

03.05-10/1/2000-02586A

**WORK PLAN
FOR
FIRING RANGE SR 11
MARINE CORPS BASE
CAMP LEJEUNE, NORTH CAROLINA**

Prepared for:

DEPARTMENT OF THE NAVY
Contract No. N62470-97-D-5000

Atlantic Division
Naval Facilities Engineering Command
6506 Hampton Boulevard
Building A (South East Wing) 3rd Floor

Prepared by:



**OHM Remediation
Services Corp.**

A member of THE IT GROUP

11560 Great Oaks Way, Suite 500
Alpharetta, GA 30022

October 2000

OHM Project No. 920901

03.05 - 10/1/2000 - 02586A

**WORKPLAN
FOR
FIRING RANGE SR-11
MARINE CORPS BASE
MCB CAMP LEJEUNE, NORTH CAROLINA**

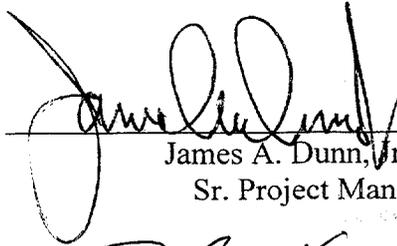
Prepared for:

Department of the Navy
Contract No. N62470-97-D-5000
Task Order 017

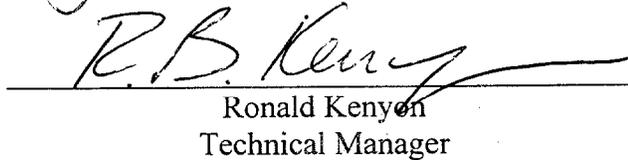
Atlantic Division
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October 2000
OHM Project No. 920901

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- B. CONSTRUCTION QUALITY CONTROL PLAN

1.0 INTRODUCTION

1.1 ACTION OBJECTIVES

This submittal presents OHM Corporation's approach to implementing the construction of a new Firing Range SR-11, located at Marine Corps Base (MCB) Camp Lejeune, North Carolina.

This work plan identifies and describes how OHM will implement the major tasks of the project, encompassing:

- The installation of an Action Target bullet trap at 14 firing lanes on concrete slab
- The installation of a wood baffle and drainage improvements for SR-11 area
- The installation of cover gravel and build sidewalks and access sidewalk for SR-11 range
- Providing one year of operation and maintenance OHM for the bullet traps

This document is prepared by OHM Corporation for the Department of the Navy, Naval Facilities Engineering Command, Atlantic Division (LANTDIV) under Contract Number N62470-97-D-5000, Task Order 17, Modification No. 6.

Several other plans have been developed for this task order and are to be considered as complementary components to this Work Plan. They include:

- Environmental Protection Plan (EPP) (Section 3.0 of this document)
- Site Specific Health and Safety Plan (SSHSP) Addendum (Appendix A of this document)
- Construction Quality Control Plan (CQCP) (Appendix B of this document)

1.2 SITE DESCRIPTION

Camp Lejeune is a training base for the U.S. Marine Corps, located in Onslow County, North Carolina. The base covers approximately 236 square miles and includes 14 miles of coastline. The Atlantic Ocean, to the northeast bound MCB Camp Lejeune to the southeast by State Route 24. The town of Jacksonville, North Carolina is located north of the Base.

Range SR-11 is located near the intersection of Joe's Trail and South Bay Road in the Sandy Run area of MCB, Camp Lejeune, located off US Route 17. Figure 1 presents the location of SR-11.

2.0 PRE-CONSTRUCTION ACTIVITIES

Several activities will be executed by OHM before actual mobilization to the project site and the commencement of site operations, as discussed below.

2.1 PRE-CONSTRUCTION SUBMITTALS

The following plans have been developed for this task order and are to be considered as complementary components to this Work Plan:

- EPP
- SSHSP
- CQCP

2.2 PERMITS

OHM will prepare all appropriate permit applications for submission to the base as required and will coordinate with the state/federal agencies, Camp Lejeune personnel, and LANTDIV as needed. Possible required permits include:

- Utility clearances
- Base construction/digging permits
- Electrical Permits

2.3 PROCUREMENT

Upon approval of this work plan, OHM will complete procurement of equipment, materials, and subcontractors necessary for the execution of this project.

The major equipment and materials to be procured include:

- Bullet Traps with roofs and dust collectors-Action Target
- Timber for Side Walls, Baffles Roofing
- Concrete for Bullet Trap Foundation and Sidewalks
- Stone for cover, base and drain trenches

Specialty subcontractors may be procured to execute certain portions of work. The following is a list of anticipated subcontractors procured for the project:

- Installation of Bullet Traps with roofs and dust collectors
- Electrical contractor for power distribution to the bullet traps Inc.
- Transportation and disposal services for residuals management

2.4 PRE-CONSTRUCTION MEETING

OHM will participate in a pre-construction meeting at MCB Camp Lejeune with Base, LANTDIV, and other parties prior to mobilization to the site. OHM representatives will include at a minimum the Project Manager and the Site Supervisor. The purpose of this meeting will be to:

- Confirm roles and responsibilities of key personnel and flow of communications for project execution
- Review project schedule, work hours, sequence of tasks and key milestones
- Identify and discuss Base-specific issues relative to the upcoming mobilization and construction activities
- Obtain the necessary security clearances for operations personnel
- Review appropriate permits with Base

3.0 ENVIRONMENTAL PROTECTION

This Environmental Protection Plan (EPP) has been prepared in accordance with standard OHM procedures and policies. The EPP provides specific information relating to the scope of work under Task Order 017 of LANTDIV Contract No.D62470-97-D-5000 at SR-11 MCB Camp Lejeune, North Carolina. The plan will provide site-specific information for:

- Land resources management
- Water resource management
- Air and noise pollution control
- Non-compliance/corrective action
- Post-construction clean-up

The control of environmental pollution will consider air, water and land impacts as well as noise and solid waste management.

The land resources within the property of MCB Camp Lejeune, but outside the limits of permanent work, will be preserved in their condition or restored to a condition that does not detract from the appearance of the area after completion of construction. As much as is possible, construction activities will be limited to areas defined by the plans and specifications.

3.1 TEMPORARY ROAD CONSTRUCTION

In the event that temporary construction roads are required at the project site, road construction will be performed in a manner as to minimize the impact to the natural environment. Water will be used for dust control, as necessary.

3.2 PROTECTION OF TREES, SHRUBS, AND GRASS

Prudent steps will be taken to protect trees and shrubs outside of the work zone as necessary. Precautions will be taken to minimize the construction activities impact on existing vegetation and will include:

- Utilization of existing or temporary construction roads
- Closely supervise equipment operators with an emphasis place on preservation of vegetation in non-work area

- Proper guidance of heavy equipment and truck operators by site personnel to minimize damage to adjacent vegetation not directly affected by construction activities

3.3 WATER AND RESOURCES PROTECTION

3.1.1 Surface Water Management

Stormwater surface run-off leaving the site will be controlled by temporary erosion and sediment control techniques such as berms, silt fencing and grading. Areas of bare soil during construction activities will be minimized.

3.1.2 Erosion Control

Prior to disturbance of native vegetation and soils, temporary erosion/sediment control will be established on the down gradient side of the work area. Control techniques to be utilized will involve silt fencing that will be installed with the fabric a minimum of 6 inches below grade and extending 36 inches above grade and fastened to posts no more than 6 feet apart. The posts will be installed a minimum of 24 inches below grade and extend a minimum of 36 inches above grade. Fabric will be attached to the upslope side of the posts using 1-inch staples or tie wires. Silt fences will be inspected after every rain and daily during extended rainfall. Accumulated sediment will be removed before the thickness reaches 12 inches.

3.1.3 Spill and Discharge Control

Measures will be taken to prevent any decontamination rinsates from leaving the work area. Decontamination rinsates be collected and disposed of at an applicable Base water treatment plant.

3.4 EMISSIONS CONTROL

3.1.4 Air and Noise Control

Ambient air monitoring will be conducted as necessary in order to determine airborne dust levels. This ensures that respiratory protection is adequate to protect personnel against the harmful particulate levels that are encountered as well as ensuring that of airborne contaminants is not leaving the site.

3.5 SOIL EXCAVATION, HANDLING, SITE GRADING, AND TRANSPORTATION

Specific measures to be take to minimize particle emissions for major activities during site construction include the following:

- Apply water to work and traffic areas as necessary to minimize dust emissions
- Cover stockpiles with sheeting to minimize wind and / or stormwater erosion
- Move and load soil for transport using procedures that limit dust emissions
- Halt dust generating work when on-site wind conditions exceed 35 miles per hour

3.6 MOVEMENT OF EQUIPMENT

- Water traffic areas as required to minimize dust emissions
- Designate equipment traffic patterns to minimize travel distance and vehicular dust emissions
- Limit vehicle speed to minimize dust emissions

3.7 SITE RESTORATION AND CLEANUP

All earth moving heavy equipment will be decontaminated prior to demobilizing from the site. Decontamination will consist of scraping and pressure washing to remove visible soil and debris from tires and undercarriage of vehicles and heavy equipment.

3.8 SEEDING

Grass seed matching existing vegetation will be placed at a minimum rate of 5 pounds per 1,000 square feet over topsoil areas. Fertilizer Type I, Class 2, 10-10-10 analysis or similar will be applied at a rate of 25 pounds for 1,000 square feet.

4.0 MOBILIZATION AND SITE PREPARATION

4.1 MOBILIZATION

To augment the current workforce at Camp LeJeune, OHM may mobilize personnel and equipment as necessary from its attendant facilities including Covington, Georgia; Alpharetta, Georgia; and/or Clermont, Florida. Prior to beginning work on site, training will be conducted to brief all site personnel on the Site Health and Safety Plan, construction drawings, operation procedures, and other relevant site-specific plans. Site hazards and conditions will be discussed and all personnel will acknowledge their understanding and compliance with the plan by signing an approved acceptance form.

4.2 SITE PREPARATION

Project site setup and preparation will consist of the following main activities:

4.2.1 Utility Clearance

OHM will work with Base personnel to identify and mark all known utilities potentially within the work zones. OHM will exercise caution while performing ground-intrusive work and will implement its Standard Operating Procedures for excavation near utilities. Techniques for minimizing damage to existing utilities will include the use of location devices and hand digging. A Base issued dig permit or excavation permit will be obtained from the Public Works Officer, Utilities Division prior to beginning work.

4.2.2 Site Survey

OHM will mark the location for the utilities using spray paint or wood stakes. The locations will be rechecked just prior to construction or as the need arises.

4.2.3 Fence Construction

During any excavation activities, OHM will erect safety fencing around the designated work areas. Fencing will be 3-foot-high, bright orange, polyethylene-mesh to prevent unauthorized personnel from accidentally entering a working area.

4.2.4 Site Security

All persons entering the site will be required to sign in and out daily. OHM reserves the right to deny access to any individual not showing proper identification, medical clearance, or OSHA training certification

4.3 HEALTH AND SAFETY ZONES

The site will be segregated into work areas based on degree of hazard and personal protective equipment (PPE) requirements. Personnel working within the work area will be required to wear the appropriate PPE as outlined in the Site Specific Health and Safety Plan.

4.4 DEMOLITION

Demolition of the existing concrete target support wall will occur before any site construction begins. Concrete saws may be used to cut concrete in sections for removal in manageable pieces. A trackhoe/excavator equipped with a hydraulic hoe ram may be utilized to break up the larger sections of the concrete. Concrete will be sized to the requirements of the intended recycling or disposal facility (Base Landfill)

All debris will be staged and maintained adjacent to the work area while awaiting transport off site. This staging area will be marked off using either high visibility caution tape or construction safety fencing.

5.0 CONSTRUCTION PHASE

5.1 PREPARE GRADE FOR CONCRETE SLAB

The existing area will be graded to a level elevation (field determined) that will ensure the drainage of the concrete foundation that will follow. Backfill soil will be imported and compacted to raise the elevation of the site prior to the installation of concrete.

5.2 CONCRETE SLAB FOR BULLET TRAP

OHM will construct a 83'x22'-4"x6" thick foundation of 4000 psi concrete for the bullet trap. The concrete foundation will be sloped to drain away from the bullet trap. Figure 3 presents the intended drainage construction for the bullet trap pad.

5.3 BULLET TRAP

Bullet traps with dust collectors will be supplied, installed, tested, and started-up by the manufacturer. The locations and construction of the bullet traps and dust collectors are shown in Figure 2 and Figure 3. The bullet trap will meet the following requirements:

- Consist of 14 trap lane modules 5-feet wide separated by a center 3 feet module and with 3-feet modules on each end to form a single aperture 79 feet wide.
- The traps will include a crib style steel roof covering the entire area occupied by the traps.
- The traps will employ a single stage air collection and filtration system to collect and purify the air within the main deflection aperture/collection chamber.
- The dust collectors will be weather proof, suitable for outdoor installations.
- The dust collectors and ductwork shall be protected from stray bullets.
- Start-up of dust collector to verify airflow meets design requirements; ductwork system does not leak, and dust collector system functions as designed will be conducted.

The installation of the bullet trap will be supervised by Action Target and performed by OHM.

5.4 WALL CONSTRUCTION

To prevent stray lateral fire from exiting the sides of the range areas, new sand-filled timber walls will be constructed. All timber materials will be treated for exterior use. Member sizes will be as indicated on the Figure 5.

Each new wall will be 10'-2" in height by 3'-3" wide and contain a 24-inch cavity. The cavity will be lined with a geotextile material and filled with sand. The new walls will be capped with timber.

5.5 BAFFLE CONSTRUCTION

Stray vertical fire will be inhibited by construction of baffles at all ranges. Baffles will provide a clear height of 9 feet 2 inches and be configured as indicated on Figure 3. Details of the baffle construction are shown on Figure 4. The outermost baffle support column at its intersection with the new walls will also serve as a wall support column. All materials used in the construction of the baffles will be treated for resistance to the elements.

5.6 TARGET WALL CONSTRUCTION

OHM will construct a wood target wall immediately in front of the bullet trap as shown in Figure 7. The wall will be 4.0" high and will run across the width of the Firing Range. The front of the wall will be planked using 2"x10" lumber and will have an overhang of 30 inches facing the front of the range. Immediately behind the target wall, OHM will construct a target stand centered in each firing lane. A three sided metal enclosure will be fabricated and attached to the top of each target stand to hold the target paper in place during use. Refer to Figure 7 for the details of the target stands.

5.7 RANGE SIDEWALK CONSTRUCTION

Two-foot wide sidewalks constructed of 4-inch thickness 2500-PSI concrete will be installed as indicated on Figure 2. Areas under the baffles and between the sidewalks will receive gravel placed over geotextile fabric at a nominal thickness of 2 inches.

