



FINAL

FORMER MARINE CORPS AIR STATION (MCAS) El Toro

98th Restoration Advisory Board (RAB) Meeting Minutes

Meeting Location: Irvine City Hall, Conference Training Center, Irvine California

Meeting Date/Time: 27 January 2010/6:42pm - 7:47 pm

Minutes Prepared by: Tony Guiang, CDM Federal Programs Corporation (CDM)

Attachment:

Presentation Slides: "Installation Restoration Program (IRP) Sites 3 and 5 Update."

WELCOME/INTRODUCTIONS/AGENDA REVIEW:

Mr. Jim Callian (Base Realignment and Closure [BRAC] Environmental Coordinator [BEC] and Navy RAB Co-Chair) welcomed everyone and introduced the RAB community Co-Chair, Mr. Bob Woodings. He asked Ms. Marcia Rudolph (RAB member, Subcommittee Chair) to lead the Pledge of Allegiance. Self-introductions by all those in attendance followed. A total of 22 attendees were present.

ANNOUNCEMENTS/ REVIEW OF ACTION ITEMS

Mr. Callian began the meeting with the following announcements and discussion:

- Mr. Callian requested attendees to sign the sign-in sheets, noting the Navy's requirement to document community involvement and participation.
- Mr. Callian announced that last month the Navy submitted the IRP Site 1, Adjacent Property Action Memorandum (AM) and associated Time Critical Removal Action (TCRA) Work Plan for Agency and RAB review. The Navy received comments and is in the process of incorporating the responses to comments (RTCs). He mentioned this topic was discussed by Ms. Rudolph during her last subcommittee meeting update. He noted the Navy would be finalizing the document which will be available for public review in the Administrative Record (AR) File in early February and field work at the site is scheduled to start soon after.
- Mr. Callian reviewed the RAB meeting agenda; no changes to the agenda were suggested by the RAB.
- Mr. Callian presented a series of slides listing dates and times for the upcoming quarterly RAB meetings. In addition, he presented slides listing key Navy and Regulatory Agency contacts, RAB points of contact, Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) AR File and Information Repository (IR) locations and hours, and environmental and reuse/redevelopment websites. Mr. Callian reiterated the RAB's focus was on environmental issues and not reuse.

Mr. Callian noted the only action items from the last RAB was Ms. Rudolph's request for an IRP Site 3 and 5 Update, which he noted would be the topic for presentation in this evening's RAB. He asked if there were any comments or questions. There were no comments or questions from the RAB.

APPROVAL OF 09 SEPTEMBER 2009 RAB MEETING MINUTES

Mr. Callian opened the floor for discussion, questions, or corrections to the 09 September 2009 RAB meeting minutes. Mr. Woodings noted he had read the meeting minutes and had no comments or questions. No comments, corrections, or questions were made and the 09 September 2009 meeting minutes were approved.

SUBCOMMITTEE MEETING REPORT

Ms. Rudolph began her subcommittee meeting report by thanking the regulators (Department of Toxic Substances Control [DTSC] and the United States Environmental Protection Agency [U.S. EPA]) for their participation in the RAB. She noted topics discussed in the subcommittee meeting included the Radium 226 (Ra 226) present at IRP Site 3, cleanup of perchlorate at MCAS El Toro sites, and the determination that Anomaly Area 3 (AA 3) was in fact an anomaly area.

Ms. Rudolph discussed the upcoming 100th RAB meeting scheduled to take place in August 2010 and asked the RAB to commemorate the occasion by inviting former RAB members or offering refreshments.

In closing, Ms. Rudolph welcomed attendees to the next subcommittee meeting on 28 April 2010 at 5:30 pm and extended Happy New Year wishes to the RAB.

REGULATORY AGENCY UPDATE

Ms. Mary Aycock (U.S. EPA)

Ms. Aycock provided the following update to the RAB:

- U.S. EPA completed their technical review on the TCRA Work Plan for IRP Site 1 and noted the U.S. EPA had minimal comments on the document.
- U.S. EPA conducted a review on the Record of Decision (ROD) for AA 3 and is currently in discussion with their management for a final signature scheduled around April 2010.

Ms. Aycock welcomed any comments or questions from the RAB. There were no comments or questions from the RAB.

Mr. Quang Than (DTSC)

Mr. Than stated he had nothing to add and welcomed any questions or comments from the RAB. There were no comments or questions from the RAB.

IRP SITES 3 and 5 UPDATE

The IRP Site 3 and 5 RAB presentation was presented in two parts. The first part of the presentation presented by Mr. Smits included:

- An overview of the topics to be covered in the RAB meeting (Slide 2), site location maps of IRP Sites 3 and 5 known as the Original Landfill and Perimeter Road Landfill, respectively (Slides 3 and 5), and site descriptions (Slides 4 and 6).
- Site Plan maps of IRP Sites 3 and 5 showing the extent of waste placement (Slide 7) and a summary of the components of the remedy (Slide 8), which include installation of a synthetic flexible membrane liner, construction of a landfill gas (LFG) collection system, installation of passive soil gas control trenches, groundwater and LFG monitoring, operations and maintenance of drainage features and monuments, and implementation of institutional controls (ICs).
- A summary of on-going construction activities (Slide 11) including radiological screening, soil consolidation, and confirmation sampling. Mr. Smits noted that by consolidating the areas as shown on the plan map, the overall landfill footprint was reduced by 1/3 and less soil would be required for the landfill cap.

