.

F-2.3. Scope. The provisions of this plan apply to all MTA and subcontractor personnel and activities associated with the above specified delivery order and contract.

F-3. RESPONSIBILITIES.

F-3.1. Senior UXO Supervisor. The Senior UXO Supervisor is responsible for completion of all on-site tasks required in the subject delivery order. The Senior UXO Supervisor is also responsible for maintaining documentation on:

a. Equipment use, calibration and maintenance.

b. Individual and collective training received on-site.

c. Maintenance of project logbooks.

d. Compliance with the work plan and all cited references therein.

The Senior UXO Supervisor is also responsible for performing the duties of the Site Safety Officer (SSO). As such, he is responsible for administration of the requirements in the Accident Prevention Plan (APP).

F-3.2. UXO Supervisors. UXO Supervisors are responsible for completion of all on-site tasks assigned to them and for the safety of those subordinate to them.

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a. Independent evaluation of the quality and compliance of on-site operations

b. Documenting general conditions and deficiencies of the operation

c. Reporting findings to corporate management

d. Assisting on-site personnel in the correction of deficiencies.

F-3.4. All Personnel. All personnel are responsible for the safe conduct of their specific tasks and for preventing unsafe acts observed during the conduct of the project.

F-4. QUALITY CONTROL OF SITE OPERATIONS.

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F-4.2. Corporate Quality Control. The corporate QC element will conduct a site visit to observe the performance of site tasks and the overall quality of the work being performed. Corporate QC personnel will conduct operational checks from randomly selected sample areas using independent tools and equipment (e.g., magnetometers and geographical measuring means) as part of this visit (see paragraph F-8).

F-4.2.1. Quality Control of Sweep Activities. Corporate QC personnel will first observe site operations to ensure that safety and environmental protective measures are being employed in accordance with approved work plans and references therein. QC personnel will then check random sections within the area swept by the on-site crew. Detection instruments equal in capability and authorized by the Project manager will be

used for these checks, except as stated in paragraph F-8 below. If two or more items of ordnance are found during the quality control check(s), the area will be re-swept by the on-site crew and another quality control check performed.

F-4.2.2. Post Activity Restoration. The Senior UXO Supervisor, corporate QC representative and CEHND representatives will conduct a joint assessment of the area after completion of operations. Post event conditions will be compared to pre-event video footage to determine acceptability of post event restoration activities. See Annex E, Environmental Protection Plan.

F-4.2.3. Quality Control for Buoy Activities. Corporate QC personnel will inspect emplaced signs/buoys to ensure visibility and anchoring of the buoys/signs, and to assess overall safety of placement operations.

F-5. QUALITY CONTROL OF TOOLS & EQUIPMENT.

F-5.1. Calibration. All items of equipment will be operational prior to being assigned to the project. Equipment taken off-site will be rechecked for operational capability prior to reassignment to the project. UXO Supervisors will calibrate electrical devices at the beginning of each day. The Senior UXO Supervisor will observe the calibration. Initial calibration will be annotated in the site logbook and signed by the UXO Supervisor and Senior UXO Supervisor. Calibration checks during operations will be conducted in accordance with manufacturers' specifications. If specific calibration data is not provided the following schedule will apply:

EQUIPMENT	ITEM/FREQUENCY
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Whites Locator	Sensitivity: every 4 hours of use Batteries: every 8 hours of use

F-5.2. Maintenance. The corporate QC element will conduct a site visit to observe the performance of site tasks and the overall quality of the work being performed. Corporate QC personnel will conduct operational checks and samples using independent tools and equipment (e.g., magnetometers and geographical measuring means) as part of this visit (see paragraph F-8).

F-6. QUALITY CONTROL OF PROJECT DOCUMENTATION.

F-6.1. On-site Quality Control. The Senior UXO Supervisor will record all site activities in the bound and sequentially numbered log books maintained at on site. Log books will be open to inspection by the CEHND on-site representative and other personnel as dictated by the CEHND Project Manager. Original copies of maps, charts, reports and other project documentation will be sent to MTA corporate headquarters for inclusion in progress reports sent to CEHND. Copies will be retained by the Senior UXO Supervisor.

F-6.2. Corporate Quality Control. Completed log books will be sent to MTA corporate headquarters. Corporate QC personnel will review the log books for compliance with work plan directives and other guidance, and will retain the log books for submission with the final report. Log books will not be copied without the express written consent of the CEHND Project Manager. All other documentation will be copied and retained for submission with the Final Removal Report.

F-7. QUALITY CONTROL REPORTING. Quality Control reports and documentation will be submitted to MTA corporate management, and in turn to the CEHND as part of the monthly and final reports. Documentation regarding corrective actions will reference and (when possible) be included with documentation describing specific deficiencies.

F-8. NEW/DEVELOPMENTAL TOOLS AND EQUIPMENT. Use of new/developmental tools and/or equipment in quality control operations under the following guidance.

a. New/developmental tools and/or equipment may be used to augment but not replace CEHND approved equipment.

b. Application of new/developmental and/or equipment must be at no extra cost to the government.

c. Application of new/developmental tools and/or equipment must not interfere with the safe and scheduled completion of the project.

d. Use of new/developmental tools and/or equipment must be approved by the CEHND Project Manager on a case-by-case basis.

When new/developmental tools and/or equipment are used, a narrative description will be written by users. This narrative will describe features, benefits and shortfalls of the equipment, and will be included in the final disposal report.

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Remediation of Sites in the U.S. Virgin Islands and Puerto Rico
Contract DACA87-92-D-0147
Delivery Order 0002

LOCATION, REMOVAL AND DISPOSAL OF UXO CULEBRA ISLAND, COMMONWEALTH OF PUERTO RICO

ANNEX G
UXO PERSONNEL RESUMES
TO
SITE SPECIFIC WORK PLAN
(SSWP)

U.S. Army Engineering Division, Huntsville
ATTN: CEHND-CT-D (A. Prince)

ANNEX G
UXO PERSONNEL RESUMES
CULEBRAS ISLAND
(CONTRACT DACA87-92-D-0147, DELIVERY ORDER 0002)

G-1. General. The following resumes are submitted for UXO positions as required in the Scope of Work for the subject delivery order.

G-2. Qualifications. The individuals whose resumes appear herein meet the qualifications for and are identified by their primary position on the deploying work crews.

G-3. Format. Individuals are identified by their names and corporate affiliation (i.e., employed by MTA or Wyle). The first entry in the education section of each resume is the year the individual graduated from The Naval EOD School. This entry is in **bold type** for easy location. Other relative education and experience is listed chronologically.

I. NAME: **JORGE G. ARROYO (MTA, Inc.)**

II. POSITION: **Senior UXO Supervisor/Site Safety Officer**

III. EDUCATION:

1974 U.S. Navy Explosive Ordnance Disposal Course, Indianhead, MD

1982 EOD Team Leader Course
1984 Explosives Qualification and Certification Course
1984 Explosive Devices Techniques and Terrorist Activities Course
1985 Advanced Noncommissioned Officer Course
---- Advanced Language Skills - Spanish

IV. EXPERIENCE:

1986 - 1992: 66th Ordnance Detachment (EOD), Cape Canaveral, FL. Over six years experience as Senior EOD Supervisor. Performed location, identification, and render safe and/or disposal procedures for UXO. Responded to and safely resolved over 1000 EOD incidents involving military and civilian explosives. Planned and conducted major range clearances at various locations in the United States. Planned and performed multi-team clearance and ammunition disposal operations.

1983 - 1986: 16th Ordnance Detachment (EOD), Athens Greece. Over two years as EOD Specialist, EOD Team Leader and EOD Supervisor. Served as EOD Equipment Specialist and Document/Publications Control. Provided EOD support to the U.S. Secret Service, State Department and local law enforcement agencies. Provided intensive and diversified training in explosives, hazards, and safety in numerous European locations.

1980 - 1983: 77th Ordnance Detachment (EOD), Fort Huachuca, AZ. Over two years as EOD Team Leader, EOD Sergeant and EOD Specialist. Also served as EOD Equipment Maintenance Specialist and Document/Publications Control. Provided EOD support to the U.S. Secret Service, State Department and local law enforcement agencies. Performed numerous clearance and disposal activities throughout southwestern United States.