5.8 ACCESS SIDEWALK CONSTRUCTION

An additional sidewalk, 350 feet long and 4 feet wide will be constructed leading from the existing parking area to the new Range. The sidewalk will be 4 inches thick 2500 psi concrete and will be installed as indicated on Figure 1A. Grading may be required to prepare the sidewalk site and provide adequate drainage.

5.9 ELECTRICAL POWER DISTRIBUTION

OHM will provide primary electrical power to the dust collector at SR-11 by tapping into the Bases existing 12.47 kV power lines. OHM's electrical subcontractor will install new power

poles and transformers and a 100-amp service entrance rated panel boards. New overhead or underground power lines and associated power poles will be installed between the existing power source and the new power pole with the transformer as shown on Figure 6.

The main distribution panel boards will be enclosed in NEMA 3R enclosures and will be mounted on the new service poles. Prior to start-up, all electrical equipment will be tested to ensure proper operation. All electrical work shall be in accordance with NFPA 70. An electrical one-line diagram for each range is provided in Figure 6.

6.0 *SITE RESTORATION AND DEMOBILIZATION*

Upon completion of the Firing Range SR-11 construction, OHM will perform site restoration activities and then demobilize from the site.

6.1 SITE RESTORATION

The disturbed areas will be backfilled with soil from off-site borrow sources if needed. The area will be graded and compacted with the existing site equipment to pre-existing conditions. Grass areas destroyed or disturbed during remediation activities will be seeded as presented in the Environmental Protection Plan.

6.2 DEMOBILIZATION

Upon completion of site restoration, all equipment, support trailers and personnel associated with this work will be demobilized from the project site. Heavy equipment will be returned to the equipment yard where they originated, and the project personnel will return to their respective home offices.

7.0 TRANSPORTATION AND DISPOSAL

This section deals with the transportation and disposal of demolition debris, wastewaters, and PPE.

7.1 DEBRIS

Debris could consist of concrete and structural steel. The debris will be sized according to the receiving facilities requirements, stockpiled in a lined area, tested for the on-Base Subtitle D landfill parameters, and transported to the selected recycling facility or Base landfill if acceptable analytical results are obtained.

7.2 WASTE DISPOSAL COORDINATION

OHM will assign a Transportation and Disposal (T&D) Coordinator to this project to act as a single point-of-contact for waste management activities. Prior to disposal of debris and PPE, the T&D officer will coordinate with the Base representative to obtain approval.

8.0 OPERATION AND MAINTENANCE

8.1 OPERATION & MAINTENANCE

OHM will provide O&M of the bullet traps for one year after the completion of the new range.

The task will require one man-day per quarter plus drums and a backhoe to load the filled drums for delivery to the Base recycling center. Four man-hours will be expanded to change the filters in the DCU assembly. Greasing the motors and servicing the compressors will be subcontracted to a firm specializing in this type of maintenance work.

9.0 REPORTS AND SUBMITTALS

The following paragraphs discuss the reports OHM plans to prepare during this project.

9.1 AS-BUILT RECORDS

OHM will maintain two sets of full size drawings marked to show any deviations, which have occurred, including buried or concealed construction and utility features revealed during the course of construction. OHM will record horizontal and vertical locations of buried utilities that differ from the contract drawings. These drawings will be available for review by the ROICC and NTR at any time. At the completion of the work, OHM will prepare final as-built drawings for inclusion in the Contractors Closeout Report.

9.2 CONTRACTOR PRODUCTION REPORT (CPR)

The CPR will be prepared and submitted daily to the ROICC and NTR, as presented in the QC Plan provided as Appendix B.

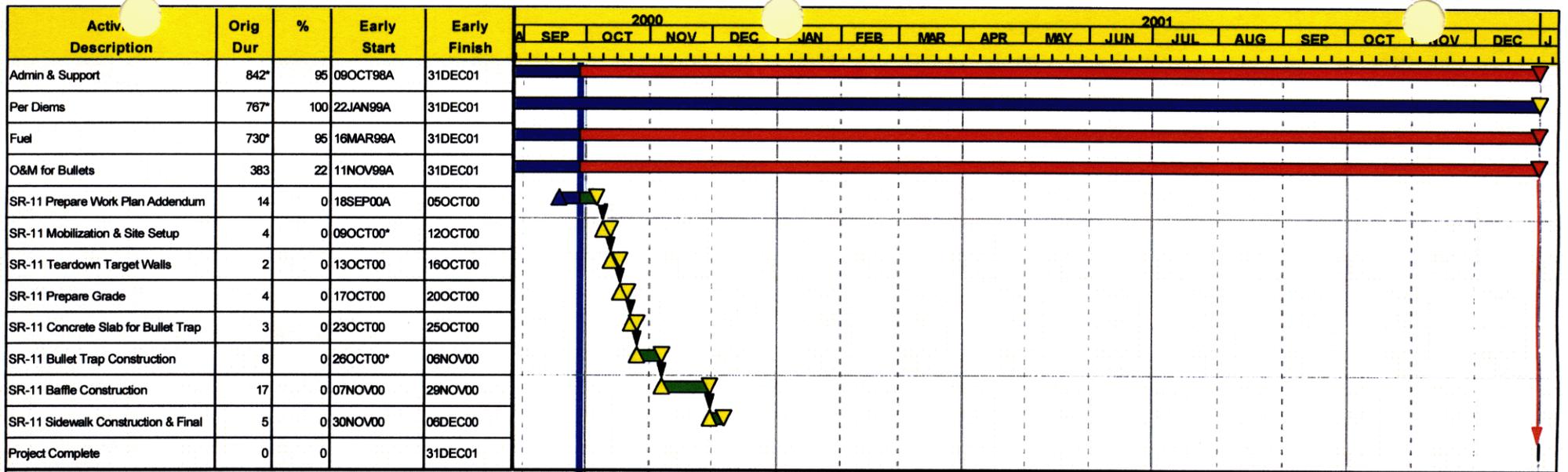
9.3 CONTRACTOR'S CLOSEOUT REPORT

The Contractor's Closeout Report will be submitted upon completion of the project. This report will include:

- Introduction
- Summary of actions
- Final Health and Safety report
- Summary of record documents
- Field changes and contract modification
- As-built drawings
- Documentation of offsite transportation and treatment of materials
- QC summary report
- An evaluation of the system including; problems encountered, and solutions implemented.

10.0 PROJECT SCHEDULE

The anticipated schedule for this project is shown in the attached chart.



Start Date 29AUG00
 Finish Date 31DEC01
 Data Date 28SEP00
 Run Date 28SEP00 15:06

© Primavera Systems, Inc.

 Early Bar
 Progress Bar
 Critical Activity

017X

Sheet 1 of 1

IT Corporation
 Task Order 17 - Project 920901
 Range SR-11

0750100000



Prepared 16 August 2000 by:
 Nikki Hall, EMD/IRD
 451-9610



300 0 300 600 900 1200 Meters

Map Projection: UTM (NAD83, GR 1980)

UNCLASSIFIED GEOGRAPHIC INFORMATION & POSITIONING
 Marine Corps Base, Camp Lejeune, NC

Prepared by the G-E Office, Environmental Management Department

NOTE: THIS MAP IS FOR REFERENCE ONLY

Information is provided for informational purposes only and does not constitute a warranty or representation of the information with respect to any specific use of the information.

SR-11 Range

- Road Centerline
- Installation Boundary
- Structure Existing

Figure 1

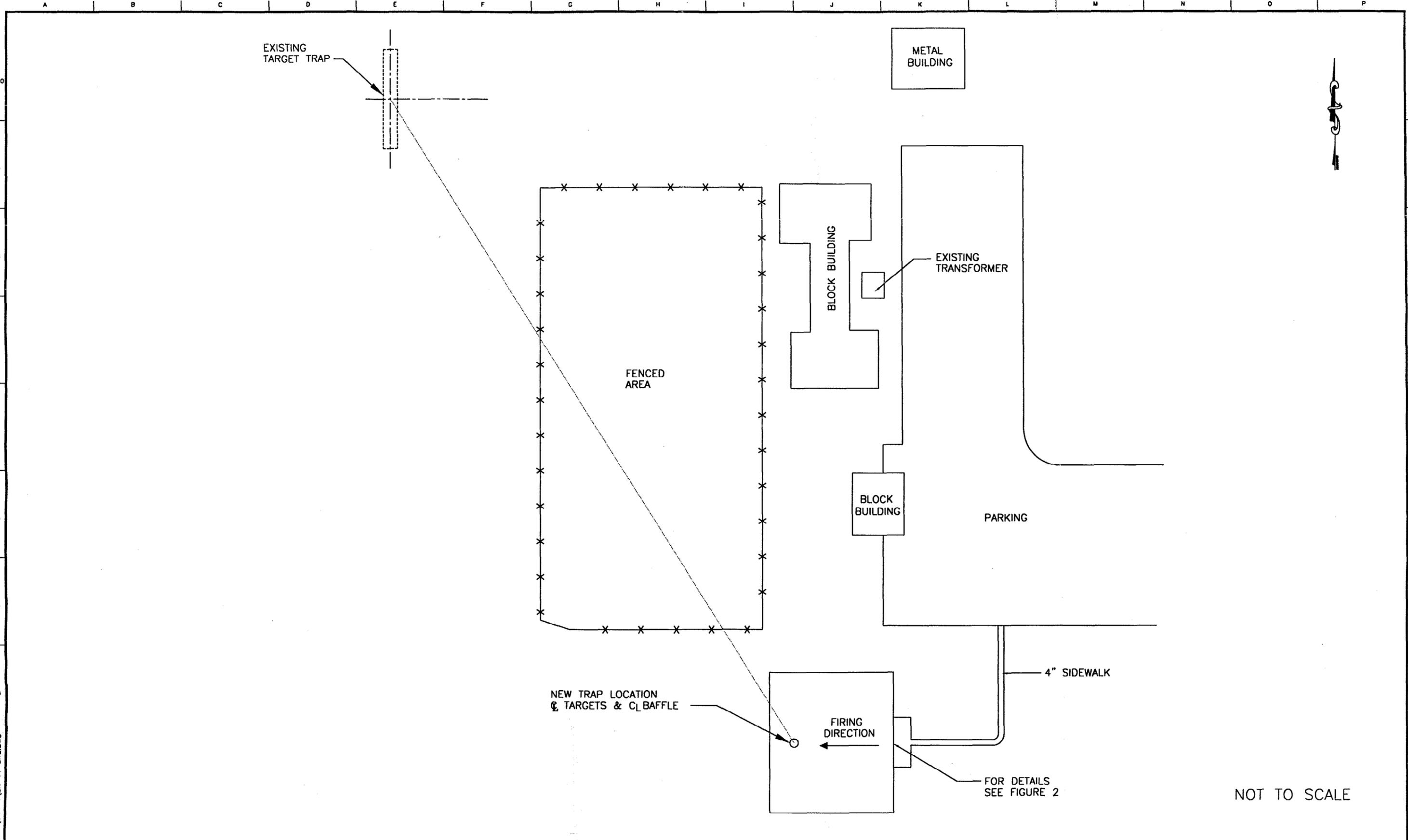
Location Map

Fire Range SR-11

Marine Corps Base

Camp Lejeune, N. Carolina

02586AAB02Y



NOT TO SCALE

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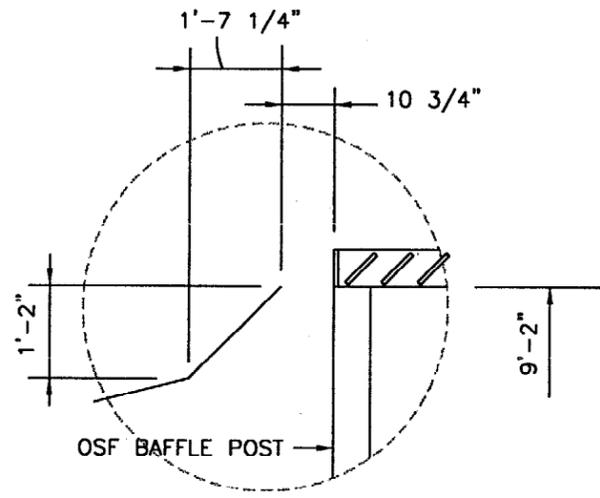
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 APPROVED: _____ SR. PROJECT ENGINEER: _____ DATE: _____
 APPROVED: _____ DEPT. MANAGER: _____ DATE: _____

REVISIONS					
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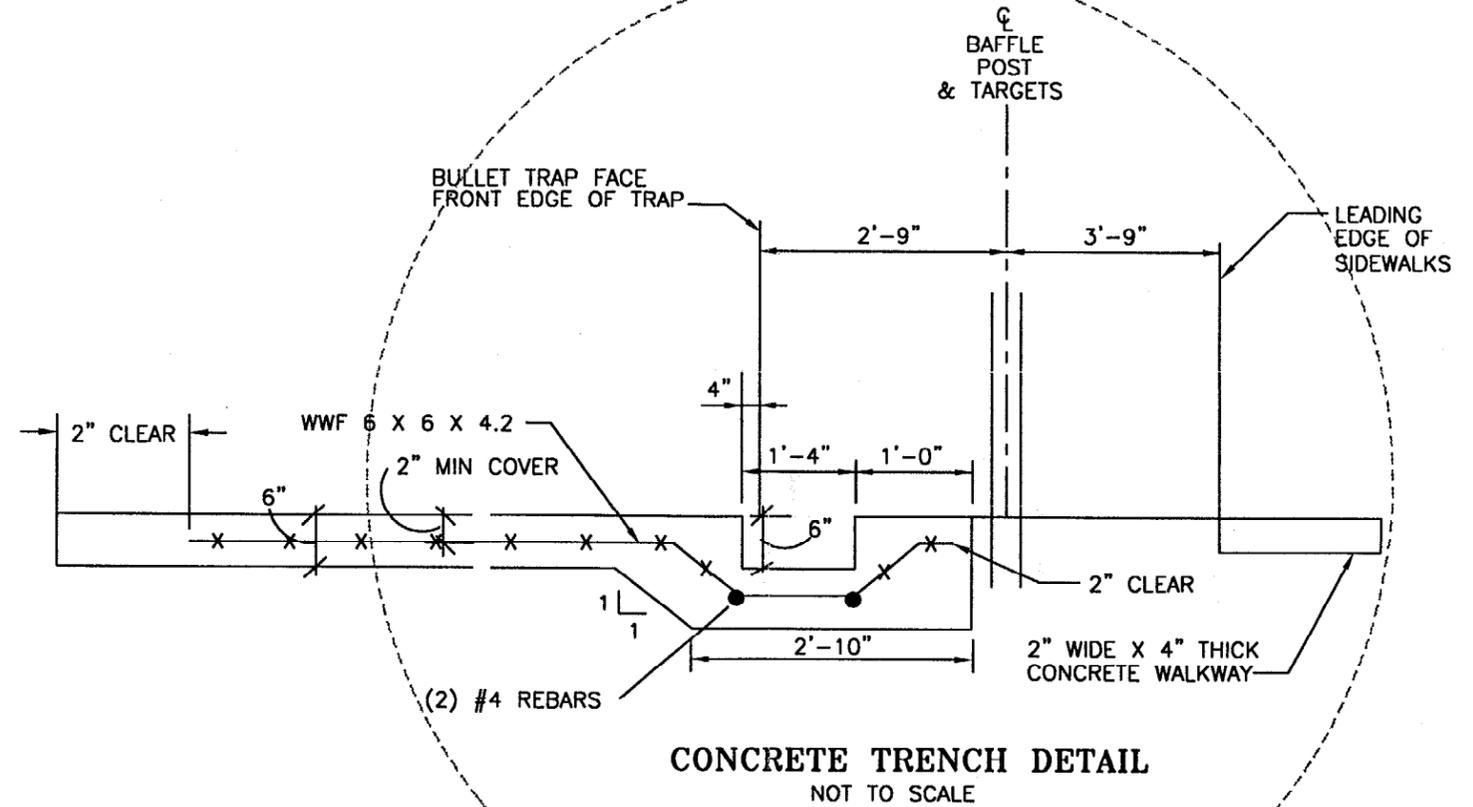
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
 NAVAL STATION NORFOLK, VIRGINIA
 CONTRACT NO. N62470-97-D-5000 DELIVERY ORDER 017 MOD 8
 OHM PROJECT NO. 920901 MARINE CORPS BASE, CAMP LEJEUNE, N.C.