The second part of the presentation presented by Mr. Chris Johnson (Shaw) included:

- An explanation and figure showing a cross section of a typical landfill cover (Slide 12).
- Photographs of on-going construction activities at IRP Sites 3 and 5 including scraping of the soil cover (Slide 13), exploratory trenching to re-verify limits of waste (Slide 14), excavation and scraping (Slides 15, 16, 17, and 18), and compacting the foundation layer to 90% compaction (Slide 20), which will result in a minimum of two feet of soil covering the waste.
- Photograph of LFG well installation (Slide 21) for both passive and active LFG monitoring, venting, and mitigation, if necessary. Mr. Johnson noted the LFG wells were screened from approximately 11 feet below ground surface (bgs) to 20 feet bgs.
- Summary and photographs of the radiological survey conducted at IRP Site 5 (Slide 19), which involves maneuvering a device with a sodium iodide detector and a global positioning system (GPS) six inches off the ground over the surface of the area being investigated. The detector is capable of identifying subsurface radiological anomalies. Mr. Johnson explained that the operator would traverse the site in a serpentine pattern recording readings to identify anomalies in the subsurface which potentially contain radiological materials. To date, he noted, the operator has surveyed an equivalent of about 40 miles and has downloaded about 350,000 survey points.
- Photographs associated with the geomembrane liner, including excavating an anchor trench for the liner (Slide 23), deploying the geomembrane liner (Slides 24 and 25), modifying the liner to accommodate an LFG well (Slide 27), and as-built diagrams (Slides 26 and 28).

- Samples of a 60-mil (0.06 inches thick) low-density polyethylene (LDPE) geomembrane liner and the overlying geotextile fabric, which protects the geomembrane liner from the cover soil, were passed around to the meeting attendees.

Mr. Johnson asked if there were any comments or questions. The following questions were raised by the RAB:

Ms. Mary Matheis (RAB Member) asked whether the LFG wells were permanent or temporary. Mr. Smits replied the overall idea was to have a passive and active LFG system in-place within the 100-foot buffer zone associated with the landfill. He noted if they were to start getting detections in the LFG wells, the Navy wanted the flexibility to activate the LFG collection and treatment system immediately. By the same token, when enough data are collected over time to show there have been no detections, the wells could potentially be removed.

Mr. Werkmeister (Lennar) asked if there was any radiological material found during the survey. Mr. Smits replied there were 79 radiological anomalies at IRP Site 3 that were found; the items have been segregated and will be subsequently disposed of offsite.

For point of clarification, Mr. Hersh (RAB Member) asked what types of waste were found at the landfill waste areas. Mr. Johnson replied incinerator waste was found in Areas A1 and A3; concrete debris in A2; and incinerator waste, concrete debris and bottles were found in Areas C and E. The remaining areas contained broken concrete (construction material). With regard to characterization of the waste materials found in the landfill areas, Mr. Hersh asked how much of the waste encountered in the landfill was municipal versus industrial or military. Mr. Johnson and Mr. Smits replied IRP Site 5 contained municipal waste which consists mostly of debris and incinerator waste. Mr. Johnson added once materials were removed, there was no visible staining left in place and confirmation samples detected no metals, volatile compounds, or any other chemical of concern.

Ms. Rudolph asked whether the Ra 226 at IRP Site 3 was still an issue. Mr. Smits replied all the radiological anomalies at IRP Site 3 have been segregated and secured for appropriate disposal by Army personnel. Mr. Johnson added all the personnel working on the site were equipped with dosimeters to monitor exposure levels. He added all the results were nondetect.

Mr. Smits concluded the presentation by providing the summary of project documentation and project schedule. He asked if there were any comments or questions on the RAB presentation.

Mr. Ouellette (Resident) asked how the rain events from last week impacted the operations at the landfills. Mr. Johnson replied that all the run-off was maintained and controlled at IRP Site 3 and since IRP Site 5 was covered prior to the rain event, there were no drainage problems encountered.

OPEN QUESTIONS AND COMMENTS

Mr. Callian thanked Mr. Smits and Mr. Johnson for the presentation and opened the floor for questions and comments.

Ms. Rudolph asked how IRP Sites 1 and 2 withstood the recent rain events. Mr. Callian replied the Navy evaluated the area at IRP Site 2 and 17, and although erosion damage was observed at IRP Site 17, the Navy was taking steps to remedy the situation. Mr. Callian noted the Navy has not yet visited IRP Site 1 but he does not expect much damage in that area because the area is in its original condition. Ms. Rudolph asked the Navy to provide an update of IRP Site 1 conditions at the next RAB.

Mr. Callian opened the floor for discussion on other environmental topics the RAB would like discussed at the next RAB. The following topics were suggested:

- Ms. Aycock suggested an update on the ROD for AA 3.
- Ms. Rudolph asked for discussion on the comments to the Annual 2008 Groundwater Monitoring Report for AA 3 and IRP Sites 1 and 2.
- Mr. Ouellette asked for an update on IRP Site 24.

MEETING SUMMARY AND CLOSING

In closing, Mr. Woodings asked for an overall evaluation of the evenings RAB. Many members expressed their satisfaction on the presentation.