1978 - 1980: 36th Ordnance Detachment (EOD), Canal Zone, Panama. Over two years as EOD Specialist. Conducted EOD operations and training in several Central and South American countries. Planned logistics support for diverse types of EOD operations. Served as Training NCO, responsible for maintaining unit and individual EOD tasks proficiency.

1974 - 1978: 144th Ordnance Detachment (EOD), Fort Meade, MD. Over 4 years as EOD Specialist. Performed numerous support missions for the Secret service, State Department and other agencies; provided emergency EOD response to large military and civilian population base in the National Capitol area.

I. NAME: **RICHARD H. WINTERS, Jr. (MTA, Inc.)**

II. POSITION: **UXO Supervisor**

III. EDUCATION:

1963 U.S. Navy Explosive Ordnance Disposal Course, Indianhead, MD

A.A., Business, Charles County Community College
Advanced Access and Disablement School
U.S. Army Sergeant's Major Academy
OSHA Hazardous Waste Workers Course

IV. EXPERIENCE:

International Safety Services Incorporated 1992 - 1993: UXO Team Leader. Directed and supervised UXO/OEW remediation activities at Pueblo Army Depot, Colorado under contract with U.S. Army Corps of Engineers. Conducted surface/subsurface sweeps; performed UXO/OEW removal ands disposal; restored locations at completion of activities. Instructor for IED and EOD procedures. developed lesson plans; conducted training to U.S. and foreign students; provided practical demonstrations on EOD and demolition procedures; evaluated traininng effectiveness.

United States Army 1963 - 1984

1982 - 1984: 546th Ordnance Detachment (EODCC). Served as EOD Sergeant Major. Supervised personnel in the conduct of emergency service support for seven state area. Developed operations, deployment, budget, security, training, safety, and support policies for command. Personally performed and directly supervised technical operations on munitions, fuzing and weaponry from all services. Conducted and directed personal protection missions for U.S. and foreign heads of state.

1979 - 1981: 2d Ordnance Detachment (EOD). Two years as unit commander/Sr. EOD Supervisor. Participated in extensive range clearance operations throughout Europe. Supervised all unit enlisted personnel in the conduct of render-safe and disposal operations.2

1976 - 1979: U.S. Naval EOD School. Trained and evaluated technical proficiency of technicians from all services. Provided instruction in EOD procedures, new developments, operations safety, and tools and equipment. Developed, tested and modified baseline training programs for classroom and practical instruction of EOD procedures.

1972 - 1976: 55th Ordnance Detachment (EOD). Four years as Sr. EOD Supervisor. Participated in extensive range clearance and disposal operations. Supervised all unit enlisted personnel in the conduct of render-safe and disposal operations.

1971 - 1972: MACV - Republic of Viet Nam. Served as EOD Advisor to allied forces. Conducted range clearance and disposal operations with U.S. and allied members.

1968 - 1971: EOD Test, Evaluation and Development. Developed EOD plans and procedures for U.S. and foreign munitions. Tested and validated procedures against actual ordnance. Evaluated and documented test results and recommended procedures changes.

1965 - 1968: 95th Ordnance Detachment (EOD). Three years as EOD Tecnician. Participated in extensive range clearance and disposal operations. Supervised enlisted personnel in the conduct of render-safe and disposal operations.

1963 - 1965: 87th Ordnance Detachment (EOD). Two years as EOD Tecnician. Participated in extensive range clearance and disposal operations.

1963 - 1963: 27th Ordnance Detachment (EOD). Attached for training. Participated in range clearance, rendersafe and disposal operations. Supervised all unit enlisted personnel in the conduct of render-safe and disposal operations.

I. NAME: **RICHARD C. MAHAN (MTA, Inc.)**

II. POSITION: **UXO Supervisor**

III. EDUCATION:

1972 U.S. Navy Explosive Ordnance Disposal Course, Indianhead, MD

1991 A.S., Business, John C. Calhoun Community College
1992 B.A., Athens State College, Business

IV. EXPERIENCE:

United States Army 1968 - 1991

1988 - 1991: OMMCS EOD Staff. Served as Operations Sergeant for the Explosive Ordnance Disposal Center for Training and Technology. Performed as unexploded ordnance technician, applying technical knowledge and skills to the recovery, handling, transport, neutralization, and demilitarization of all classifications of explosive ordnance and associated components. Planned, initiated, and supervised comprehensive technical training programs for both new and experienced explosive ordnance disposal technicians. Managed personnel and operations of cadre and students at the Army school level. Primary point of contact between major Army commands for EOD training matters.

1985 - 1988: EOD Training Evaluator/Range Administrator. Trained and evaluated field technical proficiency of technicians and field units. Provided instruction in EOD procedures, new developments, operations safety, and tools and equipment to over 90% of CONUS based EOD units over 3 year period. Recommending correction programs for individual and unit deficiencies. Responsible for safety, scheduling, equipment, and operations on a 1000 acre demolition range.

1978 - 1985: Technical Escort Services. Seven years planning and conducting explosive and chemical demilitarization, escort, clean-up, test, and disposal operations. Provided emergency response, contamination control and decontamination support at multiple civilian and military locations.

1968 - 1978: EOD Operations. Ten years in EOD field units in the United States and overseas. Personally performed and directly supervised technical operations on munitions, fuzing and weaponry from all services. Conducted and supervised multiple range clearances and large scale ammunition disposal operations in support of numerous military establishments. Personally instructed over 1000 civilian and military personnel on bomb threat procedures, explosives safety, ordnance recognition, and conduct of operations in hazardous areas. Conducted and directed personal protection missions for U.S. and foreign heads of state. Frequently performed functions of Senior EOD Supervisor and EOD Team Chief.

I. NAME: **RONALD L. NELSON (MTA, Inc.)**

II. POSITION: **UXO Specialist**

III. EDUCATION:

1981 U.S. Navy Explosive Ordnance Disposal Course, Indianhead, MD

1992 U.S. Army Advanced EOD Course
1991 Instructor Training Course
1988 EOD Basic Noncommissioned Officer Course (DMG)
1988 USAREUR EOD Refresher
1986 Advanced EOD Refresher
1984 NATO Improvised Explosive Device Disposal
1984 Nuclear, Biological, and Chemical NCO Course
1983 Primary Leadership Development Course
1983 Radiation Protection Officer Training Course
1983 Nuclear Weapon Refresher
1983 EOD TTEP

IV. EXPERIENCE:

U. S. ARMY 1980-1993

1990 - 1993: McKinley Range Operations/Safety NCO, EOD Center for Training and Technology. Over two years experience and responsibility in Range Safety, Operations, Maintenance and upkeep of training sites, and preparation for future training. Also manage all explosive requirements for EOD Center.

1987-1990: 856th Ordnance Detachment (EOD), Stuttgart, Germany. Three years participating as Team Leader in support of range clearances at Grafenwoehr and Welfleken training areas. Also served as Maintenance NCO, NBC NCO, Tool Custodian, Transportation Coordinator, and Driver examiner.

1985-1987: U.S. Army National Range Operations Directorate, White Sands Missile Range, NM. Two years as EOD Team Leader and Aerial Observer in support of testing, firing, location, render safe, and/or destruction of test and production missiles and payloads. Range clearance operations used on submunition payload clean up.

1982-1985: 20th Ordnance Detachment (EOD), Kaiserslautern, GE. Three years as EOD Team Member. Participated in extensive range clearance operations in support of 18th Engineer Brigade, Grafenwoehr upgrade. Supply NCO, NBC NCO, Publications NCO, and Training NCO.

1980-1982: 34th Ordnance Detachment (EOD), Sierra Army Depot, Herlong, CA. Two years as EOD Team Member. Participated in Nuclear Weapons Accident Exercise, NUWAX-81 at Nevada Test Site. Constructed EOD training site at SIAD. Maintenance NCO, and Hot Line Supervisor.