FIGURE 1A
FIRE RANGE SR-11
SITE PLAN

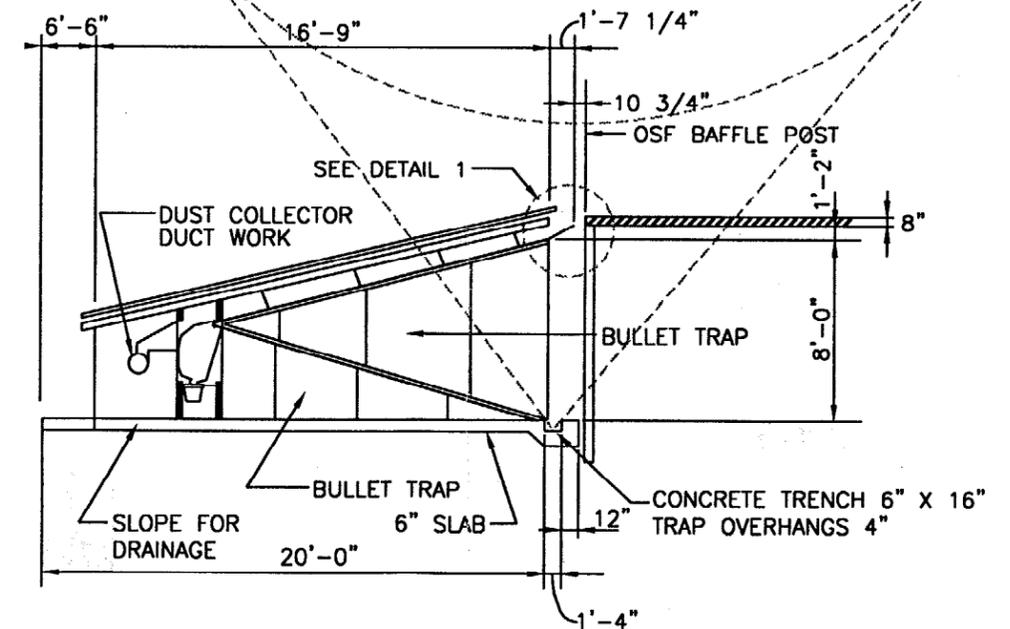
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 SHEET NUMBER: _____
 DATE: 10/6/00



DETAIL 1
NOT TO SCALE



CONCRETE TRENCH DETAIL
NOT TO SCALE



BULLET TRAP SECTION
NOT TO SCALE

J:\LANDVA\LEJUNE\920901\SR-11\WORKPLAN\SR-11-FIG3.DWG

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SUBMITTED: _____ PROJECT MANAGER DATE: _____
APPROVED: _____ SR PROJECT ENGINEER DATE: _____
APPROVED: _____ DEPT. MANAGER DATE: _____

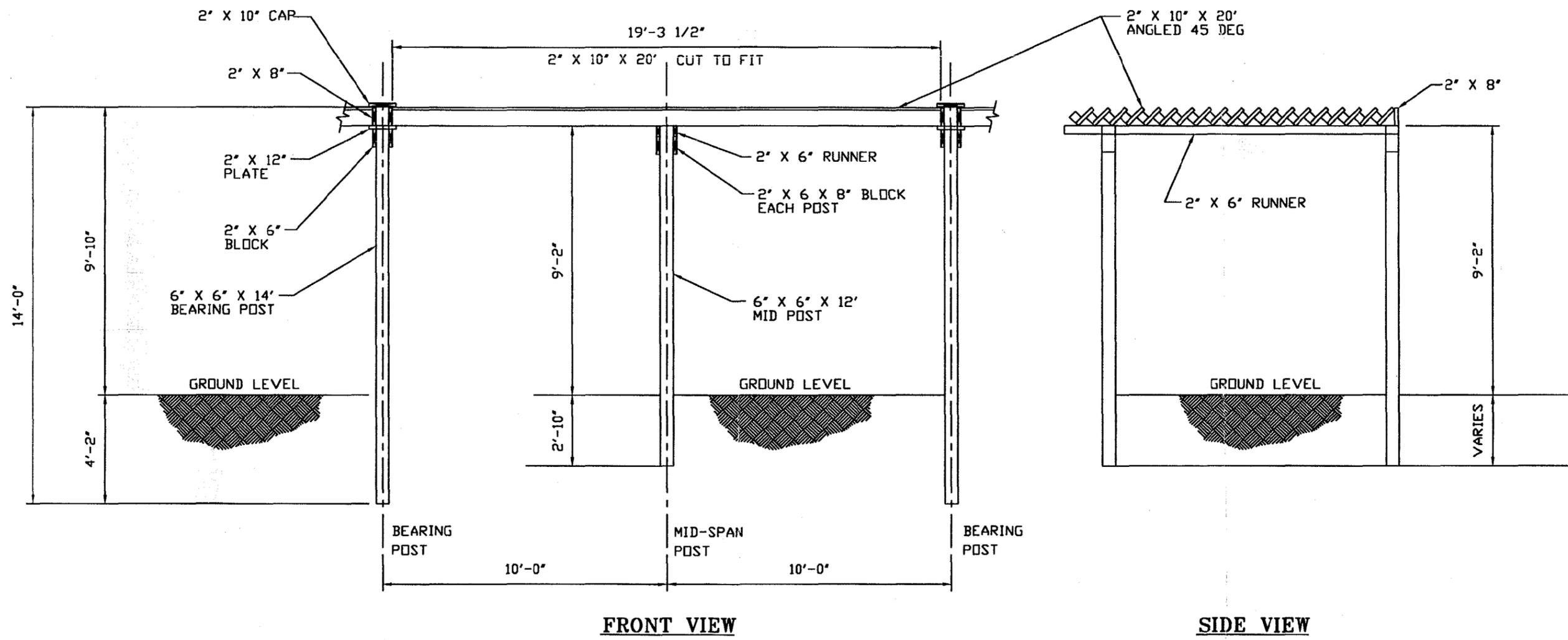
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REV.	DESCRIPTION	BY	DATE	APP.	

DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION

NAVAL STATION NORFOLK, VIRGINIA
CONTRACT NO. N62470-97-D-5000 DELIVERY ORDER 0017
OHM PROJECT NO. 920901 MARINE CORPS BASE, CAMP LEJUNE, N.C.

FIGURE 3
FIRE RANGE SR-11
BULLET TRAP SECTION

DRAWING NUMBER: _____
SHEET NUMBER: _____
DATE: 10/20/99



SCALE = 1/4" = 1'-0"

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SUBMITTED: _____ PROJECT MANAGER DATE: _____
 APPROVED: _____ SFC PROJECT ENGINEER DATE: _____
 APPROVED: _____ DEPT. MANAGER DATE: _____

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REV.	DESCRIPTION	BY	DATE	APP.	

DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND

ATLANTIC DIVISION

NAVAL STATION NORFOLK, VIRGINIA

CONTRACT NO. N62470-97-D-5000 DELIVERY ORDER 0017

OHM PROJECT NO. 920901 MARINE CORPS BASE, CAMP LEJEUNE, N.C.

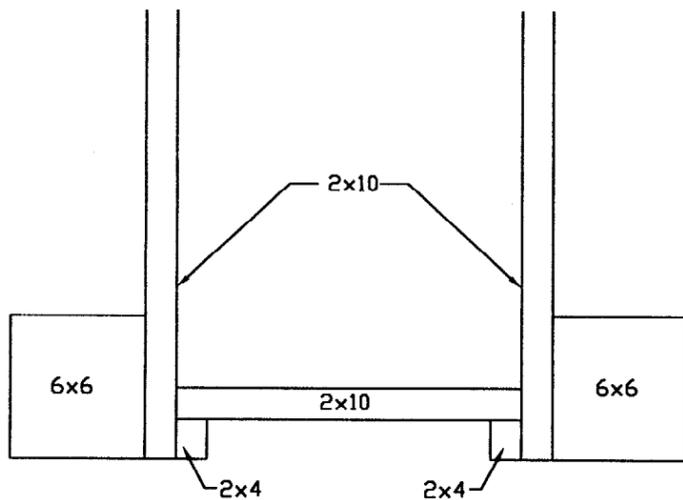
FIGURE 4

FIRE RANGE SR-11

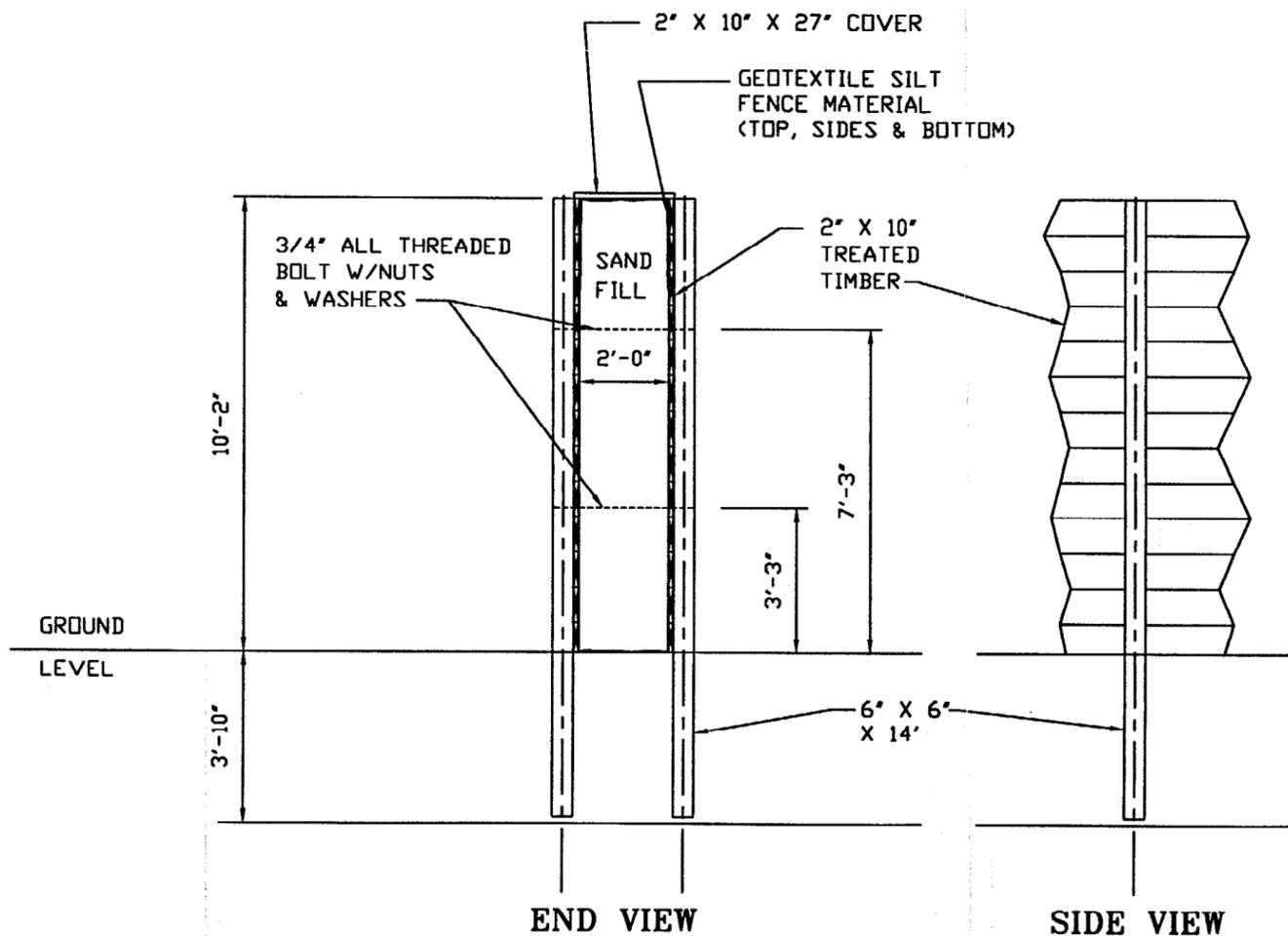
NEW BAFFLE DETAILS

FRONT AND SIDE VIEWS

DRAWING NUMBER:	
SHEET NUMBER:	
DATE:	10/20/99



TOP VIEW END OF WALL
(TYPICAL)
NTS



SCALE = 1/4" = 1'-0"