Mr. Callian noted the RAB would consider ways to commemorate the upcoming 100th RAB meeting in August. Ms. Rudolph suggested providing a time-line table which shows the environmental cleanup of MCAS El Toro sites at the early stages of the IRP to the current status of cleanup at sites. The recommendation was taken under consideration. Mr. Callian thanked everyone for attending and the 27 January 2010 meeting adjourned at 7:47 pm.

LIST OF HANDOUTS PROVIDED AT THE MEETING

- 27 January 2010 Former MCAS El Toro RAB Meeting Agenda and Upcoming RAB Meeting Schedule
- Where to Get More Information & Environmental Websites
- Presentation Slides: "Installation Restoration Program (IRP) Sites 3 and 5 Update. Former MCAS El Toro, California"
- Former MCAS El Toro IRP Site Location Map
- Former MCAS El Toro RAB Mission Statement and Operating Procedures
- Former MCAS El Toro RAB Fact Sheet/Membership Application
- Former MCAS El Toro Mailing List Coupon

Copies of the meeting minutes and handouts provided at the 09 December 2009 RAB meeting are available at the IR for former MCAS El Toro located in the Government Publication Section

of the Heritage Park Regional Library, Irvine, California. Library hours are 10 am to 9 pm Monday through Thursday; 10 am to 5 pm Friday and Saturday; and 12 pm to 5 pm on Sunday. The library may be reached at (949) 936-4040. In addition, copies of the meeting minutes and handouts are also available at the CERCLA AR maintained at Building 307 at former MCAS El Toro by Ms. Sue Rawal. Documents can be viewed by appointment; call Ms. Rawal at (949) 726-5398 between 9 am and 1 pm Monday through Thursday.

Final minutes from previous RAB meetings can be found on the internet at the Navy BRAC PMO website: www.bracpmo.navy.mil

INTERNET SITES

Navy and Marine Corps Internet Access

BRAC PMO Web Site (includes RAB meeting minutes): <http://www.bracpmo.navy.mil/>

Department of Defense - Environmental Cleanup Home Page Web Site:

<http://www.dtic.mil/envirodod/>

U.S. EPA:

Homepage: www.epa.gov

Superfund information: www.epa.gov/superfund

National Center for Environmental Assessment: www.epa.gov/ncea

Federal Register Environmental Documents: www.epa.gov/federalregister

Cal/EPA:

Homepage: www.calepa.ca.gov

Department of Toxic Substances Control: www.dtsc.ca.gov

Department of Health Services, reorganized into the Department of Health Care Services and the Department of Public Health: www.dhs.ca.gov