I. NAME: SCOTT MONEYPENNY (Wyle Laboratories)

II. POSITION: UXO Specialist

III. EDUCATION:

1984 U.S. Navy Explosive Ordnance Disposal Course, Indianhead, MD

IV. EXPERIENCE:

Wyle Laboratories 1990 - 1991

One year experience as EOD Technician at Norco, California facility. Worked on the Tomahawk Cruise Missile Inspection and Downloading Project. Handled, transported and disassembled suspect weapon systems and performed disposal operations as required. Operated ordnance handling equipment and vehicles. Performed EOD tear-down procedures, reassembling of components, identified, inventoried and packaged explosive components, hardware and submunitions for shipment.

USMC 1984 - 1988

1987-1988: Marine Corps Air/Ground Combat Center, 29 Palms California. One year as EOD Technician. Performed range clearance operations on all ranges including Quakenbush, Delta Corridor, Lead Mountain, Lavic Lake, R119 Sensitive Fuze Range; Chocolate Mountain-All bombing ranges; Blue Mountain-All bombing ranges. Gained extensive inerting experience in USN ammunition and ordnance (ground and air). Trained in use and operation of the mechanical remote fuze disassembly kit (MRFDK), and X-Ray techniques/operations including interpretation. Operated heavy equipment including backhoe, dozer, forklifts and cranes. Experienced as metal machinist.

1984-1987: USMC, MCAS Kaneohe Bay, Oahu. Three years as EOD Technician. Performed EOD range clearance operations for ranges on Oahu-Kaneohe Bay, Pearl Harbor Navy Base, Hickham AFB, Schoffield Barracks USA, Westlock Naval Base, Barbers Point NAS, Waikane Valley, Makua Valley; Hawaii-Pahakalowa Training Area; Kahoalawe-all ranges; Kanai-and the Pacific Missile Range. Additional duties included Classified Material NCO.

I. NAME: JACK L. THOMAS (MTA, Inc.)

II. POSITION: UXO Supervisor/QC Specialist

III. EDUCATION:

1980 U.S. Navy Explosive Ordnance Disposal Course, Indianhead, MD

1979 B.S., Drafting Technology, Central Missouri State University
1979 U.S. Army Ordnance Officer Basic Course
1979 U.S. Army Ordnance Officer Munitions Materiel Management Course
1985 U.S. Army Ordnance Officer Advanced Munitions Materiel Management Course
1989 U.S. Army Command and General Staff College
1987 U.S. Army Combined Arms and Services Staff School

IV. EXPERIENCE:

MTA, Incorporated 1990 - Present

1990 - Present: Logistics/Remediation Analyst. Provide logistical and environmental analytical services. Perform environmental assessments for developing weapons and automation systems. Perform research and analysis on chemical and conventional munitions packaging and shipping; EOD tools and procedures; and OEW remediation programs. Develop and refine remediation support documents (i.e. SHERPs, Environmental Protection/Restoration plans, and QA/QC plans) for current CEHND remediation projects. Perform public relations/media releases for corporate environmental programs.

U.S. ARMY RESERVE 1990 - Present

1990 - Present: U.S. Army Reserve. Assigned Individual Military Augmentee (IMA) position in Munitions Division, U.S. Army DCSLOG, Pentagon. Develop and execute missile, munitions and EOD programs for war and other emergencies.

U.S. ARMY (ACTIVE DUTY) 1979 - 1990

1989 - 1990: EOD Officer/Combat Developments. Developed EOD and logistics support plans for Space, Directed Energy and Special Projects for US Army Ordnance Missile and Munition Center and School, Redstone Arsenal, AL. Integrated EOD plans and requirements into future weapon developmental programs; coordinated EOD issues with TRADOC activities.

1985 - 1989: Theater EOD Officer, U.S. Pacific Command. Served simultaneously on three major Army staffs (USCINPAC, USARPAC, AMCCOM). Performed explosive ordnance disposal duties to recover, handle, destroy, neutralize, and demilitarize explosive ordnance and associated components. Planned, initiated, and supervised comprehensive technical training programs for explosive ordnance disposal technicians and units of all services.

USCINCPAC: Sole tasking and coordinating authority for all military EOD support to United

States Secret Service, State Department, and other federal/foreign agencies on personal protection missions for foreign and domestic heads of state. Responsible for planning, coordinating, and executing all operational and logistic elements of joint service EOD exercises and training. Coordinated tailored EOD and ordnance support for joint service MIA/KIA recovery missions in southeast Asia. Planned and coordinated joint U.S. military humanitarian assistance efforts in the Solomon Islands. Resolved inter-command ammunition support issues in Korea, Japan, and various Pacific locations. Drafted joint logistic/EOD policy for USCINCPAC staff.

USARPAC (WESTCOM): Provided sole EOD staff expertise for command. Established operational and support policies for command's EOD program. Represented Pacific area EOD concerns at Department of Army level discussions and meetings. Designed command's training plans and schedules. Evaluated readiness and technical capabilities of command's EOD elements. Planned, resourced and executed major operations for ammunition disposal, chemical, conventional and nuclear weapons support, and deployment of military forces in peace and war.

AMCCOM: Established theater wide ammunition support programs for command field operating element. Resolved operational conflicts between major commands in Korea, Japan, and the Pacific. Prepared briefing materials (e.g., scripts, graphics and settings) for external presentation. Developed and managed command's EOD and disposal programs.

1982 - 1985: Commander, 53d Ordnance Detachment (EOD), Vancouver, Washington: Commanded unit for four years. Provided emergency service support for two state area (Oregon and Washington). Developed all operations, deployment, budget, security, training, safety, and support policies for command. Personally performed and directly supervised technical operations on munitions, fuzing and weaponry from all services. Developed and submitted technical drawings and render-safe procedures of first seen foreign ordnance. Personally instructed over 1000 civilian and military personnel on bomb threat procedures, explosives safety, ordnance recognition, and conduct of operations in hazardous areas. Conducted and directed personal protection missions for U.S. and foreign heads of state. Directly supervised 8 first line managers.

1979 - 1982: Commander/Executive Officer, 47th Ordnance Detachment (EOD), Fort Hood, Texas: Served two and 1/2 years as Executive Officer, six months as Commander. Provided emergency service support to state of Texas. Developed operations, deployment, budget, security, training, safety, and support policies for unit. Personally performed and directly supervised technical operations on munitions, fuzing and weaponry from all services. Supervisor of original Nuclear Emergency Search Team (NEST). Conducted weekly range clearances and large scale ammunition disposal operations in support of two - plus division military base. Personally instructed over 1000 civilian and military personnel on bomb threat procedures, explosives safety, ordnance recognition, and conduct of operations in hazardous areas. Conducted and directed personal protection missions for U.S. and foreign heads of state. Frequently performed functions of Commander and EOD Team Chief.

I. NAME: DOUGLAS G. SAMS (MTA, Inc.)

II. POSITION: EOD Specialist

III. EDUCATION:

1986 U.S. Navy Explosive Ordnance Disposal Course, Indianhead, MD

1985 B.S., Pre-Law, Bradley University
1985 Ordnance Munitions Materiel Management Course, Redstone Arsenal, AL
1987 Advanced EOD Course, Albuquerque, NM
1988 Defense Packaging of Hazardous Material Course, APG, MD
1991 Explosive Safety Certification, Huntsville, AL
1991 Emergency Medical Technician Course, Huntsville, AL

IV. EXPERIENCE:

MARSHALL SPACE FLIGHT CENTER 1991 - 1993

Senior Safety Engineer, Aerojet Advanced Solid Rocket Motor Division (AAD), Test Operations, Huntsville, Alabama. Defined and implemented requirements for the Advanced Solid Rocket Motor (ASRM) design, development, test, and evaluation (DDT&E) Site Safety Program. Managed AAD system and institutional safety activities to support DDT&E activities and ensure the health and safety of its employees, test hardware, facilities, and environment. Managed and audited subcontractor safety program and activities to ensure compliance with NASA and DoD Standards, federal and state regulations, AAD safety program objectives, and contractual requirements. Reviewed and approved system, facility, and operational hazards analyses to ensure technical accuracy, regulatory compliance and format in accordance with NSTS 22254 and MIL-STD-882B. Reviewed and approved engineering drawings and instructions for facility construction and modification, test article assembly, and tooling. Performed risk analyses and convey risks identified and recommendations for their elimination, control, or acceptance. Investigated, documented and submitted accident/incident/near miss data reports and implemented appropriate corrective actions. Developed and maintained safety training and motivational programs.