J:\ANTONIA\LEJEUNE\920901\SR-11\WORKPLAN\SR-11-FIG5

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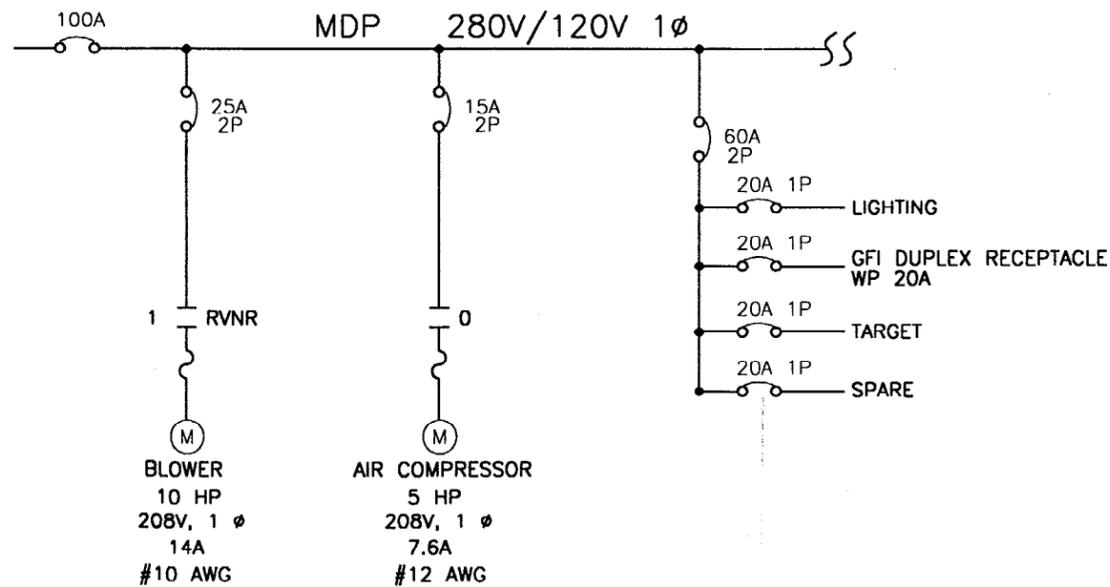
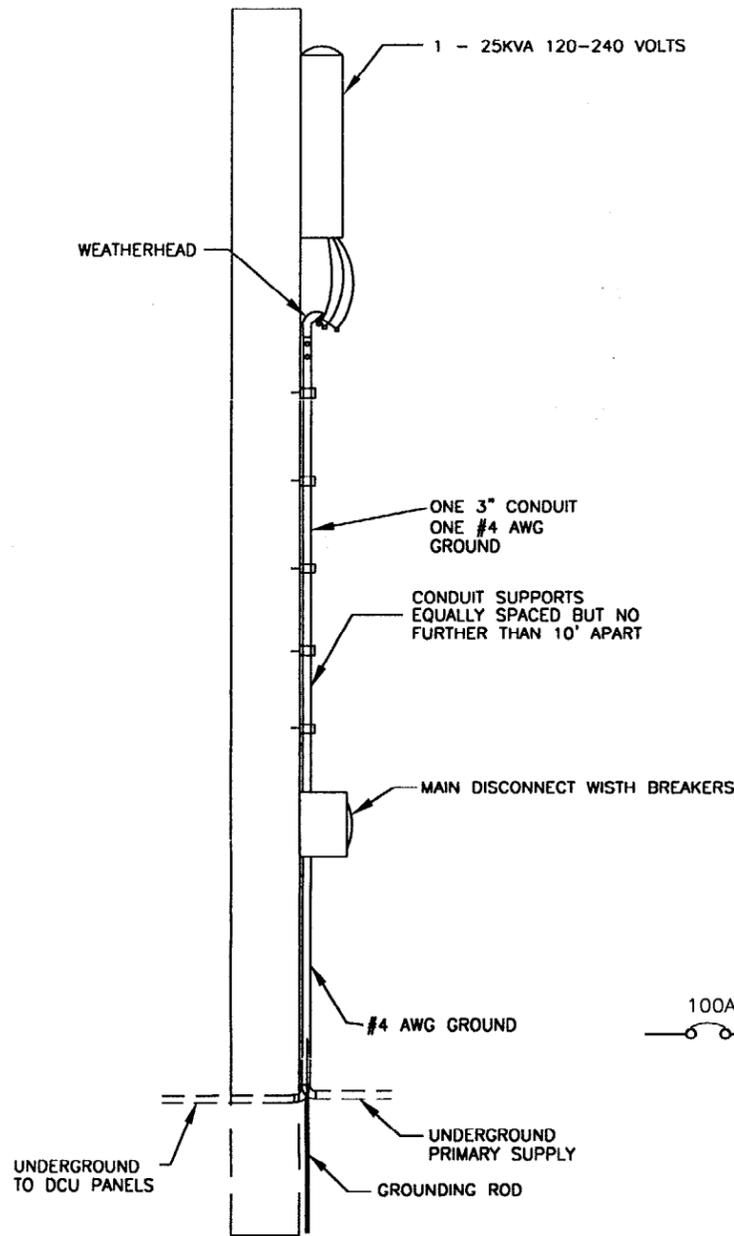
SUBMITTED: _____ DATE: _____
APPROVED: _____ SR. PROJECT ENGINEER DATE: _____
APPROVED: _____ DEPT. MANAGER DATE: _____

REVISIONS					
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2					

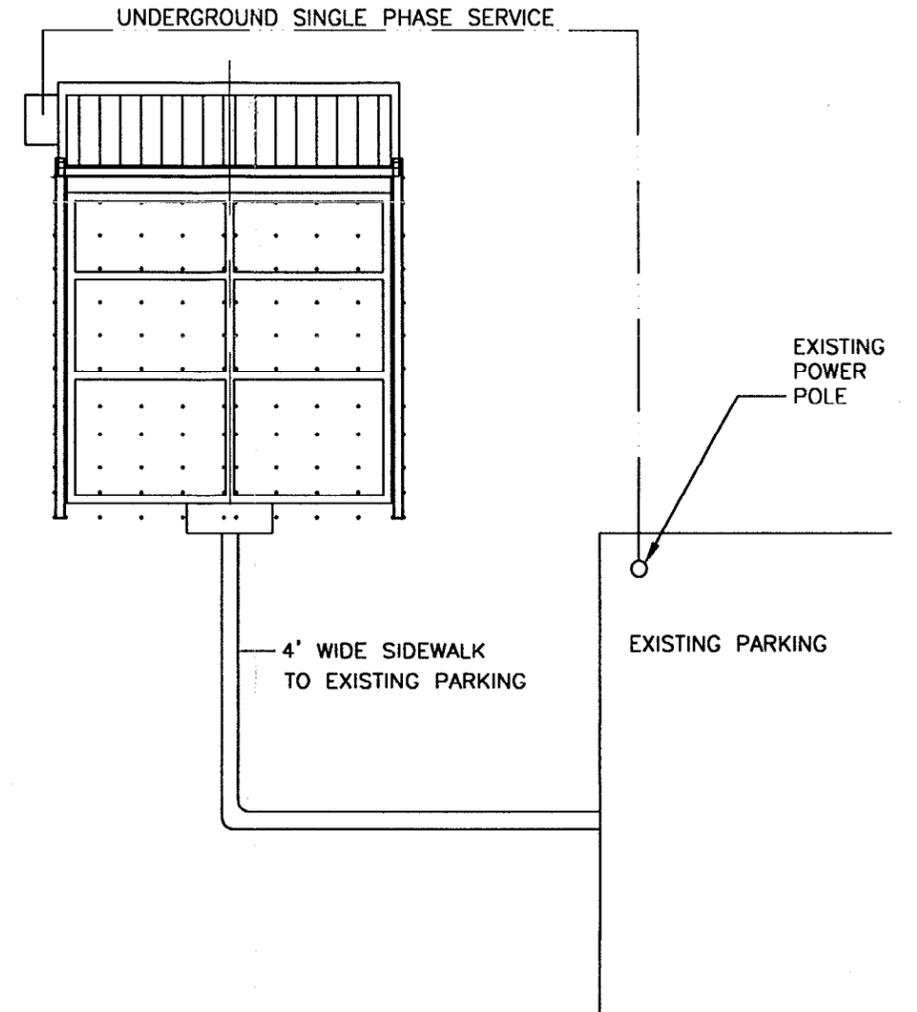
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NAVAL STATION NORFOLK, VIRGINIA
CONTRACT NO. N62470-97-D-5000 DELIVERY ORDER 0017
OHM PROJECT NO. 920901 MARINE CORPS BASE, CAMP LEJEUNE, N.C.

FIGURE 5
FIRE RANGE SR-11
WALLS DETAILS
FRONT AND SIDE VIEWS

DRAWING NUMBER:	
SHEET NUMBER:	
DATE:	10/20/99



ONE LINE DIAGRAM
N.T.S.



ELECTRICAL SITE PLAN
N.T.S.

J:\LANTANA\LEJEUNE\920901\SR-11\WORKPLAN\SR-11-FG7

OHM Remediation Services Corp.
Norcross, Georgia
A Subsidiary of OHM Corporation

SUBMITTED: _____ PROJECT MANAGER DATE: _____
APPROVED: _____ SR. PROJECT ENGINEER DATE: _____
APPROVED: _____ DEPT. MANAGER DATE: _____

REVISIONS				
REV.	DESCRIPTION	BY	DATE	APP.

DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND

ATLANTIC DIVISION

NAVAL STATION NORFOLK, VIRGINIA

CONTRACT NO. N62470-97-D-5000 DELIVERY ORDER 0017

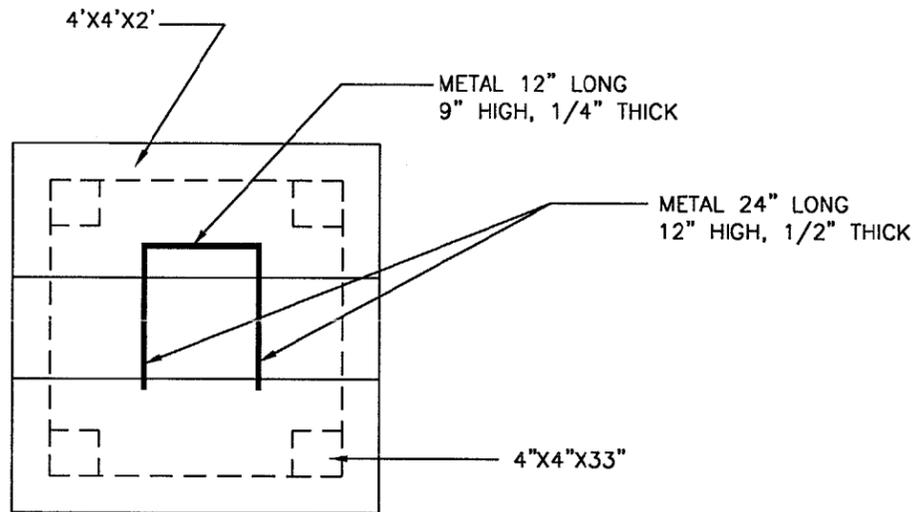
OHM PROJECT NO. 920901 MARINE CORPS BASE, CAMP LEJEUNE, N.C.

FIGURE 6

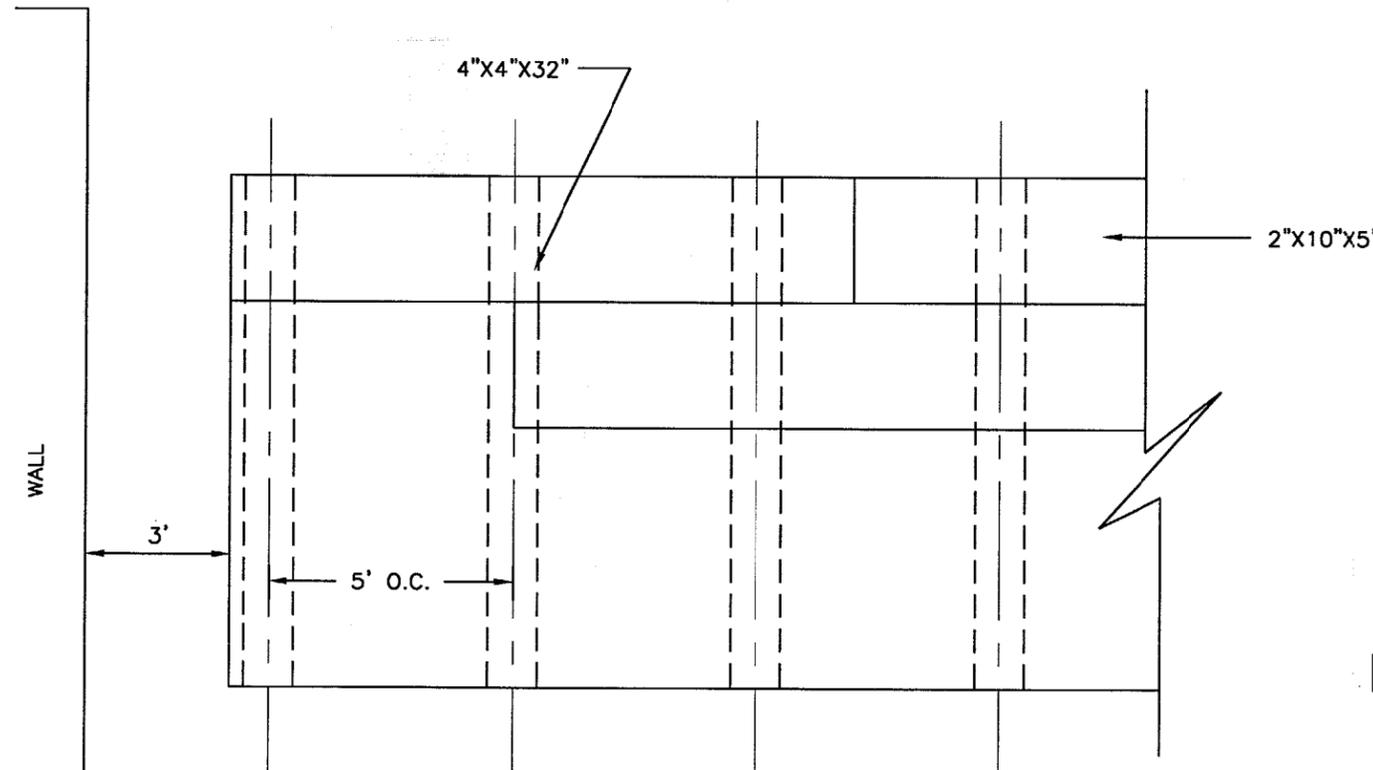
FIRE RANGE SR-11
ELECTRICAL PLAN
AND SIDEWALK PLAN

DRAWING NUMBER:
SHEET NUMBER:
DATE:

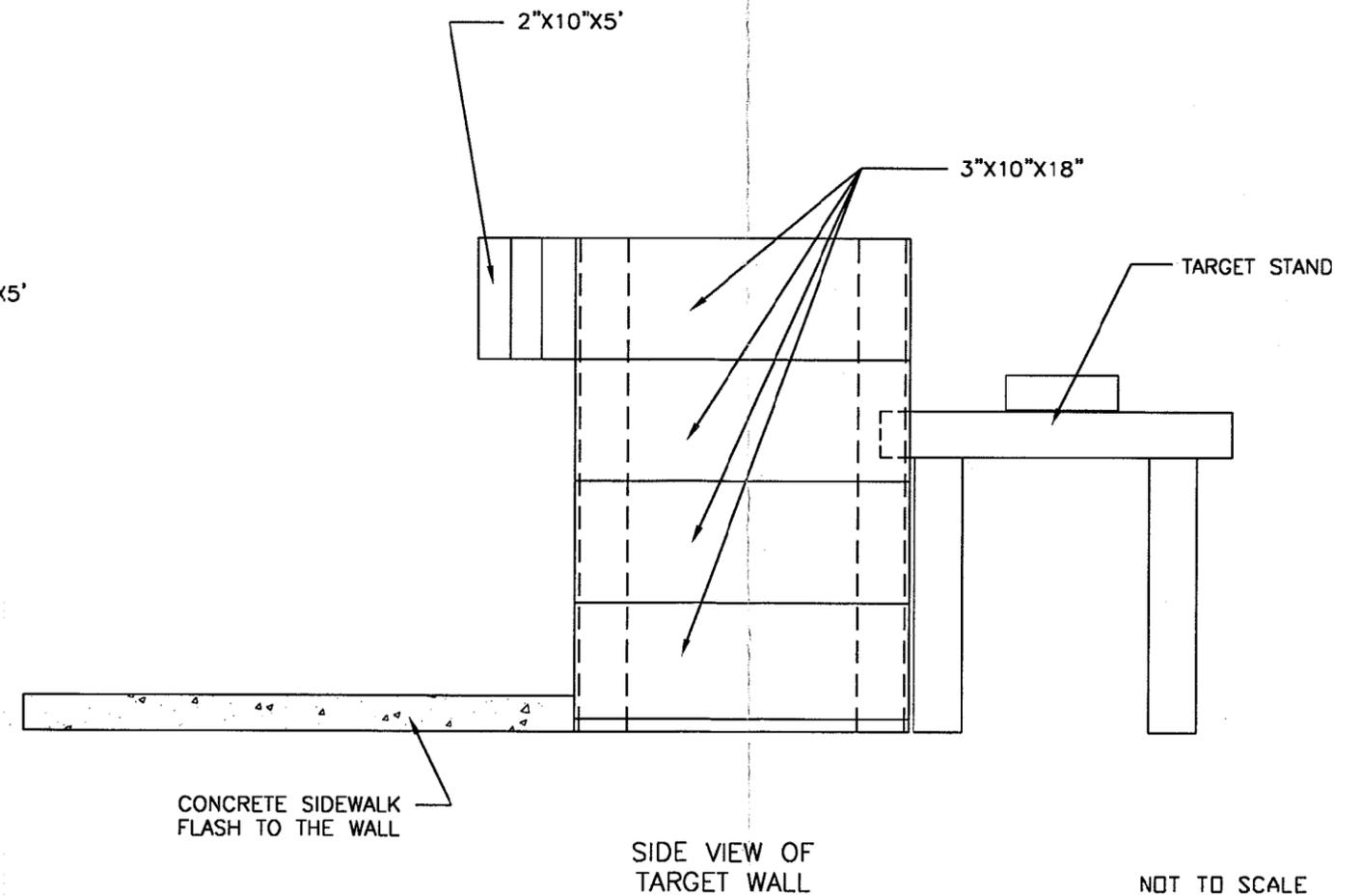
J:\LAN\ EUEUNE\920901\SR-11\WORK PLAN\SR-11-FIG9.DWG Fri, 29/Sep/00 10:42am or on
 Dimscale: 0 Lt scale: 1 Pstiscale: 1
 Softdesk Project: N:\SDSK\PROJ\<none>



TOP VIEW OF TARGET STAND



FRONT VIEW OF TARGET WALL



NOT TO SCALE

OHM Remediation Services Corp.
 Norcross, Georgia
 A Subsidiary of OHM Corporation

SUBMITTED: _____ PROJECT MANAGER DATE: _____
 APPROVED: _____ SR. PROJECT ENGINEER DATE: _____
 APPROVED: _____ DEPT. MANAGER DATE: _____

REVISIONS					
REV.	DESCRIPTION	BY	DATE	APP.	

DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
 NAVAL STATION NORFOLK, VIRGINIA
 CONTRACT NO. N62470-97-D-5000 DELIVERY ORDER 0017
 OHM PROJECT NO. 920901 MARINE CORPS BASE, CAMP LEJUNE, N.C.

FIGURE 7
FIRE RANGE SR-11
TARGET WALL DETAILS

DRAWING NUMBER:
 SHEET NUMBER:
 DATE:

APPENDIX A

SITE SPECIFIC HEALTH AND SAFETY PLAN

Site Specific Health & Safety Plan Amendment Documentation

Project Name: Action Target 14-Lane Bullet Trap **Project No.** 920901
Amendment No. 2 **Date:** September 26, 2000

Amendment Revises: No changes are required to the Basewide Health and Safety Plan

Reason for Amendment: OHM will be constructing a Action Target 14-lane bullet trap. No chemical hazards are present in the work area..

Amendment:

OHM will comply with all emergency procedures and Hazard Communication Procedures outlined in the Basewide Health and Safety Plan. OHM will comply with the personal protective equipment and will utilize the job safety analyses for the bullet trap construction outlined in the Site Specific Health and Safety Plan for Maintenance at Ranges I-1, B-12 and F-11 (OHM Project No. 920901).

Completed by: Alison Harwood
Alison Harwood, ASP

Approved by: Robert Brooks
Robert Brooks, CSP

APPENDIX B

CONSTRUCTION QUALITY CONTROL PLAN

**QUALITY CONTROL PLAN
FOR
FIRING RANGE SR-11
MARINE CORPS BASE
MCB CAMP LEJEUNE, NORTH CAROLINA**

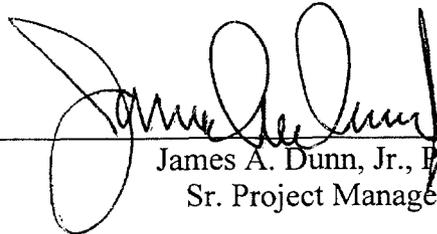
Prepared for:

Department of the Navy
Contract No. N62470-97-D-5000
Task Order 017

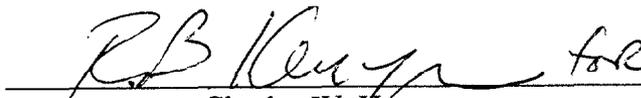
Atlantic Division
Naval Facilities Engineering Command
6506 Hampton Boulevard
Building A (South East Wing) 3rd Floor
Norfolk, VA 24311-6287

Prepared by:

OHM Remediation Services Corp
11560 Great Oaks Way
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Alpharetta, GA 30022-2424



James A. Dunn, Jr., P.E.
Sr. Project Manager



Charles W. Hunter
Program Q.C. Manager



Roland Moreau, P.E.
Program Manager

October 2000
OHM Project No. 920901

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1.0 STATEMENT OF QC PROGRAM

OHM Remediation Services Corp. (OHM), a subsidiary of IT Corporation, will provide and maintain an effective Quality Control (QC) Program. This program will be performed in accordance with the approved Program Quality Control Plan (PQCP) developed specifically to be responsive to the contract specification, Contract No. N62470-97-D-5000, Atlantic Division, Naval Facilities Engineering Command and to the Task Order (TO) 017 specification(s) made applicable to this project. OHM will perform the inspection and test required to ensure that materials, workmanship, and construction conform to drawings, specifications, and contract requirements.

Note to Employees

Quality Control should not be considered a person or an organization of personnel, but a concept to perform in such a manner that the end product of our efforts met established criterion, the customer's needs. The Quality Control individual or group cannot inspect quality into the final product, but only inspect and document the results of our efforts. The only person that can build quality into the product are the individuals performing the task of producing the end product.

It should be noted by all employees that the documentation requirements of OHM procedures, plans and the delivery order specifications are considered equally as important as the end product itself. When it is stated that the documentation will be approved prior to the start of work, this is exactly what is intended. To eliminate problems in this area requires careful planning and execution by everyone.

We would do well to remember that our livelihood depends on how well we satisfy our customer. To accomplish this requires teamwork and attention to detail by all employees and contractors.

2.0 QC ORGANIZATION AND RESPONSIBILITIES

2.1 ORGANIZATION

The QC organization is depicted in the Organizational Chart (Exhibit 2.1). Other positions are reflected to show organizational interface and lines of communication. Depending upon the scope, size and complexity of the project, the Project Superintendent may also fulfill the duties of the Project QC Manager when approved by the Navy.

2.2 QC MANAGERS

The Program QC Manager's resume is included in the Program QC Plan and the QC Manager's resume (delivery order specific) is included herein as Exhibit 2.2.

2.3 DUTIES, RESPONSIBILITIES AND AUTHORITIES

1. The **Program QC Manager** shall report to the Program Manager and shall be responsible for developing, maintaining, and enforcing the quality control program.
2. The **Site QC Manager** shall report to the Program QC Manager and shall be responsible for the management and implementation of the Program QC Plan and the delivery order specific QC Plan for both on-and off-site activities. Specific duties include: attend the Coordination and Mutual Understanding Meeting; conduct the scheduled QC meetings; perform the three phases of control; perform submittal reviews; perform submittal approval except for submittals designated for Contracting Officer approval; ensure tests are performed; and prepare QC certifications and QC documentation as required by this Plan. Except for managing and implementing the QC program, the QC Manager shall perform no other duties without the authorization of the Contracting Officer. The QC Manager shall also be responsible for delivering at a minimum, the following documentation to the Contracting Officer:
 - Combined Contractor Production Report/Contractor Quality Control Report, original and one copy, by 10:00 a.m. the next working day after each day that work is performed.
 - QC meeting minutes three copies within two calendar days of the meeting.
 - Rework items list, three copies at the end of each month.
 - Completion Certification attesting that "the work has been completed, inspected, tested, and is in compliance with the contract."

3. The site QC Manager is expected to attend the daily site safety meetings and abide by all site rules and regulations.

2.4 APPOINTMENT LETTERS

The appointment letter for the site QC Manager is included as Exhibit 2.3. The appointment letter for the Program QC Manager can be found in the Program QC Plan.

3.0 SUMITTALS

3.1 REVIEWING, APPROVING, AND MANAGING SUBMITTALS

3.1.1 CONTRACTOR'S RESPONSIBILITY

The following responsibilities are those of the contractor and not the QC organization. They are included only for the purpose of providing an understanding of the contractor's responsibility. While the QC organization is expected to assist the contractor in fulfillment of their responsibilities, no part of these responsibilities shall be assumed by the QC organization without the expressed written permission of the Contracting Officer.

1. Coordinate preparation and processing of submittals with performance of work so that work will not be delayed by submittal processing. Allow for potential requirements to resubmit.
2. Except as specified otherwise, allow a review period, beginning with receipt by the approving authority, that includes at least 15 working days for submittals for QC Manager approval and 20 working days for submittals requiring Contracting Officer approval. The period of review for submittals with Contracting Officer approval begins when the Government receives the submittal from the QC organization. The period of review for each resubmittal is the same as for the initial submittal.
3. Determine and verify field measurements, materials, field construction criteria; review each submittal; check and coordinate each submittal with requirements of the work and contract documents.
4. Transmit submittals to the QC organization in orderly sequence, in accordance with the submittal register, and to prevent delays in the work, delays to the Government, or delays to separate contractors.
5. Correct and resubmit submittals as directed by the approving authority. Direct specific attention, in writing or on resubmitted submittals, to revisions not requested by the approving authority on previous submissions.

6. Furnish additional copies of submittals when requested by the Contracting Officer, to a maximum limit of 20 copies.
7. Complete work that must be accomplished as a basis of a submittal in time to allow the submittal to occur as scheduled.
8. Ensure no work has begun until submittals for that work have been returned as “approved” or “approved as noted” except to the extent that a portion of the work must be accomplished as a basis of the submittal.

- **Format of Submittals**

Transmittal Form. Transmit each submittal, except sample installations and sample panels, to the office of the approving authority utilizing transmittal forms standard for the project. The transmittal form shall identify the Contractor, indicate the date of the submittal, and include information prescribed by the transmittal form and required in the paragraph entitled “Identifying Submittals”. Process transmittal forms to record actions regarding sample panels and sample installations. Transmittal forms for submittals of sample panels and sample installations shall record any actions and locations of the samples.

Identifying Submittals. Identifying submittals, except sample panel and sample installation, submittals shall be identified with the following information permanently adhered to or noted on each separate component of each submittal and noted on the transmittal form. Mark each copy of each identically, with the following:

1. Project title and location.
2. Construction contract number and delivery order number.
3. The section and paragraph number of the section for which the submittal is required.
4. The Submittal Description (SD) number (see Exhibit 3.1) of each component of the submittal.
5. If a re-submittal, add an alphabetic suffix to the submittal description, for example, SD-10A, to indicate the resubmission.

6. The name, address, and telephone number of the subcontractor, supplier, manufacturer, and any other second tier contractor associated with the submittal.
7. Product identification and location in project.

- **Format of Product Data**

1. Present product data submittals for each section as a complete, bound volume. Include a table of contents listing page and catalog item numbers for product data.
2. Indicate, by prominent notation, each product that is being submitted, indicate the specification section number, and paragraph number to which it pertains.
3. Supplement product data with material prepared for the project to satisfy submittal requirements for which product data does not exist. Identify this material as developed specifically for the project.

- **Format of Shop Drawings**

1. Shop drawings shall be not less than 8 1/2 by 11 inches nor more than 30 by 42 inches.
2. Present 8 1/2 by 11 inches sized shop drawings as a part of the bound volume for the submittals required by the section. Present larger drawings in the sets.
3. Include on each drawing the drawing title, number, date, and revision numbers and dates, in addition to the information required in the paragraph entitled "Identifying Submittals."
4. Dimension drawings, except diagrams and schematic drawings; prepare drawings demonstrating interface with other trades to scale. Identify materials and products for work shown.

- **Format of Administrative Submittals**

1. When the submittal includes a document that is to be used in the project or become a part of the project record, other than as a submittal, do not apply the Contractor's approval stamp to the document, but to a separate sheet accompanying the document.
2. Operation and Maintenance Manual Data: Submit in accordance with the section entitled "Operation and Maintenance Data" of the individual delivery order.