Santa Ana Regional Water Quality Control Board: www.waterboards.ca.gov/santaana

Additional Websites: Reuse and Redevelopment

Orange County Great Park: www.ocgp.org

Great Park Conservancy: www.orangecountygreatpark.org



**INSTALLATION RESTORATION PROGRAM (IRP)
OPERABLE UNIT 2C
SITE 3 – ORIGINAL LANDFILL
SITE 5 – PERIMETER ROAD LANDFILL**

REMEDIAL ACTION UPDATE

Presented By

**Marc P. Smits, P.E. – Navy Remedial Project Manager
Chris E. Johnson – Shaw Environmental Project Manager**

**Base Realignment and Closure (BRAC) Program
Management Office West**

January 27, 2010



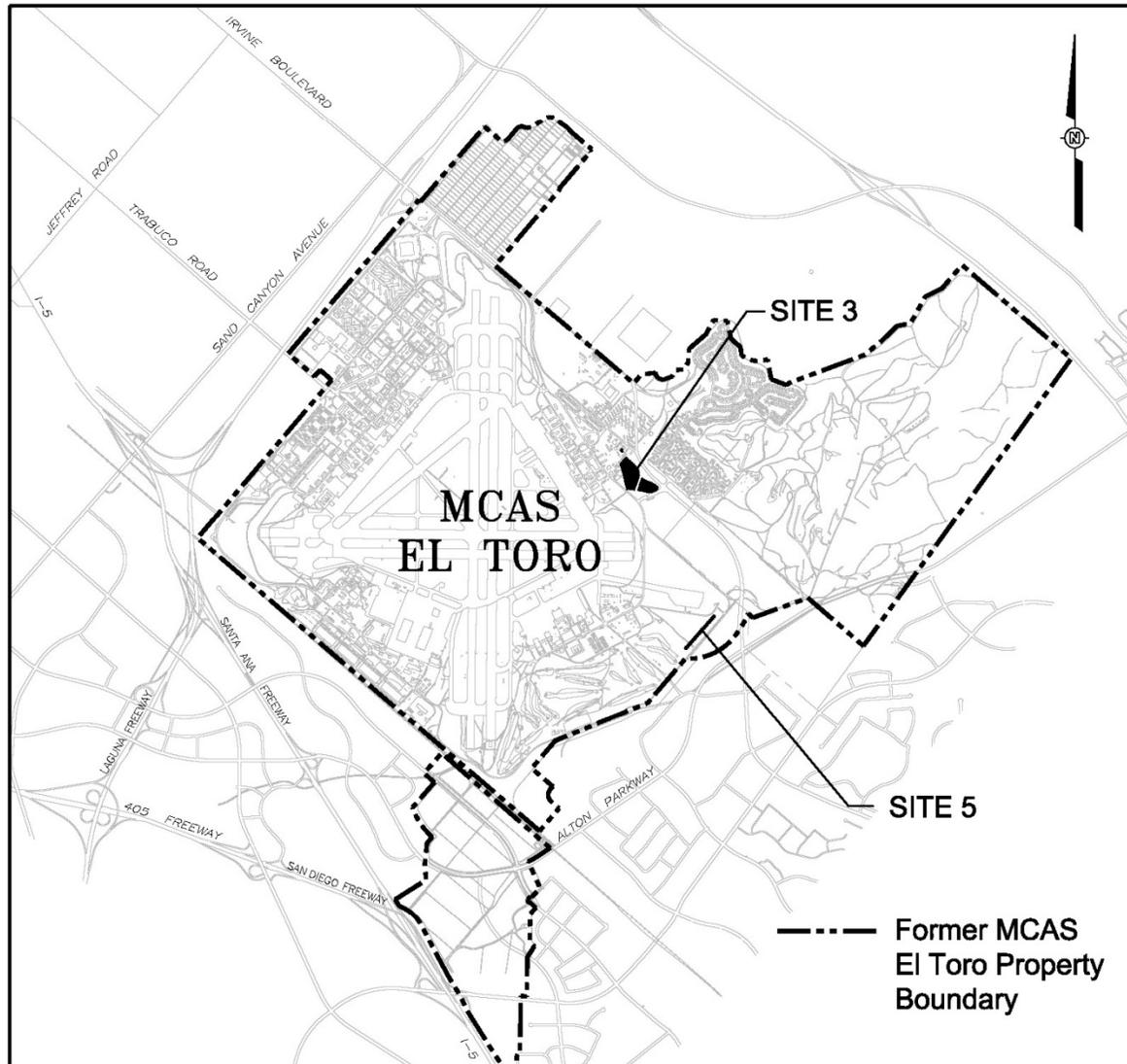
OVERVIEW



- SITE DESCRIPTIONS
- COMPONENTS OF REMEDY
- CONSTRUCTION ACTIVITIES
- PROJECT DOCUMENTATION
- SCHEDULE



SITE LOCATION MAP





SITE DESCRIPTIONS

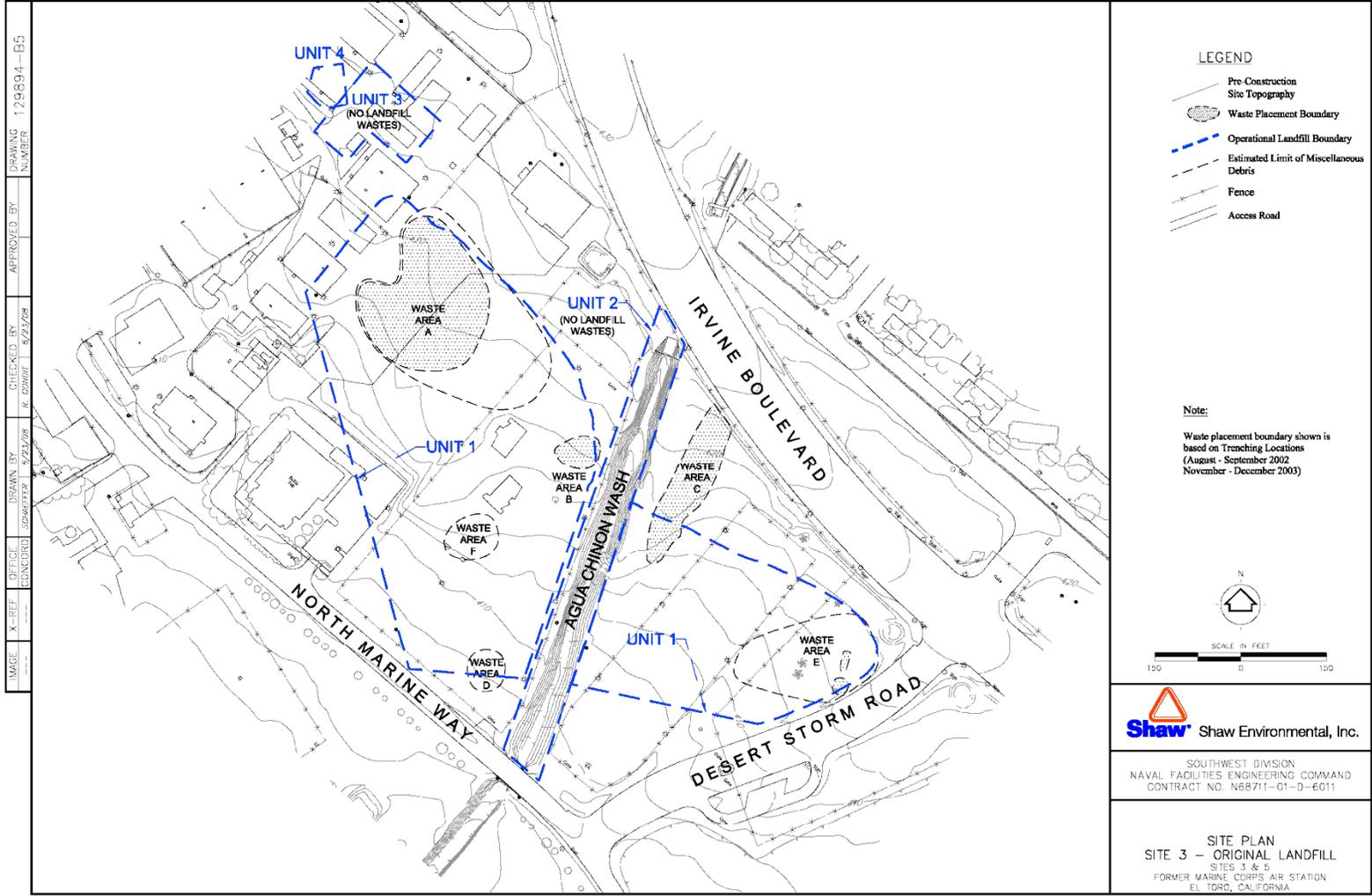


SITE 3 – ORIGINAL LANDFILL

- Active from 1943 to 1955