TECHNICAL ANALYSIS, INC. 1990 - 1991

Safety Engineer, Huntsville, Alabama. Defined requirements for Explosive Safety Program Plan for NASA Headquarters to implement at centers and field activities. Co-authored and edited a NASA handbook to implement the plan. Performed explosive safety audits of test laboratories and solid rocket motor manufacturing facilities managed by MSFC to ensure compliance with NASA and DoD explosive safety standards. Wrote, maintained, and instructed Explosive Safety training courses for presentation to civil service and contractor personnel required for explosive handling certification. Supported design reviews for explosive facilities and aerospace propulsion test systems at MSFC to ensure compliance with DoD explosive safety standards. Provided technical and hazard analyses support to system and institutional safety offices for assigned programs. Captured and consolidated mishap and anomaly data for Naval and Air Force weapon systems and developed lessons learned databases for networking to NASA Centers and field activities.

U.S. ARMY 1986 - 1989

1985 - 1989: Commander, 51st Ordnance Detachment(EOD), Fort Sheridan, IL. Four years experience in managing all facets of unit operations. Performed as explosive ordnance disposal technician and supervisor, using technical knowledge and skills to recover, handle, destroy, neutralize, and demilitarize explosive ordnance and associated components. Planned, initiated, and supervised comprehensive technical training programs for both new and experienced explosive ordnance disposal technicians. Supervised activities of twelve subordinate personnel while providing emergency explosive ordnance and hazardous material support to federal, state, and local authorities in tri-state area of operation. Controlled a $55,000 annual budget, maintained a $1,000,000 inventory of tools, vehicles, equipment and explosives, and was accountable for over 20,000 classified documents. Preformed as Certifying Official for the Army's Nuclear Surety and Personnel Reliability Program. Screened all personnel for entry into program and for access to classified data and weapons. Monitored personnel in the program via duty performance, disciplinary actions, financial matters, medical history, and random drug screening in order to ensure reliability. Acted as member of the Ft. Sheridan Nuclear Surety Board and Radiological Protection Board. Coordinated and provided explosive ordnance support with the US Secret Service, Sate Department, and DoD for the protection of the President, Vice President, Secretary of State, Secretary of Defense, foreign heads of state, presidential candidates, and other designated VIP's. Trained military and civilian authorities in explosive safety and ordnance recognition. Ensured the health and welfare, professional development, and training of assigned personnel. Provided performance counseling. Coordinated internal and external support, logistics, and planning for deployment of personnel and equipment.

I. NAME: **JAMES E. JOHNSON (Wyle Laboratories)**

II. POSITION: **UXO Assistant**

III. EDUCATION:

1988 U.S. Navy Explosive Ordnance Disposal Course, Indianhead, MD

IV. EXPERIENCE:

USMC 1989 - 1992

1991-1992: MCAS, El Toro, Santa Ana, California. One year as EOD Technician. Worked as unexploded ordnance technician in which solid technical knowledge and skills were applied to recover, handle, destroy, neutralize, and demilitarize all classifications of explosive ordnance and associated components. Planned, initiated, and supervised comprehensive technical training programs for both new and experienced explosive ordnance disposal technicians. Regularly supervised subordinates; coordinated with and advised senior personnel on explosive ordnance disposal support, capabilities, and operations. Established effective supply, resupply, maintenance, and inventory control procedures for team tools, equipment, and demolition materials. Controlled and regulated more than 5,000 classified documents. Developed and implemented in-depth technical research libraries.

1990-1991: USMC EOD PLATOON, Saudi Arabia/Kuwait. One year as EOD Technician. Cleared and/or rendered safe numerous air and ground explosive ordnance items in Kuwait, Saudi Arabia and other southwest Asian countries while serving as an explosive ordnance disposal technician during Desert Storm and Desert Shield operations. Cleared numerous U. S. air and ground explosive impact ranges of hazardous unexploded ordnance. Handled the demilitarization and destruction of large quantities of unserviceable explosive ordnance. Stripped, disassembled, and/or inerted a broad assortment of U. S. and foreign explosive ordnance.

1989-1990: MCAS, El Toro, Santa Ana, California. One year experience as EOD Assistant. Worked as an unexploded ordnance technician in which solid technical knowledge and skills were applied to recover, handle, destroy, neutralize, and demilitarize all classifications of explosive ordnance and associated components. Planned, initiated, and supervised comprehensive technical training programs for both new and experienced explosive ordnance disposal technicians. Prepared and presented more than 100 formal and informal lectures. Taught classes dealing with explosive ordnance and related topics to a variety of military and civilian agencies. Drafted and submitted a diversity of written correspondence from detailed reports and operational programs to letters and memorandums.

I. NAME: **DAVID LINDSEY (Wyle Laboratories)**

II. POSITION: **UXO Supervisor**

III. EDUCATION:

1974 U.S. Navy Explosive Ordnance Disposal Course, Indianhead, MD

1971	Basic Combat Demolitions, Land Mine Warfare, V.C. Booby Traps
1978	Basic Applied Engineering Techniques, Radiation Physics and Innovative Explosive Devices - Charles County Community College
1982	EOD Service, Ammunition Destruction, Ammunition Destruction Surveillance, Ammunition Malfunction Investigation, Equipment for EOD Operations, EOD Procedures
1984	Surface Blasting Course, E.I. DuPont de Nemours
1985	ATF Post Blast Investigators Course
1987	LABTI Advanced Improvised Explosive Devices and Terrorist Activities
1987	Nuclear Emergency Team Operations
1989	Advance Explosive Ordnance disposal Refresher, 1986, 1984, 1980, 1979

IV. EXPERIENCE:

Wyle Laboratories 1990 - 1991

Master EOD Technician at Norco, California facility. Supervised work on the Tomahawk Cruise Missile Inspection and Downloading Project. Handles, transports, and disassembles suspect weapon systems and performed disposal actions as required. Supervised operation of ordnance handling equipment and vehicle. Performed and developed EOD tear-down procedures. Identified, inventoried and packaged explosive components, hardware and submunitions for shipment.

USMC 1974 - 1990

1984 - 1990: MCAS, El Toro, Santa Ana, California. Six years as EOD Officer, Hazardous Waste Coordinator, CMCC Responsible Officer, Special Staff Officer for AC of S G-3 COMCAB WEST and 3rd MAW, and Officer in Charge of Joint EOD Unit. Performed the duties as Officer in Charge, Joint EOD Unit which consisted of Station EOD Team, MAG-11 EOD Team and MAG-13 EOD Team. Provided all operational support to MCAS El Toro, MCAS Tustin, 3rd Marine Aircraft Wing, and all local, state and federal authorities. Dealt with numerous different commands on a continuous basis and was responsible for promoting good order, discipline, and harmony within the Joint EOD Unit. Provided extensive VIP support during the 1984 and 1988 Presidential Campaigns to the U.S. Secret Service. Advanced to the rank of Captain in February 1987 and retired effective 1 August 1990.

1981-1984: 1st Marine Brigade, MCAS Kaneohe Bay, Hawaii. Three years as CMCC Responsible Officer, EOD Team Leader, Brigade EOD Officer, Officer in Charge of Combined EOD Teams. Responsible for providing support to MCAS, 1st Marine Brigade, U.S. Navy and all local law

enforcement agencies on the north shore of Oahu. Was instrumental in the implementation of the Navy 10 Year Ordnance Clearance Project on the island of Kahoolawe. Organized and conducted major clearance operations on the islands of Oahu, Kauai, and the big island of Hawaii. Promoted to Chief Warrant Officer in 1983 and subsequently promoted to First Lieutenant (LDO) May 1984.

1978-1981: EOD Platoon, 1st FSSG, MCB Camp Pendleton, California. Three years as Basic EOD Tech, Senior EOD Tech, Master EOD Tech, CMCC Alternate-Assistant Training NCO, Training NCO, EOD Team Leader and EOD Officer. Primary responsibility was providing support the 1st Marine Division and training all members of the Combined EOD Teams and participated in several range clearance operations. Participated in the first joint service nuclear weapons exercise NUWAX '79. Advanced to Master EOD Technician in October 1980 and promoted to Gunnery Sergeant in December 1980. Appointed to Warrant Officer in February 1981 and assumed the responsibility of team leader.