- **Number of Copies of Product Data**

1. Submit six (6) copies of submittals of product data requiring review and approval only by the QC organization and seven (7) copies of product data requiring review and approval by the Contracting Officer.

- **Number of Copies of Shop Drawings**

1. For shop drawings presented on sheets larger than 8 1/2 by 14 inches, submit seven (7) prints of each shop drawing prepared for this project.
2. For shop drawings presented on sheets 8 1/2 by 14 inches or less, conform to the quality requirements for the product data.

- **Number of Copies of Administrative Submittals**

1. Unless otherwise specified, submit administrative submittals which are 8 1/2 by 14 inches or smaller in size in the quantity required for product data.
2. Unless otherwise specified, submit administrative submittals larger than 8 1/2 by 14 inches in size in the quantities required for shop drawings.

3.1.2 QC Organization Responsibilities

The Quality Control (QC) organization shall be responsible for reviewing and certifying that submittals are in compliance with contract requirements. The approving authority on submittals is the QC Manager unless submission to the Contracting Officer is specified for the specific submittal. The specific QC responsibilities for submittals are as follows:

1. Note the date on which the submittal was received from the contractor on each submittal for which the Site QC Manager is the approving authority.
2. Determine and verify field measurements, materials, field construction criteria; review each submittal; and check and coordinate each submittal with requirements of the work and contract documents.
3. Review submittals for conformance with project design concepts and compliance with the contract documents.
4. Act on submittals, determining the appropriate action based on the review of the submittal.
 - When the QC Manager is the approving authority, take the appropriate action on the submittal from the paragraph of "Possible Actions."

- When the Contracting Officer is the approving authority or when a variation has been proposed, forward the submittal to the Contracting Officer with the certifying statement or return the submittal marked "Not Reviewed" or "Revise and Resubmit" as appropriate.

5. Ensure that the material is clearly legible.

6. Stamp each sheet of each submittal with the appropriate stamp, except that data submitted in bound volume or on one sheet printed on two sides may be stamped on the front of the first sheet only. When agreed to by the Contracting Officer, a single cover sheet containing the required certification wording may be utilized instead of the above. The stamp or cover sheet shall contain the following wording:

- When the approval authority is the Contracting Officer, the QC organization will certify submittals forwarded to the Contracting Officer with the following certifying statement:

I hereby certify that the (equipment) (material) (article) shown and marked in this submittal is that proposed to be incorporated into Contract Number N62470-97D-5000, is in compliance with the Contract drawings and specification, can be installed in the allocated spaces, and is submitted for Government approval. Government approval of proposed variation, if any, is recommended.

Certified by Submittal Reviewer _____, Date _____

Certified by QC Manager _____, Date _____

- When approving authority is the QC Manager, the QC Manager will use the following approval statement when returning submittals to the Contractor as "Approved" or "Approved as Noted":

I hereby certify that the (equipment) (material) (article) shown and marked in this submittal is that proposed to be incorporated into Contract Number N62470-97-D-5000, is in compliance with the Contract drawings and specification, can be installed in the allocated spaces, and is _____ approved for use, _____ approved for use subject to Government approval of proposed variation.

Certified by Submittal Reviewer _____, Date _____

Approved by QC Manager _____, Date _____

7. Sign the certifying statement or approval statement. The signatures shall be in original ink. Stamped signatures are not acceptable.

8. Update the submittal register as submittal actions occur and maintain the submittal register at the project site until final acceptance by the Contracting Officer.
9. Retain a copy of approved submittals at the project site, including the contractor's copy of approved samples.
10. When the approving authority is the QC Manager, forward two copies of each approved submittal, except "Samples", where only one set is required, to the Contracting Officer.

- **Actions Possible**

Submittals returned to the contractor shall contain one of the following notations:

1. **"Not Reviewed"** shall indicate the submittal has been previously reviewed and approved, is not required as a submittal, does not have evidence of being reviewed and approved by the Contractor, or is not complete. A submittal marked "Not Reviewed" shall be returned with explanation of the reason it is not reviewed. Returned submittals deemed to lack review by the Contractor or to be incomplete shall be resubmitted with appropriate action, coordination, or change.
2. Submittals marked **"Approved"** or **"Approved as Submitted"** authorize the Contractor to proceed with the work covered.
3. Submittals marked **"Approved as Noted"** authorize the Contractor to proceed with the work as noted provided the Contractor takes no exception to the notations.
4. Submittals marked **"Revise and Resubmit"** or **"Disapproved"** indicates the submittal is incomplete or does not comply with the design concept or the requirements of the Contract documents and shall be resubmitted with appropriate changes.

3.2 PERSONNEL AUTHORIZED TO REVIEW AND CERTIFY SUBMITTALS

In addition to the QC Manager, the personnel listed in Exhibit 3.2 are authorized to review and certify submittals as indicated. Any additional personnel required to review and certify submittals will be submitted in writing to the Contracting Officer for approval.

3.3 SUBMITTAL REGISTER

The submittal register is shown in Exhibit 3.3. The submittal register shall be maintained as follows:

1. Column (a): List each specification section in which a submittal is required.

2. Column (b): List each submittal description (SD No. and type, e.g., SD-04, Drawings) required in each specification section. Follow each submittal description with the list of material of products to be addressed in each submittal description.
3. Column (c): List one principle paragraph in the specification section where a material or product is specified. This listing is only to facilitate submittal reviews. Do not consider entries in column (c) as limiting project requirements; do not consider that a blank must be filled in by the Contractor or the Government.
4. Column (d): Indicates approving authority for each submittal. A "G" indicates approval by the Contracting Officer; a blank indicates approval by the Site QC Manager.
5. Column (e): Indicates for submittals to be approved by Contracting Officer, specific reviewers other than the QC organization. This column may or may not be filled out on the copy supplied by the Government.

Columns (f) through (o) will be completed by the QC organization as follows:

6. Column (f): As submittals are processed, list a consecutive number assigned by the Contractor for each group of submittals. Place this same number in the appropriate block on the "Submittal Transmittal Form". For a resubmission, repeat transmittal control number of the original submittal with a suffix; e.g., No. "100B" is second resubmission of material originally transmitted under No. "100".
7. Column (g): List dates scheduled for approving authority to receive submittals. These dates are the scheduled beginnings of submittal review period. The Contractor proposes these dates and the Contracting Officer approves them to establish the approved submittal register.
8. Columns (h) and (i): Use to record Contractor's review when forwarding submittals to the QC organization.
9. Column (j): Enter date QC organization receives submittal from contractor.
10. Columns (k) and (l): If approving authority is Contracting Officer, enter date QC organization forwards certified submittal to Contracting Officer.
11. Columns (m) and (n): If approving authority is Contracting Officer, enter the Government action and date of action as shown on returned submittal. If approving authority is QC Manager, enter QC action and date of action.
12. Column (o): Enter date QC organization returns submittal to Contractor, regardless of who is approving authority. If QC Manager is approving authority, it is also the date the information is forwarded to the Government.

4.0 REWORK

4.1 REWORK DOCUMENTATION REQUIREMENTS

The QC Manager shall maintain a list of work that does not comply with the contract, identifying what items need to be reworked, the date the item was originally discovered, and the date the item was corrected. There is no requirement to report a rework item that is corrected the same day it is discovered. Attach a copy of the Rework Items List (Exhibit 6.1) to the last daily Contractor Quality Control Report of each month. The Contractor shall also be responsible for including on this list, items needing rework including those identified by the Contracting Officer.

5.0 MEETING

5.1 COORDINATION AND MUTUAL UNDERSTANDING MEETING

After submission of the QC Plan and prior to start of construction, meet with the Contracting Officer to discuss the QC program required for this contract. The purpose of this meeting is to develop a mutual understanding of the QC details, including forms to be used; administration of on-site and off-site work, and coordination of the Contractor's management, production and the QC Manager's duties with the Contracting Officer. A sample agenda is included as Exhibit 7.1. As a minimum, the Contractor's personnel required to attend shall include the Project Manager, Project Superintendent and QC Manager. Minutes of the meeting shall be prepared by the QC Manager and signed by both the Contractor and the Contracting Officer.

5.2 QC MEETINGS

After the start of construction, the QC Manager shall conduct QC meetings once every two weeks or as required scheduled by the Contracting Officer or delivery order. The meetings will be held at the work site, or where specified, with the project superintendent and the foreman responsible for the upcoming work in attendance. The QC Manager shall take steps as may be necessary to prevent the QC Meeting from becoming a production meeting. Often it is convenient to hold a production meeting following the QC meeting, however the minutes of these meetings shall be maintained separately. The QC Manager shall notify the Contracting Officer at least 48 hours in advance of each meeting. The QC Manager shall prepare the minutes of the meeting and provide a copy to the Contracting Officer within two working days after the meeting. As a minimum, the following shall be accomplished at each meeting:

1. Review the minutes of the previous meeting.
2. Review the schedule and the status of work.
 - Work or testing accomplished since last meeting.
 - Rework items identified since last meeting.
 - Rework items completed since last meeting.
3. Review the status of submittals.
 - Submittals reviewed and approved since last meeting.
 - Submittals required in the near future.

4. Review the work to be accomplished in the next two weeks and documentation required. Schedule the three phases of control:
 - Establish completion dates for rework items.
 - Identify Preparatory Phases required.
 - Identify Initial Phases required.
 - Identify Follow-up Phases required.
 - Identify documentation required.
5. Resolve QC and production problems.
6. Address items that may require revising the QC plan such as or changes in procedures.
7. In addition to the normal project distribution, which includes the Contracting Officer, a copy shall be forwarded to the C.O.T.R., LANTDIV, the Program QC Manager, and the OHM Program Manager.

6.0 THREE PHASES OF CONTROL

The QC Manager shall perform the three phases of control to ensure that work complies with contract requirements. The three phases of control shall adequately cover both on-site and off-site work and shall include the Inspection Plan activities (see Exhibit 8.0) of each definable feature of work as listed in Exhibit 9.1.

6.1 PREPARATORY PHASE

Notify the Contracting Officer at least two working days in advance of each preparatory phase. Conduct the preparatory phase meeting with the superintendent and the foreman responsible for the definable feature of work. Document the results of the preparatory phase actions in the daily Contractor Quality Control Report (Exhibit 8.1). Perform the following prior to beginning work on each definable feature of work:

- Review each paragraph of the applicable specification sections.
- Review the contract drawings.
- Verify that appropriate shop drawings and submittals for materials and equipment have been submitted and approved. Verify receipt of approved factory test results, when required.
- Review the testing plan and ensure that provisions have been made to provide the required QC testing.
- Examine the work area to ensure that the required preliminary work has been completed.
- Examine the required materials, equipment and sample work to ensure that they are on hand and conform to the approved shop drawings and submitted data.
- Review the safety plan and appropriate activity hazard analysis to ensure that applicable safety requirements are met, and that required Material Safety Data Sheets (MSDS) are submitted.
- Discuss construction methods.

6.2 INITIAL PHASE

Notify the Contracting Officer at least two working days in advance of each initial phase meeting. When crews are ready to start work on a definable feature of work, conduct the initial phase meeting with the personnel responsible for that definable feature of work. Observe the initial segment of the definable feature of work to ensure that the work complies with contract requirements. Document the results of the initial phase in the daily Contractor Quality Control Report. Repeat the initial phase for changes in personnel assigned

responsibility for the work, or when acceptable levels of specified quality are not being met. Perform the following for each definable feature of work:

- Establish the quality of workmanship required.
- Resolve conflicts.
- Review the Safety Plan and the appropriate activity hazard analysis to ensure that applicable safety requirements are met.
- Ensure that testing is performed.

6.3 FOLLOW-UP PHASE

Perform the following for ongoing work daily, or more frequently as necessary, until the completion of each definable feature of work and document in the daily Contractor Quality Control Report:

- Ensure the work is in compliance with contract requirements.
- Maintain the quality of workmanship required.
- Ensure that rework items are being corrected.

6.4 NOTIFICATION OF THREE PHASES OF CONTROL FOR OFF-SITE WORK

Notify the Contracting Officer at least two weeks prior to the start of the preparatory and initial phases.

6.5 RECEIPT INSPECTION

The QC organization shall conduct Receipt Inspection of materials and equipment procured in accordance with the delivery order specification. In addition to the submittal documentation, which will be reviewed and approved as required under Section 3.0, Submittals, the following attributes will be inspected for each order/shipment as applicable:

- Material is same as specified by the Delivery Order Specification
- Quantity as specified by the procurement document
- Dimensions as required by the procurement document
- Shipping Damage
- Physical Damage
- Identification and Marking
- Protective Covers and Seals
- Cleanliness

- Workmanship

Materials and equipment found to be unacceptable at receipt inspection shall be rejected and "RED Tagged" (see Exhibit 8.5) until correction or replacement can be made. This material/equipment shall not be used until the corrective action results in satisfactory re-inspection.

The results of the receipt inspection, by attribute, will be included in the Contractor Quality Control Report (Exhibit 8.1) for the date of inspection.

6.6 DOCUMENTATION

Reports are required for each day that work is performed and for every seven consecutive calendar days of no work and on the last day of no work periods. Account for each calendar day throughout the life of the contract. The reporting of work shall be identified by terminology consistent with the construction schedule. Contractor Quality Control Reports are to be prepared, signed and dated by the QC Manager and shall contain the following information:

- Identify the control phase and the definable feature of work.
- Results of the preparatory phase meetings held, including the location of the definable feature of work and a list of personnel present at the meeting. Indicate in the report that for this definable feature of work, the drawings and specifications have been reviewed, submittals have been approved, materials comply with approved submittals, materials are stored properly, preliminary work was done correctly, and work methods and schedules have been discussed.
- Results of the initial phase meetings held, including the location of the definable features of work and a list of personnel present at the meeting. Indicate in the report that for this definable feature of work, the preliminary work was done correctly, the workmanship is satisfactory, work is in compliance with the contract, and the required testing has been performed and include a list of who performed the tests.
- Results of the follow-up phase inspections held, including the location of the definable features of work. Indicate in the report that for this definable feature of work that the work complies with the contract as approved and that required testing has been performed and include a list of who performed the tests.
- Results of the three phases of control for off-site work, if applicable, including actions taken.
- List the rework items identified, but not corrected by close of business.
- As rework items are corrected, provide a revised rework items list along with the corrective action taken.

- Include in the remarks section of the report pertinent information including directions received, quality control problem areas, deviations from the QC Plan, construction deficiencies encountered, QC meetings held, acknowledgment that as-built drawings have been updated, corrective direction given by the QC Manager and corrective action taken by the contractor.
- When the QC Manager believes that an attribute list type inspection is more appropriate for the inspection of specific definable features of work, he/she may use any type of form desired for this purpose. However, this or any other form utilized shall become an attachment to the daily Contractor Quality Control Report and shall not preclude any other requirements of the contract or this plan.