- Encompasses Approximately 11 acres
- Unlined Channel (Agua Chinon Wash) bisects the Site
- Original landfill at Base - Operated as a Cut-and-Fill Disposal Facility
- Types of Waste Included Metals, Incinerator Ash, Solvents, Paint, Residues, Hydraulic Fluids, Engine Coolants, Oily Wastes, Municipal Solid Waste, and Inert Solid Wastes
- Several Small, Waste and Debris Areas (Areas B – F) Exist Outside of Main Landfill Area (Area A)



SITE 3 SITE PLAN





SITE DESCRIPTIONS

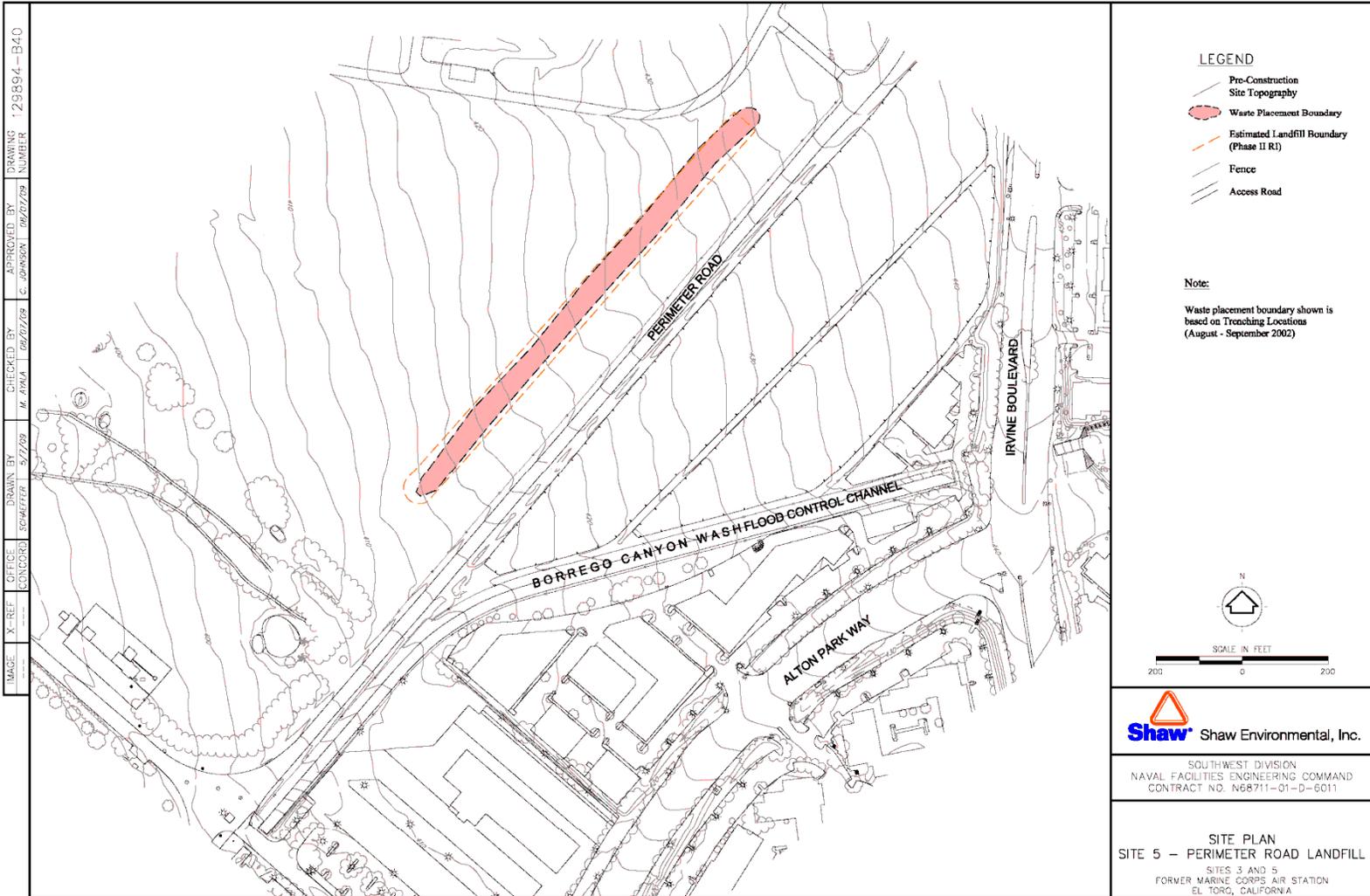


SITE 5 – PERIMETER ROAD LANDFILL

- Active from 1955 to the late 1960s
- Encompasses Approximately 1.8 acres
- 300 feet Northwest of Borrego Canyon Wash
- Operated as a Cut-and-Fill Disposal Facility
- Types of Waste Included Burnable Trash, Municipal Solid Waste, Cleaning Fluids, Scrap Metals, Paint Residues, and Unspecified Fuels, Oils, and Solvents