1977-1978: EOD Platoon, 3rd FSSG, 3rd Mar Div, Okinawa. One year as Basic EOD Tech, CMCC Alternate, Motor Transport NCO, EOD Team Leader. Acquired broad experience in performing EOD work in foreign countries to include emergency responses, grade III destruction operations, range sweeping, and working with Air Force and Navy EOD personnel. Was Team Leader for the EOD Detachment at U.S. Naval Air Station Cubi Point, Philippines for 12 weeks.

1974-1977: Marine Corps Base 29 Palms, California. Three years as Basic EOD Tech, CC Clerk, CMCC Custodian, Assistant Training NCO, Range NCO, Museum Curator. Progressed through levels of increased responsibility. Primary duty was the continuous clearance of 900 square miles of impact area. The base consisted of unserviceable ammunition destruction ranging from a few pounds to several hundred thousand pounds . In addition, worked with DoD contractors such as General Dynamics and American Products Corporation. Promoted to the rank of Staff Sergeant in May 1976 and was given the additional responsibility of running range sweep operations.

I. NAME: **OSCAR BROADWAY III (MTA, Inc.)**

II. POSITION: **UXO ASSISTANT**

III. EDUCATION:

1988 U.S. Navy Explosive Ordnance Disposal Course, Indianhead, MD

1985 EOD Assistant Course, Redstone Arsenal, AL
1991 Basic NonCommissioned Officers School (BNCOC), Redstone Arsenal, AL
1992 45 + Credit Hours, Boston University & University of Maryland

IV. EXPERIENCE:

United States Army 1985-1992

1989 - 1992: 19th Ordnance Detachment (EOD), Vicenza, Italy. Three years as EOD Team Leader in response to incidents involving unexploded ordnance and bomb threats. Served as team leader on VIP protection missions. Taught bomb search/threat classes. Assisted in EOD range clearances. Supervised demolition range operations. Maintained unit document security and key control programs.

1988 - 1989: 149th Ordnance Detachment (EOD), Andrews AFB, MD. One year as EOD Sergeant. Performed VIP Protection mission with Secret Service and State Department in support of the President, Vice President, Secretary of State, and visiting heads of state. Supported chemical munitions disposal operations at Pine Bluff Arsenal, Arkansas. Supervised three people in maintaining unit equipment and supply sections. Served as team member in response to bomb threats and unexploded ordnance.

1985 - 1988: 21st Ordnance Detachment (EOD), Germany. Over two years as EOD Assistant. Served as EOD Team Leader on ordnance identification tasks. Set up equipment for render safe procedures (RSPs). Assisted with RSPs. Performed demolition procedures in conjunction with EOD range clearances. Destroyed bulk quantities of unserviceable munitions. Assisted in developing and teaching ordnance recognition (EORA), and bomb search/threat classes. Maintained unit publications account.

I. NAME: GREGORY BAKER (Wyle Laboratories)

II. POSITION: UXO Supervisor

III. EDUCATION:

1981 U.S. Navy Explosive Ordnance Disposal Course, Indianhead, MD

IV. EXPERIENCE:

Brown & Root Corporation 1991 - 1992

One year experience as supervisor of explosive ordnance demilitarization. Supervised forty-four professional ordnance technicians in inspection, segregating unserviceable from serviceable ordnance, preparing for disposal, transportation and demilitarization. Coordinated demolition activities for 8,000 tons of retrograde ordnance with U.S. and Foreign military organizations. Supervised the inspection and shipment of post-Desert Storm stocks scheduled for return to the United States.

Wyle Laboratories 1989 - 1991

Two Years experience as EOD Technician. Team member on the Tomahawk Cruise Missile Inspection and Downloading Project. Handles, transports, and disassembles suspect ordnance systems and performs disposal actions as required. Operates ordnance handling equipment and vehicles. Performed EOD tear-down procedures, reassembling of components, identified, inventoried and packaged explosive components, hardware and submunitions for transportation.

USMC 1981 - 1986

1984 - 1986: USMC EOD Platoon, 1st FSSG, Camp Pendleton, California. Two years as EOD Technician/Team Leader responsible for handling, rendering safe and disposing of hazardous explosive, chemical, nuclear ordnance and improvised devices. Participated in range clearance operations of live fire ordnance and bombing ranges and supervised heavy equipment usage during clearance operations.

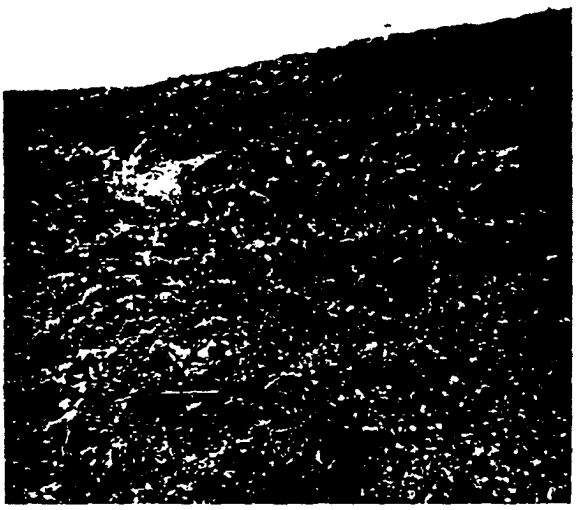
1983 - 1984: USMC EOD Platoon, Okinawa. One year as EOD Technician-responsible for handling, rendering safe and disposing of hazardous explosive, chemical, nuclear ordnance and improvised devices. Heavy Equipment operator for range clearance operations.

1981 - 1983: USMC EOD Platoon, 1st FSSG, Camp Pendleton, California. Two years experience as EOD Technician-Responsible for handling, rendering safe and disposing of hazardous explosive, chemical, nuclear ordnance and improvised devices. Supervised the maintenance and testing of EOD tools and equipment including radiographic equipment. Participated in range clearance operations of live fire ordnance and bombing ranges.

CULEBRA ISLAND SITE VISIT, 15-19 MARCH 1993

I. DNR AREA, CULEBRA ISLAND.

A. Subject Area of Removal Action.



1. General. The area to be cleared is managed by the Commonwealth of Puerto Rico's Department of Natural Resources (DNR). It covers approximately 3 acres, with an additional acre to the northwest to be used as a disposal site. It is configured in a linear plot which stretches southwest to northeast from the gate at the beginning of the DNR camping area to the point where the Mangrove trees "meet" the cleared area near the interior tank target. The proposed disposal area is a circular area which starts approximately 40 meters northwest of the interior tank target and stops at the point where the service road turns southwest toward the Fish & Wildlife Service area. The width of the area varies from approximately 50 meters to 100 meters wide, and is delineated by the service road to the northeast and a line of Mangrove trees on the southwest border.

The vegetation in the area is tough, intertwined vine structures with cockleburrs, "sick-tights" and 3/4 inch to 1 inch thorns. The first two pictures show the heavy growth of the area, but do not show the remarkable growth rate of the vegetation. The area shown in these pictures was mechanically cleared of vegetation in July of last year (1992); the area was then barren. The growth we encountered was almost uniformly waste high throughout the area. According to local F&WS sources, none of the vegetation in the area is endangered. The Mangroves, shown at the rear of this picture, are protected due to their roles in the reclamation of eroded soil and the local food chain.

Approximately 1,000 campers clear and inhabit the area in April each year for "Holy Week"; 2,000 people come for the annual Culebra Fiesta, beginning 15 July this year.

2. History. The island was used by U.S. and Allied armed forces for aerial bombardment and naval gunnery. These operations included training missions for Reserve Aircraft Crews (RACs), which were composed of pilots with very little training prior to being called to active duty. This apparently contributes to the scope of the area contaminated with UXO/OEW.