7.0 *DEFINABLE FEATURES OF WORK*

7.1 *DEFINABLE FEATURES OF WORK*

Exhibit 9.1 contains a list of definable features of work for this delivery order. A definable feature of work is a task that is separate and distinct from other tasks and requires separate control requirements. As a minimum, each division of the specification is considered a definable feature of work. However, at times there may be more than one definable feature of work in each division of the specification or a definable feature of work may include several specification sections. The site QC Manager shall discuss the list with the Contracting Officer for possible expansion of the list.

8.0 EXHIBITS

The following forms are acceptable for providing the information required by this QC Plan and the contract, except as otherwise directed by the Contracting Officer. While use of these specific forms are not required by the contract, any other format used shall contain the same information and be approved by the Program QC Manager. Exhibit 10.1 includes additional forms used by the contractor. These forms and their use are not addressed in this QC Plan.

NOTE: Exhibit numbers refer to the paragraph from which the Exhibit was first addressed.

8.1 INDEX OF EXHIBITS

- Exhibit 2.1 Organizational Chart
- Exhibit 2.2 Project QC Manager's Resume
- Exhibit 2.3 Project QC Manager Appointment Letter
- Exhibit 3.1 Submittal Descriptions (SD)
- Exhibit 3.2 List of Personnel Authorized to Review and Certify Submittals
- Exhibit 3.3 Submittal Register
- Exhibit 5.1 Testing Plan and Log
- Exhibit 6.1 Rework Items List
- Exhibit 7.1 Sample agenda for the Coordination and Mutual Understanding Meeting
- Exhibit 8.0 Inspection Schedule
- Exhibit 8.1 Contractor Quality Control Report
- Exhibit 8.5 Reject Tag (RED Tagged)
- Exhibit 9.1 Definable Features of Work
- Exhibit 10.1a Contractor Production Report
- Exhibit 10.1b LANTDIV RAC Field Forms
- Exhibit 10.1c Request For Information (RFI)
- Exhibit 10.1d Variance Request (VR)
- Exhibit 10.1e Quality Control Plan Review

Exhibit 2.1

QC Organization Chart
OHM Remediation Services Corp.

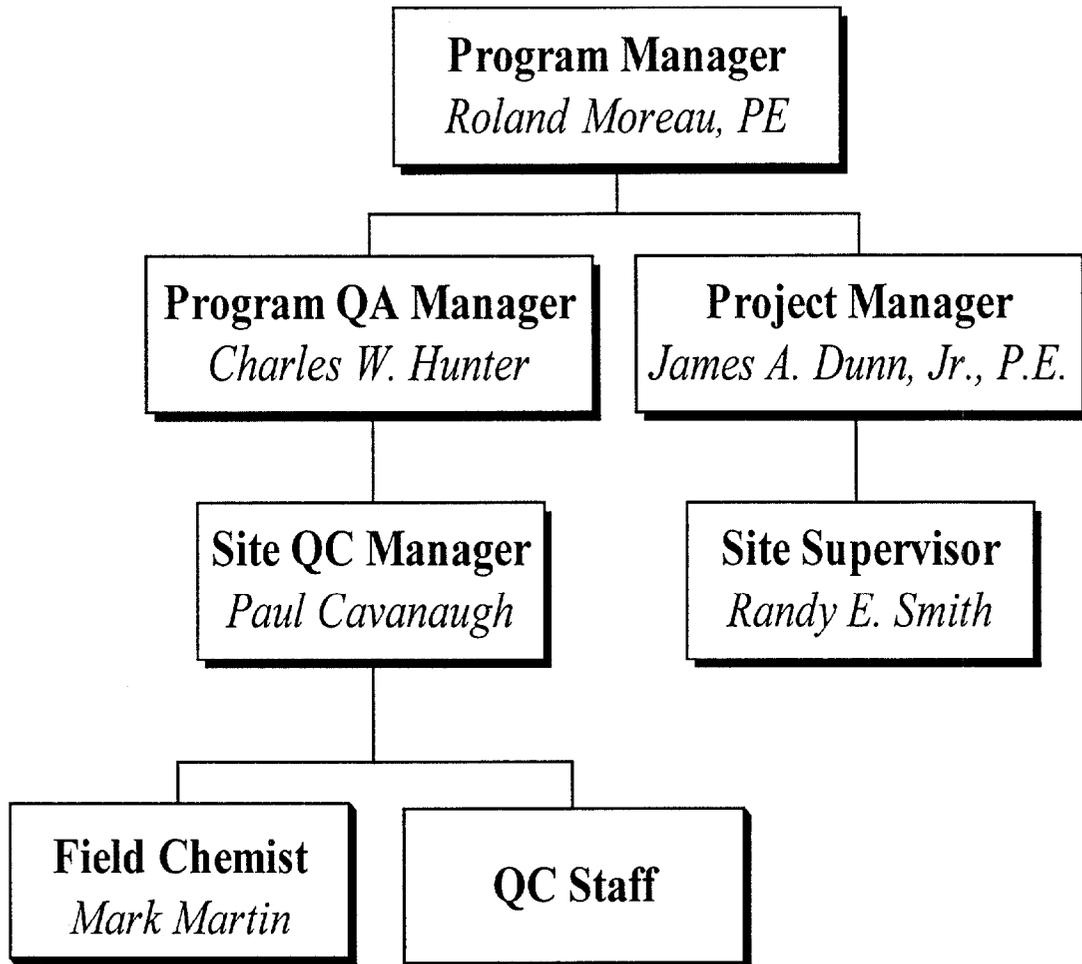


Exhibit 2.2

1.4 Site QC Manager/Representative Resume



QA/QC SCIENTIST

PAUL M. CAVANAUGH

Mr. Cavanaugh has eight years experience in environmental sampling, with emphasis on biological and chemical sampling. Included in this experience is tank and drum sampling, labpacking and analysis, and development of reports related to sampling procedures. In his capacity as Field Sampling Technician, he is responsible for sampling, sample tracking and coordination of analysis for drum recovery, wastewater treatment, PCB cutting/bulking, hazardous waste disposal, soil excavation, facility decontamination, derailments, drum repacking, pesticide cleanup. He is also experienced in explosive/reactive handling and disposal, and compressed gas cylinder identification, handling and neutralization.

Experience and Background

Mr. Cavanaugh has participated in all phases of environmental investigation and remediation, including sampling, field analysis, field quality control and transportation and disposal. He has gained a thorough working knowledge of drum recovery and bulking of acids, cyanides, flammables, organics, peroxides and oxidizers. His current position is serving as the Site QC Manager encompasses groundwater treatment systems, monitoring well, drum sampling, sludge, soil, concrete chip asbestos and other media sampling. He is additionally responsible for the utilization of Photoionization Detectors (PID) and Lower Explosive Limit (LEL) meters, and generating reports associated with sampling activities, including sampling and analysis plans and closure reports. Mr. Cavanaugh has experience with transportation and disposal, including manifesting, profiling, and associated waste tracking records. Examples of his OHM experience include:

- Staff Scientist, under LANTDIV RAC, at the 24-acre Old Landfill site, Quantico, Virginia. The project involved the removal of 2,000 cy of PCB-contaminated soils; installation of a landfill cap; and regrading and closure of the landfill. Served as Technical Lead for the development and installation of the bioremediation cell. Mr. Cavanaugh assisted the Senior Project Manager with the collection and interpretation of field data to verify levels of contamination and ensured adequate performance of the bioremediation cell. The project received two 100% award fees.



- Staff Scientist, under LANTDIV RAC, at the Camp Allen Landfill, Norfolk, Virginia. This 45-acre site contained soil and groundwater contaminated with a variety of chlorinated and petroleum organic compounds. Mr. Cavanaugh provided valuable backup services to other crew members with continuous monitoring of ambient air quality utilizing PID, LEL, OVA, CGI, monitox, dosimeter, and personal and stationary air monitors. He also assisted in the various soil and groundwater sampling activities required during the remedial investigation stage. Project received a 100% award fee.
- Staff Scientist, under LANTDIV RAC, at Bolling Air Force Base, Washington D.C. Mr. Cavanaugh assisted the Senior Project Manager in developing a work plan and installing/operating a free product recovery system for the removal of #2 and #6 fuel oil. Between three and five feet of floating product was found in monitoring wells adjacent to USTs located in the vicinity of Building #18 of the base's Heat Plant. Approximately 600 gallons of free product was recovered and 15 tons of contaminated drilling cuttings were prepared for transportation and disposal. He assisted in the monitoring and analysis activities required during all stages of the project. Project received a 100% award fee.
- Senior Technologist, under an U.S. Army Environmental Center Total Environment Program Support (TEPS) contract, at the Sudbury Training Annex, 2,700 acre site in Sudbury, Massachusetts. Contaminants of concern during this \$6.9 million RI/FS were VOCs, metals, pesticides and dioxins. Mr. Cavanaugh collected over 200 groundwater, surface water/sediment, surface soil and subsurface soil samples. He also participated in an ecological risk assessment and a fish study at Puffer Road on the Annex.
- Staff Scientist, under LANTDIV RAC, at the US Naval Transmitting Station, Driver, Virginia. The crew was contracted to remove and dispose assorted surface debris, including PCB-contaminated concrete and 12 PCB transformers. Mr. Cavanaugh conducted a comprehensive physical site inspection prior to removal. The project received an overall rating of 95%, and was completed on time and within budget.
- Staff Scientist, under LANTDIV RAC, at the Yorktown Naval Weapons Station Fleet and Industrial Supply Center, Defense Fuel Supply Point Fields Annex remediation, Yorktown, Virginia. Mr. Cavanaugh collected and



interpreted filed dates to verify the levels of contamination and evaluated opportunities for enhancement of removal operations. OHM and the Navy's CLEAN contractor were closely integrated in the redesign (conceptualization) of an innovative technique for recovery of 1.5 million gallons of Navy Supply Fuel Oil (NFS) from groundwater. The physical characteristics of NFS necessitated the introduction of heat to achieve sufficient mobility for its recovery from soils. During the evaluation of alternate technologies, it was determined that the application of heat through enclosed conduits would sufficiently distribute heat and would mitigate environmental and engineering concerns. The proposed 40-gpm treatment system includes oil/water separation; particulate removal; carbon adsorption; water cooling for off-site discharge and a biofouling suppressant system. The project received a 100% award fee.

- Senior Technologist, under a USEPA Region II ERCS contract, at the White Chemical Superfund site in Newark, New Jersey. During this project, OHM characterized and repacked 9,000 drums, drained approximately 150 ASTs and USTs, and labpacked approximately 10,000 small containers. Level A, B, and C PPE was required. The contaminants consisted of air and water reactive materials as well as toxic, explosive, and corrosive hazardous chemicals. Mr. Cavanaugh was responsible for an eight person sampling and tracking crew. He participated in the development of a first-time computerized drum bulking system.
- QC Coordinator at the Drake Chemical USEPA Region III Superfund site, Lock Haven, Pennsylvania. Mr. Cavanaugh assisted during the startup operations of the incinerator. His duties included generating USACE daily reports associated with plant operations during the trial burn phase, and ensured all phases of contract compliance relating to engineering and technical controls. He was responsible for analytical interpretation and T&D of all wastes generated on site.

His additional experience includes the following:

- Experience performing density tests for soil compaction with Troxler nuclear density gauges.
- Performed elevation surveys with laser levels and transits for excavation and backfilling activities.



- Extensive experience in data management and interpretation on a variety of projects. Project experience includes facility decontamination, tank and drum removal, bioremediation, thermal incineration, soil excavation, water treatment, lab packing, and emergency response.
- Air monitoring experience involving the use of a PID, LEL, OVA, CGI, monitox, dosimeter, and personal and stationary air monitors.
- Familiar with the use of many field analytical methods, including immunoassay field screening, soil fertility testing, PCB screening, compatibility analysis, and bulk testing.
- Performed hydrogeological testing such as slug testing and aquifer drawdown tests. Familiar with well sampling, equipment, including peristaltic pumps, submersible water level indicators, scavengers, water quality screening, and Stephens recorders.

Education

B.S., Biology, Northland College; 1988

Additional Training

OSHA 40-hour Training (29 CFR 1910.120)

OSHA 8-hour Refresher Training Certification; 1998

Licensed Pesticide Operator

Fifty (50) Hour Sampling Course; 1989

EOD Training; 1995

NRC Training Course; 1996

USACE, Construction Quality Management Course for Contractors; 1997

Registrations/Certifications

Troxler Certified, 1996

Exhibit 2.3

Sample Document

September 15, 2000

Paul Cavanaugh
OHM Remediation Services Corp.
Lot 203 Holcomb Blvd.
P O Box 8116
Camp Lejeune, NC 28542

Re: Site QC Manager
Construction of SR-11, MCB Camp Lejeune
Contract N62470-97-D-5000
Task Order 017

Dear Paul:

This letter will serve as your appointment as the Site Control Manager on the referenced project and will also clarify your duties and authority in this position. In this position, you will be authorized to use available resources to satisfy all applicable requirements of the Program and Delivery Order Quality Control Plans.

This authorization specifically gives you the authority to direct removal and replacement or correction of nonconforming materials or work and stop work authority when continuation would be unsafe to personnel, harmful to the environment, or result in a significant degradation of quality.

You will be expected to work closely with the Project Manger, Site Supervisor and other project personnel, but you will not be directly responsible to anyone but myself for resolution of quality issues when working in the capacity of Quality Control Manager.

Sincerely,

Peter Hunter
Program QC Manager
LANTDIV RAC Program

Exhibit 3.1 (cont.)
Submittal Subscriptions

Exhibit 3.1

Submittal Descriptions

SD-01, Data

Submittals that provide calculations, descriptions, or other documentation regarding the work.

SD-02, Manufacturer's Catalog Data

Data composed of catalog cuts, brochures, circulars, specifications and product data, printed information in sufficient detail and scope to verify compliance with requirements of the contract documents. A type of data.

SD-03, Manufacturer's Standard Color Charts

Preprinted illustrations displaying choices of color and finish for a material or product. A type of product data.

SD-04, Drawings

Submittals that graphically show relationship of various components of the work, schematic diagrams of systems detail of fabrications, layout of particular elements, connections, and other relational aspects of the work. A type of shop drawings.

SD-05, Design Data

Design calculations, mix design, analyses, or other data written in nature and pertaining to a part of the work. A type of shop drawings.

SD-06, Instructions

Preprinted material describing installation of a product, system, or material, including special notices and Material Safety Data Sheets, if any, concerning impedances, hazards, and safety precautions. A type of product data.