SITE 5 SITE PLAN





COMPONENTS OF THE REMEDY



- Final Record of Decision signed in February 2008
- Install a synthetic flexible membrane liner (FML)
- Construct a 2-foot soil cover
- Construct a landfill gas collection and/or venting system
- Install passive gas control trenches
- Conduct monitoring of groundwater and landfill gas well/system (using California Integrated Waste Management Board protocol)
- Conduct periodic inspections of the cap, drainage features, and settlement monuments
- Implement institutional controls for the landfills
- Conduct 5 Year Reviews to assure continued protection of human health and the environment



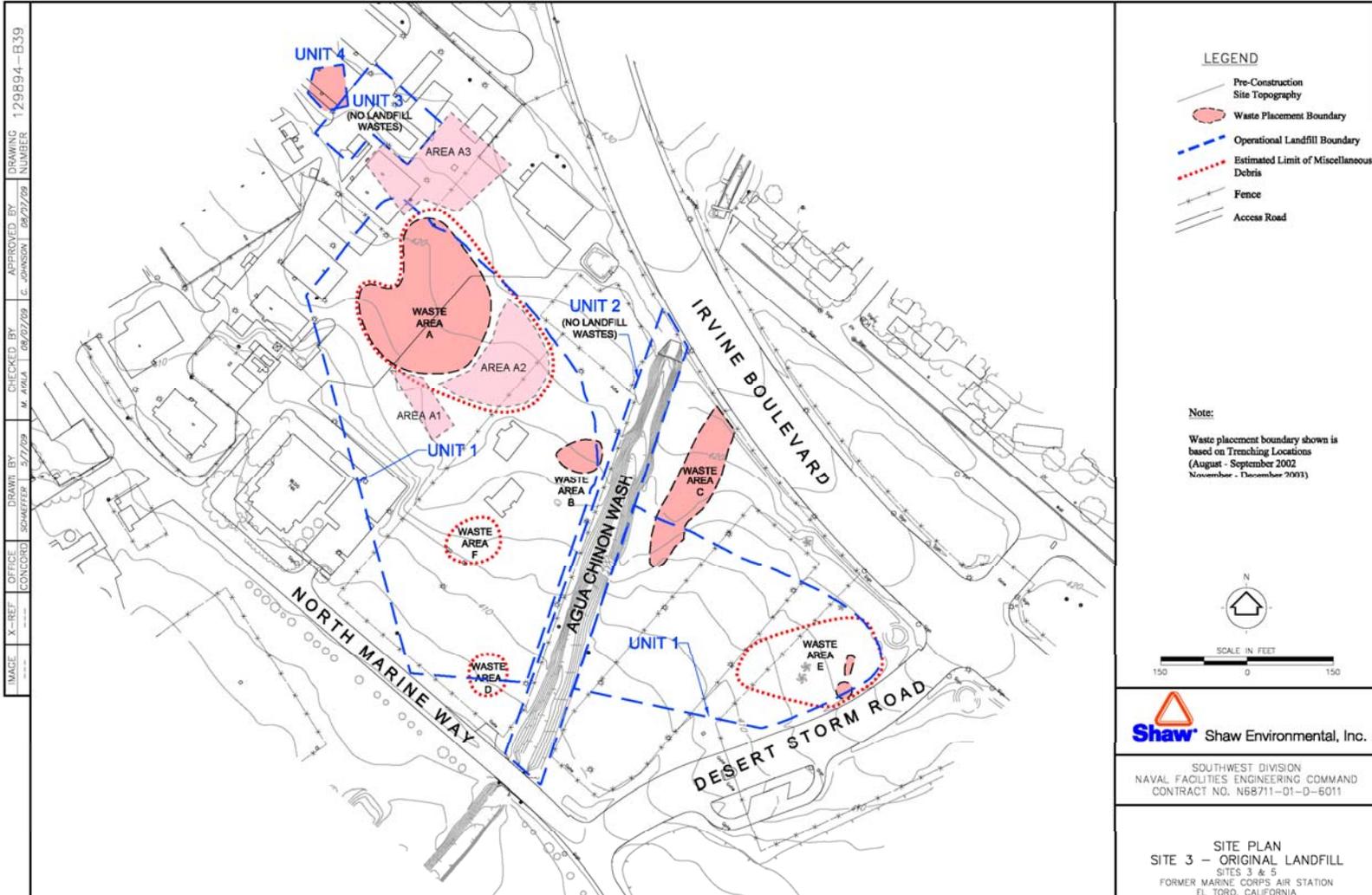
CONSTRUCTION ACTIVITIES



- A total of nine areas have been identified for consolidation of waste into the main landfill
- Six areas were initially identified for consolidation into the main landfill (Waste Area A) at IRP Site 3
- Three additional areas were subsequently identified adjacent to Waste Area A for consolidation (Areas A1, A2 and A3)
- Overall landfill footprint will be decreased by approximately 1/3 and less soil will be required for the landfill cap