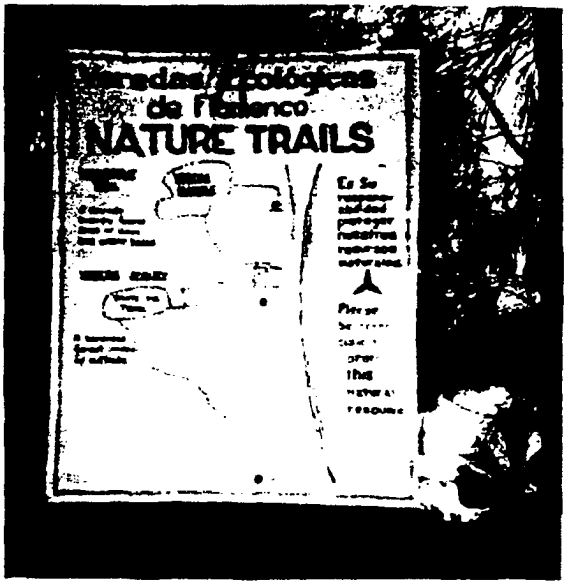
The tank target shown to the left was placed on the beach in an area that is now open to the public. The tank target at the bottom was placed approximately 150 meters inland from the one on the beach. Both were oriented as though defending the beach area. A third target was located in an inaccessible location of the Fish and Wildlife area, and was not physically investigated by the team.

In addition to the evidence of naval ordnance, the targets showed probable signs of impact from 37mm and kinetic energy anti-tank rounds. There is some speculation that the targets were subjected to these weapons prior to being placed on Culebra.

Additional information was provided regarding apparent Army mortar exercises firing across Flamenco Bay from firing points in the vicinity of Resaca Point. The weaponry used in these exercises would have to be greater than 81mm mortars, due to the distance between the alleged firing points and targets. It should be noted, however, that 81mm debris was found on Culebra (see paragraph II). Discussions also revealed foreign vessel and aircraft participation in training exercises as well; specific nations were not identified.

A UXO clearance was conducted by the National Guard in 1985. This was accomplished with PS-11 detectors, and several large bombs/projectiles were found. Reports indicate that disposal attempts were unsuccessful, resulting in the Navy physically removing the ordnance from the island.

B. Projected uses of the Area. The area is currently used for camping and beach recreation. In April, approximately 1,000 campers clear and inhabit the area during "Holy Week"; Another 2,000 people use the area during the annual Culebra Fiesta, scheduled for 15 through 25 July this year.



The sign in this picture shows a nature trail which has been developed in the prospective operational area. The trail is not sponsored by federal or local government agencies, but is cleared and maintained annually by a private citizen. One long time DNR employee indicated that he had assisted the gentleman responsible for the path several times during its development and maintenance.

Barely visible in the center of this photograph is a water tower. It is in this area that some of the mortar rounds are reported to have been fired from across Flamenco Bay.

Long range plans call for the development of housing in this area. This will involve excavation for utilities, grading/leveling of the area, and possibly explosive excavation. While these plans are 5 to 10 years into the future, some thought should be given to clearing the area of UXO/OEW soon.

In addition to these activities, there was also discussion about installing a 4 inch water line from the township out to the Flamenco Bay area. The water line could extend into the area designated for clearance.

Planning and permits for use of the area are approved by the Culebra Authority. The Authority has plans for development of trails in the area and for running water lines to the public facilities. The plans for Culebra developments, however, are several years behind in funding and execution.

C. Establishing UXO/OEW Proximity to the Public. Several indicators of types, degrees and proximity of UXO/OEW were found during the visit. The item to the left was found approximately 10 meters from the inland tank target, next to the nature trail mentioned earlier. Food wrappers and trash from very recent visitors was found within 5 feet of the round, indicating recent use of the area by civilians.

The item is a Mk 25 flare which is commonly used in anti-submarine exercises involving O3 Orion anti-submarine aircraft. The flare is activated by exposing the ignition system (located in the reduced diameter area, lower right hand corner of the picture) to salt water. Once ignited the flare produces red smoke by burning its red phosphorus filler. This smoke billows out of a small nozzle (upper left hand of photo). Typically the filler is not entirely consumed in use, and remnants of the red phosphorus crust over inside the munition. The phosphorus can then reignite if the munition is subjected to rough handling, and "spits" sparks &/or phosphorus out of the opening, creating a serious burn hazard for nearby personnel. The presence of the munition near the path suggests that someone carried it to that location.

The munition shown in the two pictures above was found on the rocky section of the public beach near the outermost tank target. The area where this object is located is

frequently traversed by tourists. The munition could not be identified by either the site visit party or the Naval EOD unit at Roosevelt Roads Naval Station. It was approximately 12 inches in diameter with approximately 20-24 inches of the munition protruding form or broken off in the rocks. The exposed section appeared to have three fuse locations on the rear area enclosed by the flange, and the flange appeared to be threaded as if to accept a fin assembly or some other appendage.

Repeated indications of extended contamination were provided throughout the visit:

- Several of the personnel we spoke with, including one Fish and Wildlife Service employee, described a probable 16 inch naval projectile, which is located somewhere in the refuge to the northeast of the subject clearance area.

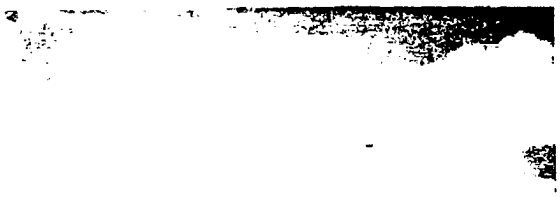
- An expended naval smoke round (FS smoke) was propping open a door at the main building of the DNR facility.

- A local resident had decorated her yard with a number of pieces of ordnance including tail fin sections from 81mm high explosive or white phosphorus projectiles; Bomb Dummy Unit (BDU) (practice bomb) body sections; two naval projectiles approximately 18-24 inches in length and 6 inches in diameter; and one naval projectile approximately 24-30 inches in length and 8-12 inches in diameter. All items had been painted silver, and could not be looked at closer at the time.

- The mayor of the town recounted an accident where a child was killed from an unexploded munition. The child was apparently tapping the fuse of the munition with a cap pistol and detonated the round.

- Several local residents recounted an incident in which Naval aircraft bombarded an observation point in the Resaca Point area during a training exercise.

II. OUTLYING CAYOS.



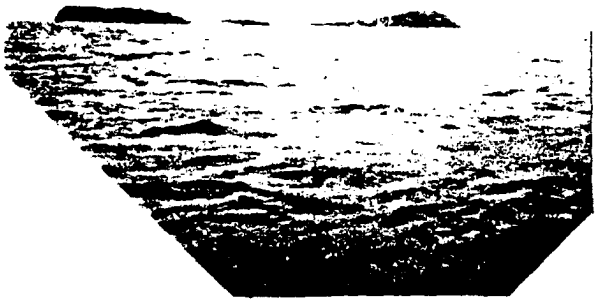
A. Subject Area of Sign Emplacement.

1. Accessibility. Accessibility is the main concern for any efforts to place signs on the cayos (small islands surrounding Culebra). The cayos are dangerous to navigate, access and work on for a number of reasons:

a. The waters around the cayos are reasonably turbulent even on the best days (photos at right and below). To illustrate, our team was able to examine only the cayos on the south side of Culebra due to bad weather and seas on the north side.

b. The shallow waters close to the cayos are protected by rocky outcroppings and extensive coral beds (to include Fire Coral). This limits the points of access to the cayos, makes movement of men and materials to the cayos difficult and dangerous, and provides a natural deterrent for those who wish to casually visit the island.

c. The actual beaches on the cayos are not beaches at all. They are harsh rocky areas which, again, are difficult and dangerous to walk on. Some of the cayos have no accessible beaches, forcing visitors to rock-climb to stable areas.



d. The wind is virtually constant, and all parts of the cayos are subjected to it. This further complicates sign placement or other similar activity on the cayos.

e. Rain is virtually a daily occurrence around the cayos, keeping the rocky surfaces wet and slick. Again, this is detrimental to sign placement activities.

The difficulties presented by the geography and climate have changed the concept for placing warning signs on the cayos. The favored approach is now placement of buoyed signs in the surrounding waters. This approach is safer and offers advantages in sign visibility, sign maintenance and effort/resources required for emplacement of the signs.