SD-07, Schedules

A tabular list of data or tubular list including location, features, or other pertinent information regarding products, materials, equipment, or components to be used in the work. A type of shop drawing.

SD-08, Statements

A document, required of the contractor, or through the contractor by way of a supplier, installer, manufacturer, or other lower tier contractor, the purpose of which is to further the quality or orderly progression of a portion of the work by documenting procedures, acceptability of method or personnel, qualifications, or other verification of quality. A type of shop drawing.

SD-09, Reports

Reports of inspection. Each report shall be properly identified.

SD-10, Test Reports

A test report signed by an authorized official of the vendor for the Bullet system. The report must state that the system has performed within the requirements. The report must state that the test was performed in accordance with the test requirements; state the test results; and indicate whether the

Exhibit 3.1 (cont.)
Submittal Subscriptions

material, product, or system has passed or failed the test. Testing must have been within three years of the date of Contract award. A type of product data.

SD-11, Factory Test Reports

A written report by the Bullet Trap vendor/manufacturer that includes the findings of a test required to be performed by the Contractor on an actual portion of the work or prototype prepared for this project before it is shipped to the job site. The report must be signed by an authorized official of a testing laboratory and must state the test was performed in accordance with the test requirements; state the test results; and indicate whether the material, product or system has passed or failed the test. A type of shop drawing.

SD-12, Field Test Results

A written report that includes the findings of a test made at the job site, in the vicinity of the job site, or on a sample taken from the job site, on a portion of the work, during or after installation.

SD-13, Certificates

Statements signed by responsible officials of a manufacturer or a product, system or material attesting that the product, system, or material meet specified requirements. The statements must be dated after the award of this contract, name the project, and the list the specific requirements that it is intended to address. A type of shop drawing.

SD-14, Samples

Samples, including both fabricated and unfabricated physical examples of materials, products, and units of work as complete units or as portions of units of work. A type of sample.

SD-15, Color Selection Samples

Samples of the available choice of colors, textures, and finishes of a product or material, presented over substrates identical in texture to that proposed for the work. A type of sample.

SD-16, Sample Panels

An assembly constructed at the product site in a location acceptable to the Contracting Officer and using materials and methods to be employed in the work: completely finished; maintained during construction; and removed at the conclusion of the work or when authorized by the Contracting officer. A type of sample.

SD-17, Sample Installations

A portion of an assembly or material constructed where directed and, if approved, retained as a part of the work. A type of sample.

SD-18, Records

Documentation to ensure compliance with an administrative requirement or to establish an administrative mechanism. A type of administrative and close-out submittal.

SD-19, Operation and Maintenance Manuals

Data intended to be incorporated in an operations and maintenance manual. A type of administrative and close-out submittal.

Exhibit 3.2

List of Personnel Authorized to Review and Certify Submittals

Specification Section	Submittal Type	Authorized Personnel
Scope of work per Task 0017	All	Randy Smith Jim Dunn Ronald Kenyon Raymond Boyd Paul Cavanaugh Project Engineer

**Exhibit 3.3
Submittal Register**

Construction of SR-11, MCB Camp Lejeune, North Carolina

Spec. No.	SD No. and Type of Submittal Material or Product	Spec. Para. No.	Approval by CO	Gov. or A/E Reviewer	Trans. Control No.	Planned Sub. Date	Action Code	Date of Action	Date Forwarded to Appro. Auth/Date Received from Contr.	Date Forwarded to Other Reviewer	Date Received from Other Reviewer	Action Code	Date of Action	Mailed to Contro./Recd. From Appro. Auth.	Remarks
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	p
	SD-01 Reports:														
	Work Plan					9/00									
	Health and Safety Plan					WP									
	QC Plan					WP									
	Environmental Protection Plan					WP									
	SD-11 Closeout Submittals:														
	As built records					CR									
	Status reports					CR									
	QC meeting minutes					CR									
	Contractor production report					CR									
	QC report					CR									
	Rework items list					CR									
	Permits					CR									
	Contractor closeout report					CR									
						CR									
	SD-18 Records	1.2.2													
	Shipment manifest					CR									
	Delivery /disposal Certificates					CR									
						CR									
						CR									
	SD-12 Field test reports														
	Fill and backfill test					CR									
	Density test					CR									
	SD-03 Product data														
						CR									
						CR									

CR - Closeout Report
WP - Work Plan

A - Approved
AN - Approved as noted

SAMPLE DOCUMENT

**COORDINATION AND MUTUAL UNDERSTANDING MEETING AGENDA
FOR
TASK ORDER No. 017
CONSTRUCTION OF SR-11
MCB CAMP LEJEUNE, NORTH CAROLINA
_____, 2000**

The purpose of this meeting is to develop a mutual understanding of the QC details, including forms to be used; administration of on-site and off-site work, and coordination of the Contractors's management, production and QC Manager's duties with the Contracting Officer.

The QC program consists of a QC Organization, QC Manager, a QC Plan for this Delivery Order, this Coordination and Mutual Understanding Meeting, QC meetings, three phases of control, submittal review, submittal approval except for submittals designated for Contracting Officer approval, testing, and QC certifications and documentation necessary to provide materials, equipment, workmanship, fabrication, construction and operations which comply with requirements of this contract.

Project QC Manager duties (contract para. 6.6.1)

- Attend this meeting
- Conduct QC meetings
- Perform the three phases of control
- Perform submittal review
- Perform submittal approval
- Ensure testing is performed
- Prepare QC certifications and documentation
- Perform other activities when approved by the Contracting Officer

Submittal Reviewers Duties and Qualifications (contract para. 6.7)

- Provide submittal reviewers qualified in the disciplines being reviewed other than the QC Manager, to review and certify that the submittals meet the requirements of the contract.

QC Plan (contract para. 6.8)

- (as specified therein)

Coordination and Mutual Understanding Meeting (contract para. 6.9)

- (see purpose above)

QC meetings (contract para. 6.10)

Exhibit 7.1 (cont.)

- The QC Manager shall conduct QC meetings once every two weeks or as otherwise directed by the Contracting Officer.
- Meeting minutes to be prepared by the QC Manager in accordance with the contract outline and a copy provided to the Contracting Officer within two working days of the meeting.
- A copy will be distributed to the Program QC Manager

Three phases of control (contract para. 6.11)

- Preparatory Phase meeting
- Initial Phase Meeting
- Follow-up Phase Inspection

Submittal review and approval (contract para. 6.12 and Part 7.0, "Submittals")

- Review
- Approval
- Certification
- Submittal Register

QC certifications (contract para. 6.14)

- Contractor Quality Control Report Certification
- Invoice Certification
- Completion Certification

Documentation (contra para.6.15)

- Contractor Production Report
- Contractor Quality Control Report
- Rework Items List
- As-Built Records
- Report Forms
- Contractor Production Report
- Contractor Quality Control Report
- Rework Items List

Exhibit 8.0
Inspection Schedule
Construction of SR-11
MCB Camp Lejeune, North Carolina
Task Order No. 033

Spec Section	Activity *	Preparatory Report No.	Initial Report No.	Follow-Up Report Nos.**

CONTRACTOR QUALITY CONTROL REPORT

DATE

(ATTACH ADDITIONAL SHEETS IF NECESSARY)

PHASE	Y - YES, N - NO, SEE REMARKS, BLANK - NOT APPLICABLE	IDENTIFY DEFINABLE FEATURE OF WORK LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	THE PLANS AND SPECS HAVE BEEN REVIEWED	
	THE SUBMITTALS HAVE BEEN APPROVED	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	
	MATERIALS ARE STORED PROPERLY	
	PRELIMINARY WORK WAS DONE CORRECTLY	
	TESTING PLAN HAS BEEN REVIEWED	
	WORK METHOD AND SCHEDULE DISCUSSED	
INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	
	SAMPLE HAS BEEN PREPARED/APPROVED	
	WORKMANSHIP IS SATISFACTORY	
	TEST RESULTS ARE ACCEPTABLE	
	WORK IS IN COMPLIANCE WITH THE CONTRACT	
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED IN INITIAL PHASE	
REWORK ITEMS IDENTIFIED (NOT CORRECTED BY CLOSE OF BUSINESS)		REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)
REMARKS		
<p>On behalf of the contractor, I certify that this report is complete and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.</p> <p style="text-align: right;"> _____ AUTHORIZED QC MANAGER AT SITE DATE </p>		

GOVERNMENT QUALITY ASSURANCE REPORT

DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

AUTHORIZED QC MANAGER AT SITE

DATE

CONTRACTOR QUALITY CONTROL REPORT CONTINUATION SHEET (ATTACH ADDITIONAL SHEETS IF NECESSARY)			DATE
CONTRACT NO.			REPORT NO.
PREPARATORY	Y - YES, N - NO, SEE REMARKS, BLANK - NOT APPLICABLE	IDENTIFY DEFINABLE FEATURE OF WORK LOCATION AND LIST PERSONNEL PRESENT	
	THE PLANS AND SPECS HAVE BEEN REVIEWED		
	THE SUBMITTALS HAVE BEEN APPROVED		
	MATERIALS COMPLY WITH APPROVED SUBMITTALS		
	MATERIALS ARE STORED PROPERLY		
	PRELIMINARY WORK WAS DONE CORRECTLY		
	TESTING PLAN HAS BEEN REVIEWED		
	WORK METHOD AND SCHEDULE DISCUSSED		
INITIAL	Y - YES, N - NO, SEE REMARKS, BLANK - NOT APPLICABLE	IDENTIFY DEFINABLE FEATURE OF WORK LOCATION AND LIST PERSONNEL PRESENT	
	PRELIMINARY WORK WAS DONE CORRECTLY		TESTING PERFORMED & WHO PERFORMED TEST
	SAMPLE HAS BEEN PREPARED/APPROVED		
	WORKMANSHIP IS SATISFACTORY		
	TEST RESULTS ARE ACCEPTABLE		
	WORK IS IN COMPLIANCE WITH THE CONTRACT		

CONTRACTOR QUALITY CONTROL REPORT CONTINUATION SHEET

(ATTACH ADDITIONAL SHEETS IF NECESSARY)

DATE

CONTRACT NO.

REPORT NO.

PHASE

Y - YES, N - NO, SEE REMARKS.
BLANK - NOT APPLICABLE

IDENTIFY DEFINABLE FEATURE OF WORK LOCATION AND LIST PERSONNEL PRESENT

WORK COUPLES WITH
CONTRACT AS APPROVED
IN INITIAL PHASETESTING PERFORMED &
WHO PERFORMED TEST

FOLLOW-UP

Exhibit 9.1

**Definable Features of Work
Construction of Firing Range SR-11
MCB Camp Lejeune, North Carolina**

Item No.	Definable Features of Work:
1	Site Preparation
2	Target Wall demolition
3	Concrete Foundation for Bullet Trap
4	Sidewalk construction
5	Installation of Bullet Trap
6	Power Distribution for Bullet Trap
7	Transport and disposal of debris
8	Site Restoration
9	One year Operation and Maintenance work for Bullet Trap

LANTDIV RAC FIELD FORM

EXHIBIT 10.1b

Contract No. _____
 Task Order No. _____
 Title/Location _____

DISTRIBUTION:

_____ CONTRACTING OFFICER/SPECIALIST (TD'S)
 _____ ROICC
 _____ RPM
 _____ COTR:
 OTHER: _____

 FILE: _____

Form No. _____		Date: _____		Respond *NLT: _____	
Initiated By: <input type="checkbox"/> Navy		<input type="checkbox"/> Contractor		<input type="checkbox"/> Other	
<input type="checkbox"/> Technical Direction		<input type="checkbox"/> RFI		<input type="checkbox"/> Variance Request	
				<input type="checkbox"/> Overtime Authorization	
Description (Include location & attachments if necessary): _____ _____ _____ _____					
Attachment <input type="checkbox"/>					
Drawing Ref: _____			Spec. Ref. _____		
Explanation/Recommendation: _____ _____ _____ _____					
<input type="checkbox"/> Scope Increase <input type="checkbox"/> Scope Decrease <input type="checkbox"/> No Change in Scope			Cost impact, fee excluded: <input type="checkbox"/> None <input type="checkbox"/> Cost Increase <input type="checkbox"/> Cost Decrease Rough Order of Magnitude: \$ _____		
WBS Codes Affected: New <input type="checkbox"/> Existing <input type="checkbox"/>			Schedule Impact (assume response by *NLT date) <input type="checkbox"/> None <input type="checkbox"/> Increase in Time <input type="checkbox"/> Decrease in Time Approximate Calendar Days: _____		
Contractor: _____		3.1		Signature _____	
Site Representative: _____				Date _____	
Project Manager: _____					
Reviewer Comments, incl RFI Response: _____ _____ _____					
Navy: _____		3.1		Signature _____	
ROICC: _____				Date _____	
RPM/EIC: _____					
<input type="checkbox"/> Task Order Modification to Follow (contract action) <input type="checkbox"/> No Task Order Modification Required					

777016-A1



OHM Remediation Services Corp.

Exhibit 10.1c

Routing: Contr. Adm.
Site Supv.
Proj. Acct.
CSE
QC
Job File

Project Name: _____
Delivery Order: _____
Contract Purchase Order N62470-97-D-5000
OHM Project Order _____

REQUEST FOR INFORMATION (RFI)

Date of Request: _____ Suspense Date: _____ VR No: _____

SITUATION/CONDITION Dwg Ref: _____ Spec Sec: _____
REQUIRING CLARIFICATION Site Location _____

DESCRIPTION:

DATE RECEIVED BY:
Certifying Engineer: _____ Tech. Rep: _____ ROICC: _____
RESPONSE:

Note: This is a clarification and does not create additional work that could be considered as a change to the contract drawings and /or specification.

RPM: _____ Date: _____
ROICC/NTR: _____ Date: _____

Exhibit 10.1e
 Quality Control Plan Review
 Construction of SR-11
 MCB Camp Lejeune, North Carolina
 Task Order No. 017

By signing this document, I am stating that I have read and understand the site Quality Control Plan for this Delivery Order/Project.
 Any questions or comments should be addressed to either the Program or site QC Manager.

<i>Name (Print)</i>	<i>Signature</i>	<i>Title</i>	<i>Company</i>	<i>Date</i>
Charles Hunter		QC Manager	OHM/IT	
James Dunn, Jr.		Sr. Project Manager	OHM/IT	
Ronald Kenyon		Technical Manager	OHM/IT	
Randy Smith		Project Superintendent	OHM/IT	
Raymond Boyd		Sr. Project Engineer	OHM/IT	
TBD		Project General Foreman	OHM/IT	
Mark Martin		Site Chemist	OHM/IT	
Paul Cavanaugh		Site QC Manager	OHM/IT	