CONSTRUCTION ACTIVITIES





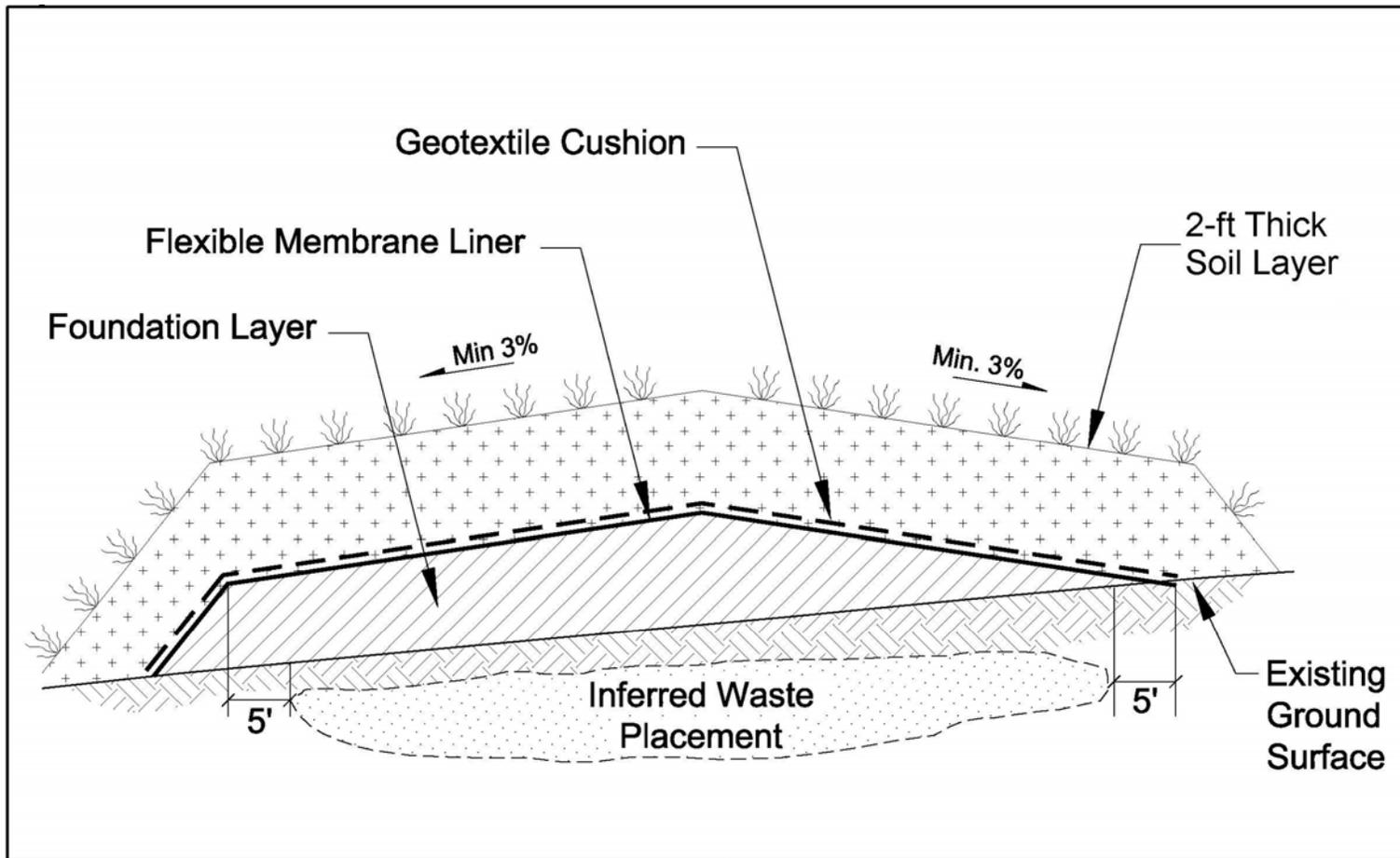
CONSTRUCTION ACTIVITIES



- Prior to removing any soil or waste from a waste area, a radiological screen was conducted on the surface
- The purpose of the radiological screen was to prevent any radiological items from being placed in the landfill
- Soil or waste was removed in 6 inch lifts and waste material was transported to Waste Area A for consolidation
- Confirmation samples were collected at the bottom and sidewalls of the excavation areas once all the waste was removed
- If confirmation sample results are below levels established in the work plan, the waste area can be backfilled