A. Technical Considerations for Sign Emplacement. The sign in the picture on the left was placed by the Navy. The sign was apparently painted on a 4' by 8' piece of plywood, and displays a UXO/OEW warning message written in-English and Spanish. The sign was written in black and white only, was very weathered, and from a distance of 150-200 meters (the closest we could get due to reefs in the area) was difficult to read. Unless an individual was specifically looking for this sign, it could be easily overlooked or ignored. This illustrates two important points regarding the placement of the signs:

1. Visibility. Signs should be placed in positions where people can easily read them before getting too close to ordnance and navigational hazards. Placement of the signs in surrounding waters accomplishes this. Further investigation with appropriate USCG Aids to Navigation Team and Local Aids agencies must be conducted to acquire location guidance.

2. Composition. The materials, lettering and colors of the signs merit careful consideration: Simple black lettering may not be adequate to capture the attention of casual boaters, and it is desirable to capture their attention as soon as possible when they are in the area. The picture on the right shows a typical navigation sign in the area, which offers indicators of adequate size, materials and colors used for navigation type signs.

B. Logistics and Maintenance. The effort and resources required for placement of the signs and the post-placement maintenance requirements must also be considered in developing plans for sign placement. Possible sources of such information and actual signs include existing government agencies/contractors and commercial firms offering ready made warning signs.

III. ENVIRONMENTAL CONSIDERATIONS.

A. Endangered Species.

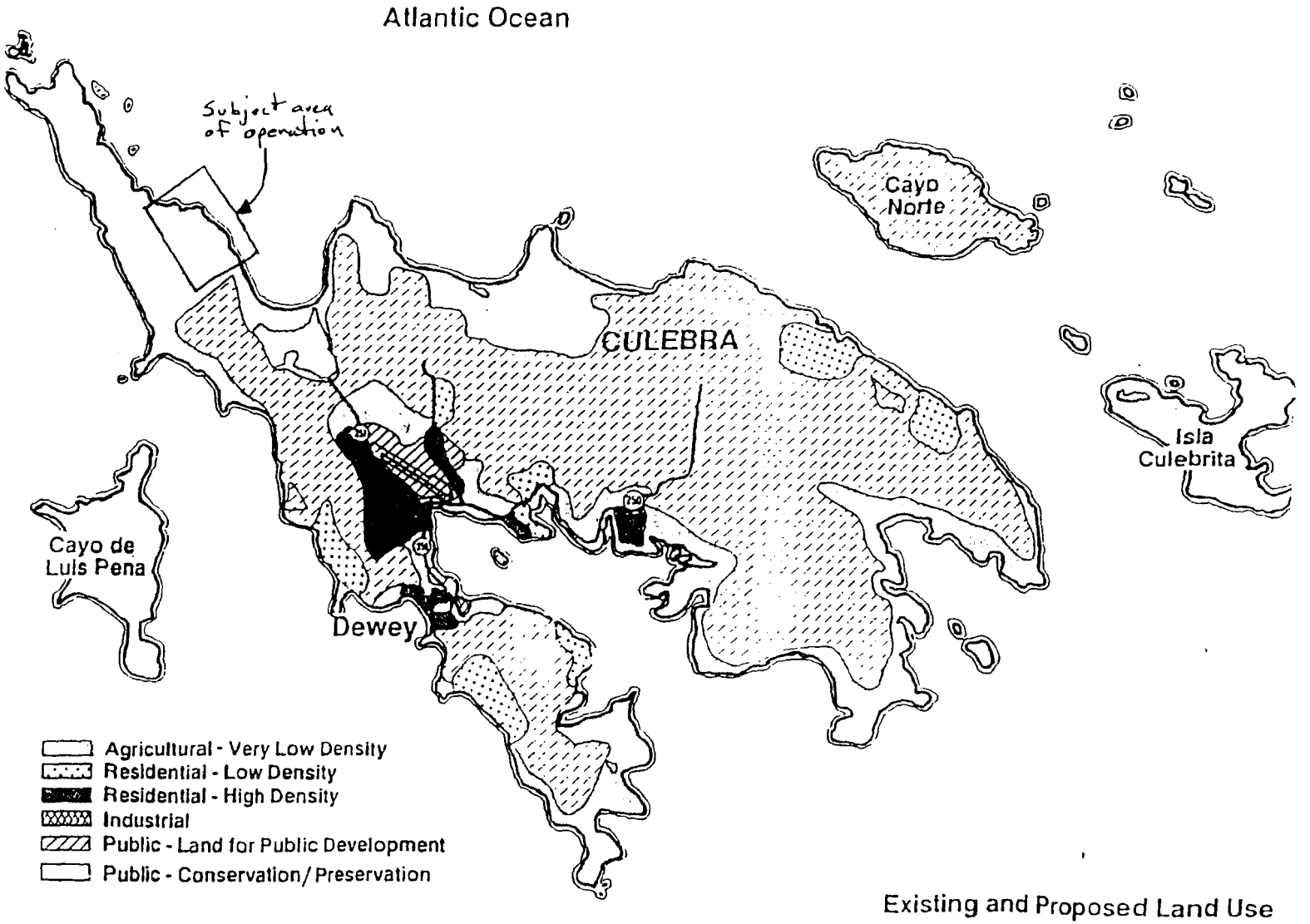
1. Animal. Endangered species on Culebra include the Leatherback Turtle; the Loggerhead Turtles; the Green Turtle; the Hawksbill Turtle; the Kemps Ridley Turtle; the Olive Ridley Turtle; the "La Pinta" snake; the St. Croix Ground Lizard; the Black Duck; the Sooty Tern; and the Brown Booby. Of these endangered bird species are located primarily in the F&WS refuge areas, and should not be effected by operations in the Flamenco Bay area. No indication was provided that the "La Pinta" snake or the St. Croix Ground Lizard habitated the area of operations. Some varieties of turtle use the beach and proximate areas during periods of nesting and hatching.

The F&WS refuge for the Sooty Tern and the Brown Booby is located on the tip of the peninsula containing the area to be swept. Consideration must be given to controlling noise, fragmentation and other operational elements which may disturb the habitat.

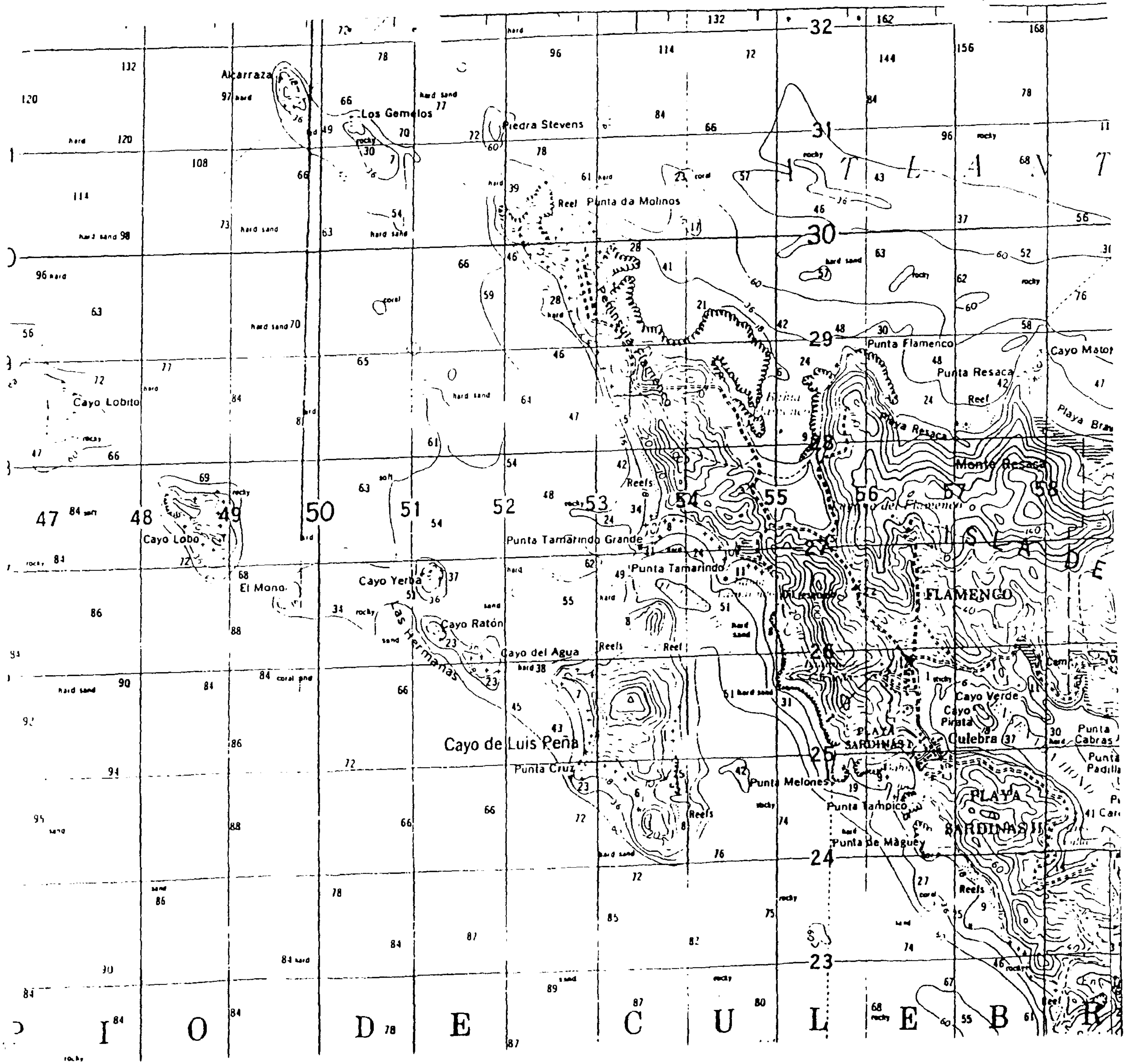
2. Vegetation. All varieties of cactus found in the Culebra area are protected. The Mangrove colonies, though not endangered, are protected due to their influence on the ecological food chain. Intentional cutting of Mangroves is prohibited.

B. Noise Abatement. The proximity of the resort in the Flamenco will dictate noise abatement provisions. Initial evaluation is that tamping and limiting the size of demolitions will adequately provide noise abatement.

C. Geographical Impact. Natural drainage and ground water schemes must be taken into account when planning disposal sites and operations. To date, the subject area has been subjected to construction and landscaping activities on numerous occasions with no harmful repercussions.



Existing and Proposed Land Use



NORTHWEST CULEBRA & SURROUNDING CAYOS

MTA, Inc.
2225 Drake Avenue, Suite 8
Huntsville, Alabama 35805

Remediation of Sites in the U.S. Virgin Islands and Puerto Rico
Contract DACA87-92-D-0147
Delivery Order 0002

LOCATION, REMOVAL AND DISPOSAL OF UXO CULEBRA ISLAND, COMMONWEALTH OF PUERTO RICO

ANNEX I
DEFENSE REUTILIZATION MARKETING OFFICE (DRMO) TURN-IN PLAN TO SITE SPECIFIC WORK PLAN (SSWP)

U.S. Army Engineering Division, Huntsville
ATTN: CEHND-CT-D (A. Prince)
P.O. Box 1600
Huntsville, Alabama 35807-4301

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ANNEX I
DEFENSE REUTILIZATION MARKETING OFFICE (DRMO) TURN-IN PLAN CULEBRA ISLAND (CONTRACT DACA87-92-D-0147, DELIVERY ORDER 0002)

I-1. REFERENCE. DOD 4160.21-M, Defense Utilization and Disposal Manual.

I-2. INTRODUCTION.

I-2.1. General. This plan fulfills the requirement of delivery order 0002 to contract DACA87-92-D-0147 to have a detailed plan for the turn-in of all recovered inert ordnance items and related ordnance scrap metal to the Defense Reutilization Marketing Office (DRMO) at Roosevelt Roads Naval Station. All material will be a result of the remediation work done by the MTA TEAM at Culebra island, Puerto Rico.

I-2.2. Purpose. The purpose is to prescribe procedures to be followed by the MTA TEAM in disposition of all recovered inert ordnance items and related ordnance scrap metal as a result of work accomplished under contract DACA87-92-D-0147 with the U. S. Army Corps of Engineers, Huntsville Division.

I-2.3. Scope. The provisions of this plan are applicable to all MTA employees and subcontractors. No scrap operations will be conducted in conjunction with the placement of warning devices on the outlying cayos.

I-2.4. Coordination. Direct coordination has been accomplished with the following agencies at Roosevelt Roads Naval Station:

Mr. Steven E. Brunow
Chief, DRMO Roosevelt Roads
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I-3. RESPONSIBILITIES.

I-3.1. U. S. Army Corps of Engineers, Huntsville Division. The Contracting Officer. The Contracting Officer, Huntsville Division is responsible for providing to the DRMO, Roosevelt Roads, a letter indicating which government representative(s) (by name) will be authorized to sign the DD Form 1348-1. This letter is required to be on file with the DRMO before any material can be accepted at the DRMO.

I-3.2. MTA, Incorporated.

I-3.2.1. Transportation. MTA is responsible for movement of scrap from the work site to the ferry dock and subsequently to the DRMO, Roosevelt Roads. These responsibilities include coordination of water transportation to Puerto Rico and transportation from port to DRMO once the material is on Puerto Rico. Required services will be billed directly to CEHND whenever possible.

I-3.2.2. DD Form 1348-1. MTA will prepare a DD Form 1348-1 for each shipment of scrap to be turned in to DRMO. Preparation will be in accordance with references I-1., and includes attachment of the Senior UXO Supervisor's certification statement. Completed forms will be provided to the authorized CEHND representative for signature.

I-3.2.3. Adherence to Standards. MTA will conduct scrap operations in accordance with all applicable portions of reference I-1 and all policies/procedures established by the DRMO, Roosevelt Roads.

I-4. PROCEDURES.

a. Inert ordnance items will be collected and transported to the designated temporary storage site where they will be inspected by contractor UXO personnel and segregated (see paragraph A-4, UXO Subplan).

b. Scrap collected from the worksite will be stored in an area adjacent to the work area. Because of the small size of the work site, it is anticipated that a minimal (approx. 2000 lbs.) amount of scrap will be collected. The scrap will be stored until the work site has been cleared. The scrap metal will then be segregated (as required by DRMO) and

transported by truck to the Culebra Ferry Dock.

c. All scrap will be inspected by qualified UXO personnel for UXO content and will certify that the scrap is cleared for shipment.

d. The scrap truck will board the ferry from Culebra to Fajardo, PR. The ferry leaves Culebra at 0700hrs daily. The truck will then travel from Fajardo (approximately six miles from Roosevelt Roads) to the DRMO. The DRMO does not have scales available. If the government requires that the scrap be weighed, than scales are available at the Fajardo Metals Company. MTA will coordinate with the Fajardo Metals Company to use their scales.

e. The Project Manager will insure that DD Form 1348-1 is properly filled out in accordance with DOD 4160.21-M prior to shipment and obtains the signature of the authorized government representative on the 1348-1. He will also prepare a certificate stating:

> "I certify that the property listed hereon has been inspected by me, and to the best of my knowledge and belief, contains no items of a dangerous nature."

This certificate will be signed by the Senior UXO Supervisor and presented to the DRMO at turn-in.

f. Turn-in at DRMO will be scheduled to comply with the published DRMO operating hours shown in Figure I-1. No local DRMO SOP exists, so all material will be turned-in according to the procedure established in DOD 4160.21-M, chapter 6, paragraphs 34 and 35.

g. MTA will provide CEHND copies of all turn-in receipts provided by the DRMO.

DRMO ROOSEVELT ROADS
HOURS OF OPERATION

	MON	TUES	WED	THUR	FRI
Turn-in Of Non-Hazardous Property	0730 1530		0370 1530		C L O S E D
Issue of Non-Hazardous Property		0730 1530		0730 1530	
Turn-in of Hazardous Material/Waste	0800 1530 (By Appointment Only)	0800 1530	0800 1530	0800 1530	
Issue of Hazardous Material		0800 1530 (By Appointment Only)		0800 1530	

Figure I-1.