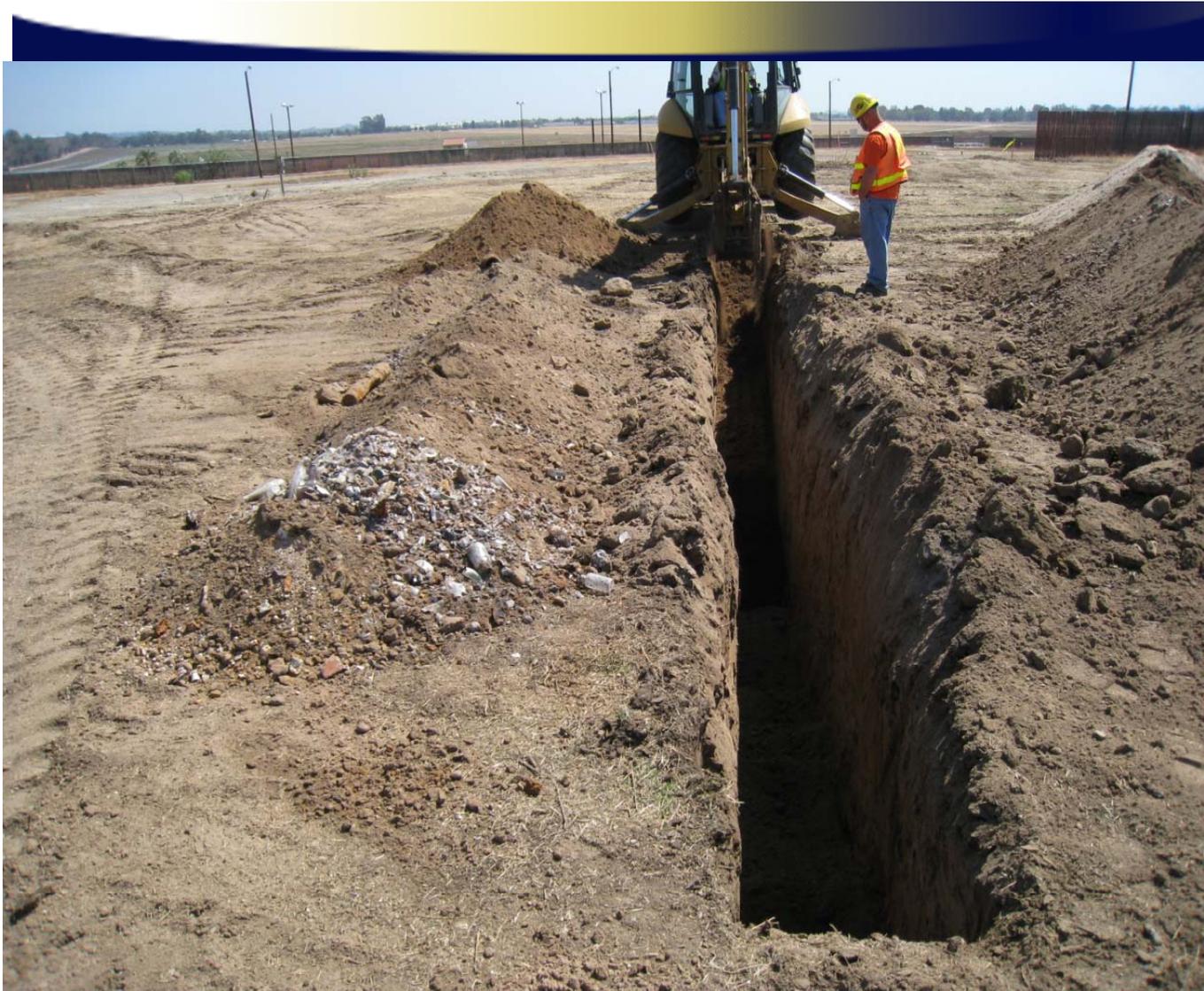


TYPICAL COVER CROSS-SECTION





Bulldozer/scrapper removing 6-inches of cover soil at IRP Site 3, Waste Area A.



Exploratory trenching to re-verify limits of waste at IRP Site 3, Waste Area A.



Excavation of native soil between waste cells at IRP Site 3, Waste Area A.



Excavation of incinerator waste/debris at IRP Site 3, Area A1.

Waste was transported to and consolidated within waste cells in Waste Area A.



Excavation of incinerator waste/debris at IRP Site 3, Waste Area C.
Waste was transported and consolidated within waste cells in Waste Area A.



Scraper removing a windrow of cover soil at IRP Site 5.

The stockpile of removed cover soil is in the background on the right behind the well monument.



Radiation survey following removal of initial 6-inch lift of cover soil at IRP Site 5.



Compacting foundation layer soil at IRP Site 5.



Installing a landfill gas well at IRP Site 5 with 12-inch outside diameter hollow stem auger.



A smooth drum compactor was used to roll a finished surface on the foundation layer at IRP Site 5 prior to the installation of the geomembrane.



Excavating the geomembrane anchor trench at IRP Site 5.



Crew deploying a roll of 60-mil linear low-density polyethylene (LLDPE) geomembrane at IRP Site 5.

Rolls were deployed as a single panel.



A welder operating a dual-track fusion welder at the seam between two LLDPE panels at IRP Site 5.



The geomembrane fully deployed at IRP Site 5.



Extrusion welding a protective boot around a landfill gas well at IRP Site 5.



Operator backfilling the geomembrane anchor trench at IRP Site 5.



PROJECT DOCUMENTATION



- Operation and Maintenance/Long-Term Monitoring Plan
 - presents the inspection, maintenance, and monitoring requirements
 - monitor effectiveness of the landfill cap, drainage structures, landfill gas and groundwater monitoring systems, and site security
- Remedial Action Completion Report
 - documents the completion of construction of the remedy including the landfill caps, landfill gas collection systems, monitoring wells, and drainage systems
- Operating Properly and Successfully Report
 - provides supporting documentation that demonstrates the remedy is operating as designed and is protective of human health and the environment



SCHEDULE



- Complete Construction Activities March 2010
- Draft Final Operation and Maintenance/Long-Term Monitoring Plan* March 2010
- Final Operating and Maintenance/Long-Term Monitoring Plan* April 2010
- Final Remedial Action Completion Report (RACR)* October 2010
- Final Operating Properly and Successfully (OPS) Report* August 2011

* - Dependent on the completion of construction.